



**tie Limited  
Tram Project Board  
January Report  
Papers for Meeting  
20<sup>th</sup> February 2007**

**09.30am – 12:45pm**

David Mackay (Chair)  
Willie Gallagher  
Neil Renilson  
Bill Campbell  
Bill Reeve  
Andrew Holmes  
Matthew Crosse  
Stewart McGarrity  
Graeme Bissett  
Jim Harries

Norman Strachan  
Alastair Richards  
Susan Clark  
James Papps  
Miriam Thorne (minutes)

Apologies:  
James Stewart



# **Tram Project Board**

**20 February 2007**

**09.30 – 12.45**

**Verity House, Boardroom**

## **Agenda**

- 1. Apologies**
- 2. Review of previous minutes**
- 3. Matters arising**
- 4. Project Director's Monthly Progress Report**
  - Appendix A - Safety
  - Appendix B – Risk
  - Appendix C – Financial
  - Appendix D – Papers for approval by the TPB:
    - Depot Advance Works Strategy
    - Network Rail Immunisation strategy
    - Railways and Other Guided Transport Systems – Approval process
  - Appendix E – Papers for Information
    - Foot of Leith Walk issue – Progress update
    - Structures Charettes – Update
    - Tram / EARL Utilities and Advance Works strategy
- 5. Project Delivery Strategy**
- 6. Traffic Management – update**
  - Traffic Regulation Summary paper
- 7. MUDFA – update**
  - Minutes from MUDFA Sub-committee
- 8. Infraco – progress update and approval process**
- 9. Tram Business Case – update**
- 10. Tram Funding**
  - TS grant funding
  - CEC contribution – paper attached
  - Development of TS / CEC funding contract, including drawdown, risk-sharing
- 11. Board Dates – feedback from TS and CEC**
- 12. CEC resources - update**
- 13. AOB**



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# Edinburgh Tram Network

## Minutes

### Tram Project Board

23 January 2007

tie offices - Verity House, Boardroom

| Members Present: |             | Participants:                  |      |
|------------------|-------------|--------------------------------|------|
| David Mackay     | DJM (chair) | Phil Wheeler                   | PW   |
| Willie Gallagher | WG          | (on behalf of Fred Mackintosh) |      |
| Neil Renilson    | NR          | Matthew Crosse                 | MC   |
| Bill Reeve       | BR          | Stewart McGarrity              | SMcG |
| Andrew Holmes    | AH          | Graeme Bissett                 | GB   |
|                  |             | Alastair Richards              | AR   |
|                  |             | Trudi Craggs (partial)         | TC   |
|                  |             | Susan Clark                    | SC   |
|                  |             | Jim Harries                    | JH   |
|                  |             | James Stewart                  | JS   |
|                  |             | Norman Strachan                | NS   |
|                  |             | Miriam Thorne (minutes)        | MT   |

**Apologies:** Bill Campbell

|            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Action                               |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| <b>1.0</b> | <b>REVIEW OF PREVIOUS MEETING</b>                                                                                                                                                                                                                                                                                                                                                                                                                              |                                      |
| 1.1        | Previous minutes were accepted as read.                                                                                                                                                                                                                                                                                                                                                                                                                        |                                      |
| 1.2        | All previous actions accepted as completed with the exception of the distribution of the Scottish Gateway 2 report – DJM to circulate.                                                                                                                                                                                                                                                                                                                         | DJM -<br><i>done</i>                 |
|            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                      |
| <b>2.0</b> | <b>INGLSTON PARK &amp; RIDE</b>                                                                                                                                                                                                                                                                                                                                                                                                                                |                                      |
| 2.1        | Recent bad weather caused significant operational problems, including flooding and high-wind related property damage leading to the closure of the waiting accommodation. Likely causes for both issues have been identified and are for Borders Construction to resolve under warrantee. The Board was reassured that ongoing contractual dispute with Borders' Constructions was not holding up issues resolution. SC to keep the TPB appraised of progress. | SC –<br><i>verbal update</i>         |
|            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                      |
| <b>3.0</b> | <b>PROJECT DIRECTOR REVIEW</b>                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                      |
| 3.1        | MC provided a high level summary of his impressions of the state of the project. Overall, most of the issues faced by the project are typical for a project of this size and complexity. Main areas of concerns were highlighted are outlined in 3.1.1 to 3.1.6:                                                                                                                                                                                               |                                      |
| 3.1.1      | <b>SDS</b> - key concerns relate to delivery to programme and quality of the design provided, and these are both recognised as challenging. Key to resolving the ongoing issues is to ensure close working of SDS with all stakeholders (including co-location), setting realistic programme goals and agreement of priorities. MC to prepare a “get-well” plan for Feb DPD and                                                                                | MC –<br><i>done – paper attached</i> |

|       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                        |
|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
|       | TPB to achieve material turn-around on current issues.                                                                                                                                                                                                                                                                                                                                                                                                                 |                                        |
| 3.1.2 | Concerns were raised about SDS high-level on-site management. WG appraised the board of the planned visit on the 6 <sup>th</sup> of Feb of a senior PB Board Director, who will be challenged with resolving the outstanding management issues.                                                                                                                                                                                                                        |                                        |
| 3.1.3 | <b>Project resource:</b> high reliance on contract staff within the project. Resource plans are on-going.                                                                                                                                                                                                                                                                                                                                                              |                                        |
| 3.1.4 | <b>Project focus:</b> plans are being developed to focus on priorities                                                                                                                                                                                                                                                                                                                                                                                                 |                                        |
| 3.1.5 | <b>Project Structure:</b> key strategies are being reviewed to ensure still they are fit for purpose. These relate primarily to aspired contract novation, level of risk transfer and whether they provide value for money.                                                                                                                                                                                                                                            |                                        |
| 3.2   | <b>Infraco:</b> WG confirmed that due process, as sanctioned by the Board, was being followed for the analysis of the initial tender returns. Scott Wilson will provide an independent review of the analysis to TS on 30 <sup>th</sup> Jan.                                                                                                                                                                                                                           |                                        |
| 3.2.1 | BR restated that the priority for TS is deliverability of Phase 1a and it is critical for TS gain a high degree confidence in the credibility of the prices provided by the bidders. Means of how to achieve this were discussed in light of the commercial sensitivity of the matter. It was agreed that a high-level, confidential verbal briefing would be provided to a small group of individuals at TS. Details of the arrangement are to be discussed off-line. | BR / WG / DJM / MC - <i>done</i>       |
| 3.3   | <b>Project Contractual structure:</b> JS recommended a high-level review of the emerging commercial and contractual structure of the project. It should take the form of a peer review and raise the visibility of the commercial and contractual aspirations of the project. MC to consider format, contents and attendees and feed back to DJM.                                                                                                                      | MC                                     |
| 3.4   | <b>Negotiation skills :</b> The board was informed that a recruitment process has commenced to bolster the negotiation skills available to the project. JS offered expertise from PUK – MC to liaise on details.                                                                                                                                                                                                                                                       | MC                                     |
| 3.5   | <b>Value Engineering:</b> An exercise led by Andie Harper has commenced with the aspirational target of achieving £50m saving. Opportunities for savings in capital expenditure will be balanced against their effect on the actual or perceived quality of the system and future operational costs. Opportunities identified will be incorporated into a formal opportunities register as part of the Project Directors' monthly report.                              | MC                                     |
| 3.6   | <b>Board sub-committees:</b> WG appraised the board that a separate MUDFA sub-committee had been set up with outputs & reports to be brought to the TPB.                                                                                                                                                                                                                                                                                                               | SC - <i>done</i>                       |
| 3.7   | <b>Risk Register</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                        |
| 3.7.1 | <b>Risk 267</b> – This relates to the position of bus/ tram interchanges. A proposal for resolution of the key issue of interchanging at the Foot of Leith Walk is to be brought to the Feb DPD.                                                                                                                                                                                                                                                                       | MC / NR – <i>done – paper attached</i> |
| 3.7.2 | <b>Risk 269</b> – This relates to the CEC – TS agreements on funding. It was noted that the Summary Risk paper incorrectly recommended this risk to be closed. This was an oversight following the DPD and has already been                                                                                                                                                                                                                                            |                                        |



|            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                          |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
|            | processed in the Risk register. The actions and resolutions of the board discussion on funding is noted at point 4.0 below.                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                          |
| <b>4.0</b> | <b>FUNDING</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                          |
| 4.1        | GB outlined the different elements of the funding issue which must inform the discussion: <ul style="list-style-type: none"> <li>- TS grant</li> <li>- TS – CEC agreement for funding of any over-runs</li> <li>- Developers’ contributions as part of CEC’s funding of £45m</li> <li>- Developers’ contributions as an opportunity to secure funding above £45m.</li> </ul>                                                                                                                                                                                                                          |                                                          |
| 4.2        | Concerns were raised that no agreement had been reached between CEC and TS on funding of any potential over-runs. Any such agreement will need to be cognisant of the interlocking commercial and contractual issues of the 3 main contracts. BR also highlighted that information will be required on the availability of funds from the Central Scottish Executive budget if required. A meeting is to be arranged by the end of the w/c 22 Jan between CEC and TS to resolve the issue.                                                                                                            | BR / AH                                                  |
| 4.3        | Further concerns were raised regarding Developers’ contributions which form a significant part of CEC’s funding commitment as well as offering the potential for enhanced funding. AH confirmed that regardless of the actual level of Developer’s contribution received, CEC is committed to a minimum of £45m. A paper on overall CEC funding matters to be presented to next TPB.                                                                                                                                                                                                                  | AH                                                       |
| 4.4        | Questions were raised about the availability of the right skill set within CEC or tie to lead negotiations for enhanced contributions from developers, especially in light of Phase 1b. JS stated that relevant experience was available within PUK. MC/JS/GB are to investigate the most appropriate approach and a strategy paper is to be presented to the Feb TPB.                                                                                                                                                                                                                                | GB / JS/<br>MC –<br><i>done –<br/>paper<br/>attached</i> |
|            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                          |
| <b>5.0</b> | <b>TRAFFIC MANAGEMENT UPDATE</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                          |
| 5.1        | <b>TRO &amp; TTRO:</b> A paper appraising the board of the current status of TRO process was presented by TC. Key points of the paper relate to the advice received from QC regarding the opportunity to use of TTRO’s in certain cases, the need for a cost/benefit analysis on this matter and the concerns for the programme due to the emerging TRO process.                                                                                                                                                                                                                                      |                                                          |
| 5.1.1      | A meeting is to be set up with the Scottish Executive to discuss opportunity for legislative changes to TRO process for major projects.                                                                                                                                                                                                                                                                                                                                                                                                                                                               | TC –<br><i>done</i>                                      |
| 5.1.2      | Key concerns were raised regarding the robustness of transport modelling and design input from SDS, CEC’s ability to review the model and design in a timely manner and the project’s ability to deal with potential objections in a timely manner. The board recognised that some of these issues are outside the project’s control, however, work on the model is progressing in close liaison with all stakeholders and concerns regarding CEC resource availability are addressed via the new CEC resource plan – a paper outlining this was considered during the meeting (see point 6.0 below). |                                                          |
| 5.1.3      | The board was advised of a bi-weekly Traffic Management Executive Committee having been established under the chair of WG. Outputs and reports from this group will feed into the DPD as first instance.                                                                                                                                                                                                                                                                                                                                                                                              |                                                          |
|            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                          |



|             |                                                                                                                                                                                                                                                                                                                                                                                                                             |                                      |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| <b>6.0</b>  | <b>CEC RESOURCES</b>                                                                                                                                                                                                                                                                                                                                                                                                        |                                      |
| 6.1         | The paper outlining key CEC resource requirements to support the project was discussed. The board requested that due discipline was applied to the utilisation of CEC staff and charging of costs. The paper is to be updated for the next TPB to clarify the composition of the proposed FTE's, their location and deliverables. A separate section tracking costs is also to be included in the Finance report.           | AH<br><br>SMcG –<br><i>done</i>      |
| 6.2         | The board agreed that although no allowance was included in the 07/08 budget, this was an oversight and a sum should be made available for CEC resources, under a formal change request and following the above changes to the paper.                                                                                                                                                                                       |                                      |
|             |                                                                                                                                                                                                                                                                                                                                                                                                                             |                                      |
| <b>7.0</b>  | <b>MUDFA UPDATE</b>                                                                                                                                                                                                                                                                                                                                                                                                         |                                      |
| 7.1         | The paper outlining the proposed MUDFA construction programme was presented by SC. The paper highlights the benefits of commencing utilities work on Phase 1b concurrently with Phase 1a. The board agreed that given the timing of ministerial approval for funding and pending feedback of the initial Infracore bid prices, the programme would be noted but no approval would be requested from the board at this time. |                                      |
| 7.2         | The success of the recent MUDFA presentation was noted and the opportunity to obtain key stakeholder buy-in for the project was recognised. WG & NR will continue the recent successful collaboration.                                                                                                                                                                                                                      |                                      |
| 7.3         | AH raised specific concern regarding agreements on working hours. The board agreed that handling of this matter will require full discussion with CEC, TEL, Chambers of Commerce, and Small Businesses Representatives.                                                                                                                                                                                                     |                                      |
|             |                                                                                                                                                                                                                                                                                                                                                                                                                             |                                      |
| <b>8.0</b>  | <b>ADVANCE WORKS STRATEGY</b>                                                                                                                                                                                                                                                                                                                                                                                               |                                      |
| 8.1         | A paper seeking approval for the strategic approach to advance works was presented by SC. BR queried the scale of financial commitment and impact on the risk profile – MC reassured that the current approval sought only related to planning of activities and thus there would be no financial impact beyond current budgets. The board approved the paper.                                                              |                                      |
|             |                                                                                                                                                                                                                                                                                                                                                                                                                             |                                      |
| <b>9.0</b>  | <b>Project Change</b>                                                                                                                                                                                                                                                                                                                                                                                                       |                                      |
| 9.1         | The summary paper on Project Change requests was noted and approved by the board.                                                                                                                                                                                                                                                                                                                                           |                                      |
|             |                                                                                                                                                                                                                                                                                                                                                                                                                             |                                      |
| <b>10.0</b> | <b>AOB</b>                                                                                                                                                                                                                                                                                                                                                                                                                  |                                      |
| 10.1        | A paper outlining the requirements for increased office space for the project was tabled by SMcG. The board recognised the importance of co-location and responses to the paper were requested from all parties within 48 hours.                                                                                                                                                                                            | All                                  |
| 10.2        | Details of future board dates were distributed for comments. The board agreed to extend its meeting time to 3 hrs.                                                                                                                                                                                                                                                                                                          | All                                  |
| 10.3        | JS requested that information on the sequence of approvals and their timing which will be required in the foreseeable future would be provided. A “look-ahead” schedule of key decisions and papers to the TPB and sub-committees will be circulated.                                                                                                                                                                       | MT –<br><i>awaiting<br/>feedback</i> |

Prepared by: Miriam Thorne

Date: 23 Jan 07



## EDINBURGH TRAM PROJECT MONTHLY PROGRESS REPORT – JANUARY 2006

### 1.0 Programme and Progress

#### 1.1 Achievements in previous period

- Infracore bidders' first proposals received on time 12 Jan. Initial review performed and a summary project estimate update was provided to TS together with an independent review by Scott Wilson of the initial tender analysis.
- Traffic Management committee established.
- MUDFA sub-committee established.
- MUDFA Construction Programme (excluding agreement on Phase 1b) was agreed with CEC and TEL. Trial dig scheduled for 19 March at Casino Square – Ocean Drive.
- Value engineering process continued and a paper outlining opportunities has been prepared.

#### 1.2 Update on key milestones outstanding

- Milestones outstanding in relation to SDS and areas affected by design are being addressed in the SDS paper – see Agenda Item 5: Project Delivery Strategy.

#### 1.3 Future key milestones – next period

##### BUSINESS CASE

- 14 Feb 2007 - TS approval of DFBC - Stage 2 (Cabinet Meeting)

##### DESIGN

- 20 FEB Final Draft TRO's to be Submitted to CEC For Members Approval

##### LAND & PROPERTY

- 28 FEB 2007 - Prepare second GVD notice for 1a

##### ADVANCE WORKS

- Still issues with land acquisition at Turnhouse – SGN negotiating land purchase with Lord Rosebery (outwith tie control)
- 5 FEB 2007 - Issue ITT for Badger relocation

##### TRAMCO

- 2 FEB 2007 - Return of SIR responses
- 16 FEB 2007 - Potential selection of 2 candidates to proceed to phased dialogue & negotiations period (Selected Candidates 4-2)



## 1.4 Future key milestones – 3 month look ahead

### DESIGN

- 20 MAR 2007 – Issue Approved for Construction drawings for Depot Utilities
- 22 MAR 2007 – Issue Approved for Construction drawings for Section 1A (excluding Constitution Street)
- 14 FEB 2007 – Issue Traction Power Equipment and Sub-station Equipment Specification
- 12 MAR 2007 – Issue Depot Earthworks Detailed Design
- 19 MAR 2007 – Formal Issue of Detailed Design Phase (Traction Power System) to tie

### MUDFA

- 19 MAR 2007 – Trial Dig for Utilities at Casino Square (Ocean Drive)

### INFRACO

- 16 APR 2007 - Receipt of Consolidated Proposals from Candidates (Phase 1a - firm bid)
- MAY - Selection of preferred bidders for Infraco and Tramco

### ADVANCE WORKS

- 6 MAR 2007 - Award Badger relocation contract
- 20 APR 2007 – Award contract for spoil disposal

### O.C.I.P.

- 22 MAR 2007 First Premium Paid

## 1.5 Other activities

- A review of the working relationship with SDS is being performed and recommendations for improvements is being presented to the FEB DPD and TPB – see Agenda Item 5
- Tram Team event planned for 15 Feb 07 to reflect Project Delivery Strategy for current project phase
- Budget refresh for the year end 06/07 continues to be performed to ensure anticipated spend is achieved
- Commencement of Infraco evaluation process
- Continuation of Tramco evaluation process
- Commencement of OCIP tender evaluation process and contract award

## 2.0 TPB feedback

### 2.1 Papers approved

The recommendations of the following papers were formally approved by the TPB:

- Update on the TTRO and TRO processes
- Advance Works strategy paper
- Tram Project changes – summary paper

### 2.2 Actions arising from the board

- CEC resourcing paper: The board requested the paper to be updated to provide greater clarity on the composition and deliverables for CEC resources allocated to the Tram Project. The updated paper is to be presented as a change request to the FEB TPB.
- MUDFA Construction Programme: the board agreed that given the timing of the ministerial approval for funding and that feedback on the initial Infraco bid prices were pending, the programme would be noted but no approval would be sought from the board at that time.

### 3.0 Key issues & concerns

#### 3.1 Design

- SDS - General: issues around programme, deliverables, costs and working relationship are being addressed in the SDS improvement plan – see Agenda Item 5.
- Design Charrettes: CEC planning indicated the desire to revisit the outcomes of the Structure Charettes which had previously been timed out for comments in Dec 06. Meetings are being held between tie / SDS / CEC to address key concerns and achieve a resolution. Most recent meeting was held on 7 Feb, recommendation paper updating on progress and proposing way forward included in the papers attached.

#### 3.2 Land & Property

- Network Rail Land: current discussions underway to request NR's permission for access to NR land. Options considered are a CPO approach or a lease agreement for the necessary lands. No response has been received to date from NR on the lease option – issue to be escalated if the lease option is to be kept open.
- Budget - other: depends on the District Valuers (DV) estimate at the time of 2<sup>nd</sup> GVD issue. The final property costs may be impacted by any application for certificates of appropriate alternative development or other contest to the DV valuation. A series of discussions with critical land owners will be undertaken during February and the DV will refresh their valuation to further firm up estimates to reflect these discussions.
- GVD notice: timing for GVD notices remains critical to take title to lands in 06/07 – the very latest date for issue of 2<sup>nd</sup> GVD is 02 Mar.07, however current programme date is 28 Feb.

#### 3.3 Advance works:

- Scottish Power had requested 5 additional feasibility studies. Adjustments to the infrastructure design will avoid the need for 4 of the previously identified 5 areas.
- Invasive species: cost for the eradication / treatment of invasive species is not covered in the baseline budget. For CEC owned land, key concerns are around cost absorption and the ability to deliver treatment within the timeframes required by the programme (first treatment due in Apr 07).

#### 3.4 Network Rail

- Enabling works: series of missed dates for method statement submission and or poor quality of the submissions resulted in cancelling of a number of possessions booked with NR. This means that contingency possessions are now used up with only 25% of enabling works actually performed. Information has been requested from SDS to assess the impact on their design of not carrying out certain enabling works and whether further possessions are required. This may have programme and /or cost implications.
- Immunisation: Approach revised to recommend direct contractual arrangement between TS and NR – see attached paper for approval.

#### 3.5 Traffic Management:

- JRC: currently undertaking re-calibration and update of the transport model suite, this activity being covered under existing contractual arrangements. This exercise is intended to refine the JRC models to the required level of detail to support detail design, and inform the TRO process. It is expected that this model update will be completed by the end of March 2007. This process is being carried out in conjunction with CEC and their advisors, SDS (internal) and the TSS team who carried out the Due Diligence required for the DFBC.

- TTRO and TRO: the TRO process is currently on the Programme critical path. A strategy to increase programme flexibility and remove the TRO process from the critical path is being investigated. This includes commencing the INFRACO works under a TTRO before the TRO is in place. Senior Council initial opinion expected mid-Feb and CEC agreement is being actively sought through consultation meetings – Agenda Item 6 - paper attached.

### 3.6 Office accommodation:

- Providing additional office capacity has been identified as essential to support current project requirements and enable planned co-location with contractors and stakeholders. A paper outlining potential opportunities went to the JAN TPB however approval to proceed has not yet been received. Achieving approval is time-critical as the opportunity to take additional space at Citypoint may pass at any time.

### 3.7 Ingliston Park & Ride Phase 2:

- Proposal received from TSS for carrying detailed design works and contract support for the expansion. This appears to offer better value for money than the previous SDS proposal. Concerns relate to the required interface risks between TSS as designers and SDS.

## 4.0 Safety Report

- No issues to note – see appendix A

## 5.0 Risks & Opportunities

### 5.1 Risk Management Register

- The Primary Risk Register is actively being updated. Active Risk Management (ARM) is now in use by all Project Managers and those who are termed risk Owners. Mitigation actions are being developed by risk owners, an update will be provided at the next DPD.
- Risk Register – see appendix B

### 5.2 Principal opportunities & output from VE exercise

- A number of strands to identify and develop key opportunities for the project are being pursued. These include evaluation of Value Engineering suggestions by the Infraco bidder, outputs from the formal Value Engineering exercise and opportunities developed within the project team. The paper to TS will baseline the current thinking on principal opportunities – a verbal update will be provided and process of formal progress reporting established.

## 6.0 Financial and Change Control

### 6.1 Financial status

- The current financial year end VOWD forecast is maintained at £44.04m
- The current AFC for the scheme is £592.4m as detailed in the Draft Final Business Case (DFBC). The project is currently updating its view of the Project AFC based on the return of the initial proposals from the Infracore bidders
- The VOWD to the end of January is £190k lower than the corresponding forecast last month. The reason for the variance is contained in the attached appendix C.

#### Current Year position

| <b>VOWD in current month 06/07</b>                     |                                   |                                         |                                            |                                                                |
|--------------------------------------------------------|-----------------------------------|-----------------------------------------|--------------------------------------------|----------------------------------------------------------------|
| Month £k<br>(Incremental)                              | Current Actual £k<br>(Cumulative) | Previous<br>Forecast £k<br>(Cumulative) | Variance £k<br>(Current minus<br>previous) | Comment                                                        |
| £2,186                                                 | £25,261                           | £25,166                                 | (£190)                                     | See appendix C                                                 |
| <b>AFC – Current Financial year position to Mar 07</b> |                                   |                                         |                                            |                                                                |
| Approved Budget<br>£k                                  | Current Forecast<br>£k            | Previous<br>Forecast £k                 | Variance £k<br>(Current minus<br>previous) | Comment                                                        |
| £44,041                                                | £44,041                           | £44,041                                 | 0                                          | See appendix C                                                 |
| <b>AFC – Anticipated Final Cost</b>                    |                                   |                                         |                                            |                                                                |
| Budget £k                                              | Current Forecast<br>£k            | Previous<br>Forecast £k                 | Variance £k<br>(Current minus<br>previous) | Comment                                                        |
| £545,000                                               | £592,400                          | £592,400                                | 0                                          | As approved<br>Preliminary<br>Design Stage<br>Project Estimate |

*\*Approved Budget to end Mar 07, reflecting new Approved Funding Paper (Nov06)*

### 6.2 Early Warnings of claims

- None received during the period

### 6.3 Change Control Summary

- The following change requests were received during the period:

| Change Request | Title                                                                                                                                                                                                                                                                                                                            | Change Type                                                                    | Schedule Impact                                                                        | Cost Impact                                                           | Other Impact                                                                                                                                       | Approval Process                                 |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| CRB018         | Update of the Operations and Performance Spec. in accordance with Employers Requirements and SDS Stage 3 Runtime Report                                                                                                                                                                                                          | Request Raised but it is anticipated to be subsumed within an SDS Change Order |                                                                                        |                                                                       |                                                                                                                                                    | Within Tram Project Directors level of Authority |
| CRB019         | Addition of Crew Relief Facilities beneath Haymarket Tramstop structure – resulting rostering efficiencies will improve operating staff costs.                                                                                                                                                                                   | Increase in Scope Change<br>Increase in Efficiency Change                      | N/A                                                                                    | Anticipated to be marginal                                            | Provide alignment between SDS specifications, design and Employers Req.s for Infraco re: Haymarket Tramstop                                        | Within Tram Project Directors level of Authority |
| CRB020         | Granton Square bus and tram Interchange - Requirement to provide a good quality interchange between bus and tram at terminus of Phase 1b. To facilitate such, the road to the West side of the square will become bi-directional bus only with bi-directional general traffic being accommodated on the East side of the square. | Increase in Scope Change                                                       | No Impact on overall project/<br>Delay in DD Roads drawing for Granton Square TramStop | Minor element of additional design - not in excess of £45,000 for SDS | Improvement in road safety for car users & pedestrians/<br>Functional improvement for passengers interchanging between bus & tram at this location | Within Tram Project Directors level of Authority |

### 7.0 Matters for Approval or Support

#### 7.1 Items for information

- Board meetings required to support procurement process
- Interchange at the Foot of the Walk.
- Progress in relation to the structures charette.
- EARL/Tram Utilities Advanced Works Strategy

#### 7.2 Decisions required from TPB

- Approval for commencement of GOGAR Depot Advance Works Programme - Stage 1
- Recommendations of Changes to Safety Approval Process (ROGS)
- Network Rail Immunisation Strategy

#### 7.3 Decisions/ support required from TS

#### 7.4 Decisions/ support required from CEC

#### 7.5 Decisions / support required from others

Submitted by:- Matthew Crosse  
Project Director

Date:- 14 Feb 07



## Edinburgh TRAM Project

### Appendix A

**Paper to** : **Tram Project Board**  
**Subject** : **HSQE Performance Report for Period 11**  
**Date** : **14<sup>th</sup> February 2007**

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### For Information

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#### 1.0 Safety

- 1.1 There have been **zero** accidents/incidents reported this period. The Accident Frequency rate (AFR) for the project is **zero**.
- 1.2 There are two late reported **minor** accidents from SDS which occurred in the Citypoint office. There was no time lost.
- 1.3 There were two Safety Tours recorded for the period. A joint Safety Tour of Citypoint office highlighted seven unsafe conditions which need to be addressed.
- 1.4 Safety Alert 2007-01 was issued highlighting the details of the accident occurred in the previous period, the cause and the actions taken.
- 1.5 A meeting with the HSE Inspector allocated to the Tram project took place. The programme of the MUDFA works was discussed and it was agreed to hold regular meetings with the HSE Inspector.

#### 2.0 Quality

- 2.1 No quality system audits were planned for this period. A draft audit schedule has been prepared and is being reviewed. This will be implemented from the next period.
- 2.2 No non-conformance reports (NCRs) were raised in the period and there are no outstanding NCRs.
- 2.3 The project management plans and procedures continue to be developed. An external audit is planned on the 5<sup>th</sup> March and all plans and procedures are to be in place prior to this.

#### 3.0 Environment

- 3.1 There were no environmental incidents in the period.
- 3.2 There are no other environmental issues to report.

**Edinburgh TRAM Project**

|                    |                                                           |               |
|--------------------|-----------------------------------------------------------|---------------|
| <b>Proposed</b>    | Tom Condie<br>HSQE Manager - Tram                         | Date 14/02/07 |
| <b>Recommended</b> | Susan Clark<br>Delivery Director                          | Date 14/02/07 |
| <b>Approved</b>    | .....<br>David Mackay on behalf of the Tram Project Board | Date: - ..... |

## Edinburgh TRAM Project

### Appendix B

**Paper to** : **Tram Project Board**  
**Subject** : **Risk Management Summary**  
**Date** : **14<sup>th</sup> February 2007**

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#### For information

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### 1.0 Introduction

- 1.1 The purpose of this document is to provide the monthly update to the Board with regard to the Primary Risk Register and the top risks facing the project
- 1.2 The risks on the Primary Risk Register have been extracted from the Project Master Risk Register and are those that have a high risk significance but which also require treatment in the near future.

### 2.0 Risk Significance and Treatment Status Summary

- 2.1 Overall the significance of individual risks on the Primary Register has not changed.  
  
1 risk was removed and 4 risks were added.
- 2.2 The following are recommended for closure or removal from the Primary Risk Register:
  - Risk 269 (Agreement on financial overrun risk sharing has not been reached between CEC and TS due to doubts over staying in budget) to close as is has now been superseded by changes in Risk 268.
  - Risk 278 (Infraco tenderers seek extensions of time during tender period) has closed. This risk referred to receipt of responses to ITN from bidders – all bidders responded by the required date of 12 January.
  - Risks 283 (Infraco tender returns are outside forecast estimates and business case capex limit) has closed because tender returns were within required tolerances.
  - Risk 344 (Withdrawal of bidders or submission of non-compliant bids due to non-project related issues) has closed because 2 compliant bids were received.
  - Risk 1 (Change in anticipated inflation rate from 5%) is closed as all bids for all contracts indicate that they will provide a fixed inflation rate which has been incorporated into the base estimate as appropriate.

## Edinburgh TRAM Project

- 2.2 Last month seven risk treatments were showing red status. Three of these have closed, one remains with an unknown status, 2 remain red and one has improved to amber. A further three have now fallen behind programme.

On the whole, the treatment status of the primary risks has remained neutral. However, 4 treatments have moved in a negative direction. These are to do with SDS activity, MUDFA and Scottish Gas Networks. The vast majority of risk treatments are on or ahead of programme.

- 2.3 The Primary Register is attached as Appendix (i). This document contains a risk status summary showing the changes from last month.

### 3.0 Consultation








- 3.1 The DPD Sub Committee will review this register and their comments will be incorporated.

### 4.0 Recommendation.

- 4.1 The Board is asked to note this paper.

|                    |                                                           |                  |
|--------------------|-----------------------------------------------------------|------------------|
| <b>Prepared</b>    | <u>Nina Cuckow</u><br>Risk Manager - Tram                 | Date: 14/02/07   |
| <b>Recommended</b> | Geoff Gilbert<br>Commercial Director                      | Date: 14/02/07   |
| <b>Approved</b>    | _____<br>David Mackay on behalf of the Tram Project Board | Date: 14/02/2007 |

| PRIMARY RISK STATUS SUMMARY             |                             |         |                                                        |                                             |                                    |
|-----------------------------------------|-----------------------------|---------|--------------------------------------------------------|---------------------------------------------|------------------------------------|
| Risk Significance (No of Risks)         |                             |         | Treatment Status (No of Treatments)                    |                                             |                                    |
|                                         | December                    | January |                                                        | December                                    | January                            |
| Black                                   | 4                           | 4       | -                                                      | -                                           | 1 treatment status unreported      |
| Red                                     | 15                          | 14      | Red                                                    | 7                                           | 5                                  |
| Amber                                   | 1                           | 1       | Amber                                                  | 25                                          | 21                                 |
| Green                                   | 0                           | 0       | Green                                                  | 21                                          | 13                                 |
| Risks Added                             | 0                           | 4       | Treatments Added                                       | 2 for existing risks (1 red, 1 amber)       | 7 for new risks (1 green, 6 amber) |
| TOTAL                                   | 20                          | 23      | TOTAL                                                  | 55                                          | 47                                 |
| Risks Removed and No Longer on Register | 8 (2 black; 5 red; 1 amber) | 1 (red) | Treatments Removed and No Longer on Register           | 4 from active risks<br>23 from closed risks | 3 from closed risks                |
|                                         |                             |         | N/A as risk closing or treatment no longer appropriate | 2                                           | 14                                 |

| RISK SIGNIFICANCE                                                                                                                    | TREATMENT STATUS                                                                                                                                |
|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
|  BLACK – SHOWSTOPPER; difficult to quantify impacts |  RED – Treatment Strategy behind programme                   |
|  RED – High Risk                                   |  AMBER – Treatment Strategy on programme                    |
|  AMBER – Medium Risk                              |  GREEN – Treatment Strategy ahead of programme or complete |
|  GREEN – Low Risk                                 |                                                                                                                                                 |



**Tram – Stakeholder Risks**

| Master Risk ID | Risk Description                                                                                                                                                                                                                                                                                                                                                 | Effect(s)                                                                                                                                                                                                                                                                                                        | Risk Sig | Treatment Strategy                                                                                                                                                                            | Treatment |         | Due Date  | Risk Owner*                                                                           |  |  |                 |  |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------|-----------|---------------------------------------------------------------------------------------|--|--|-----------------|--|
|                |                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                  |          |                                                                                                                                                                                               | end Dec   | end Jan |           |                                                                                       |  |  |                 |  |
| 264            | Long term political risk to continued commitment of TS/CEC support for the Tram scheme                                                                                                                                                                                                                                                                           | <ul style="list-style-type: none"> <li>Protracted decision making and unnecessary debate during consideration of Business Case</li> <li>Project becomes key political issue during election campaign</li> <li>Reversal of decisions by incoming administrations in either or both of CEC and Holyrood</li> </ul> |          | Monitor likely outcomes and do our best to brief all relevant parties about the project in a balanced way                                                                                     |           |         | 21 Dec 06 | <b>Willie Gallagher A</b><br><br><b>Andie Harper B</b>                                |  |  |                 |  |
|                |                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                  |          | 'Hearts and minds' campaign including Senior Executive Officer meetings with Councillors and MSPs and utilising the tram sounding board meeting with CEC and selected elected transport leads |           |         |           |                                                                                       |  |  |                 |  |
|                |                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                  |          | Regular briefings and discussions with senior CEC and TS officers particularly in relation to Full Council presentations                                                                      |           |         |           |                                                                                       |  |  |                 |  |
|                |                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                  |          |                                                                                                                                                                                               |           |         |           | Provide confidence on Infraco costs in Business Case ensuring that 70% costs are firm |  |  | Feb 07          |  |
|                |                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                  |          |                                                                                                                                                                                               |           |         |           | Make contact and engage with Senior SNP Leaders (effect 2)                            |  |  | Dec 07 – May 07 |  |
|                |                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                  |          |                                                                                                                                                                                               |           |         |           | Continue to provide accurate information on status of project (effect 3)              |  |  | From May 07     |  |
| 268            | Funding not secured or agreements not finalised regarding the total aggregate funding from TS and CEC including TS grant/indexation CEC contribution; risk sharing between parties; cashflow profile; financial covenant; and public sector risk allocation; and decision on Line 1B.<br><br>NB CHANGE OF RISK WORDING; CHANGE OF RISK OWNERS BY GRAEME BISSETT. | <ul style="list-style-type: none"> <li>Possible showstopper.</li> <li>Delays and increase in out-turn cost may affect affordability.</li> </ul>                                                                                                                                                                  |          | Ensure close and continual interactions with TS and CEC to establish funding delivery confidence and agreement.                                                                               |           |         | Sep 07    | <b>Andrew Holmes A</b><br><br><b>Stewart McGarrity B</b>                              |  |  |                 |  |
|                |                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                  |          | Develop and implement strategy for additional contributions                                                                                                                                   |           | N/A     |           |                                                                                       |  |  |                 |  |
|                |                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                  |          | ACTION CLOSED AS NOT RELEVANT (GB)                                                                                                                                                            |           |         |           |                                                                                       |  |  |                 |  |

\*Note: A – Stakeholder Risk Owner; B – Project Support to Stakeholder Risk Owner

| Master Risk ID | Risk Description                                                                                                                                                                                                        | Effect(s)                                                                                                                                                                                                                                                                 | Risk Sig | Treatment Strategy                                                                                                                                                                             | Treatment |         | Due Date | Risk Owner*         |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------|----------|---------------------|
|                |                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                           |          |                                                                                                                                                                                                | end Dec   | end Jan |          |                     |
| 269            | <p>Agreement on financial <u>over-run</u> risks sharing has not been reached between CEC and TS due to doubts over costs staying in budget.</p> <p>RISK INCLUDED IN RISK 268 (GRAEME BISSETT) THEREFORE CLOSE RISK.</p> | <ul style="list-style-type: none"> <li>Potential showstopper to project if agreement is not reached.</li> </ul>                                                                                                                                                           |          | Hold discussions with CEC & TS to ensure adequate release of funds at appropriate periods of time.                                                                                             |           | N/A     | Dec 06   | John Ramsay (TS) A  |
|                |                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                           |          | Understand commitments by TS and CEC re: 1A and 1B                                                                                                                                             |           | N/A     |          |                     |
|                |                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                           |          | Facilitate agreement between CEC and TS.                                                                                                                                                       |           | N/A     |          |                     |
| 270            | <p>Uncertainty about requirements for wider area modelling and need and extent of construction works required on road network</p>                                                                                       | <ul style="list-style-type: none"> <li>Increased construction cost.</li> <li>Delay while additional funding is found.</li> </ul>                                                                                                                                          |          | Clarify and agree boundaries of scope and funding provision between TS and CEC                                                                                                                 |           |         | Feb 07   | Willie Gallagher A  |
|                |                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                           |          | Provision of £500k in Draft Final Business Case estimate to deal with WAM requirements                                                                                                         |           |         |          |                     |
|                |                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                           |          | Employ further Traffic Management expertise                                                                                                                                                    |           |         |          |                     |
| 273            | <p>Business case is not approved during February 2007 due to Infracore tender returns not adequately informing the business case.</p>                                                                                   | <ul style="list-style-type: none"> <li>Delay until Summer 2007 due to lack of political commitment due to impending elections.</li> <li>Resultant cost impacts (inflation) on total cost.</li> <li>Political support may evaporate.</li> <li>Leads to Risk 264</li> </ul> |          | Maintain procurement programme to deliver critical business case inputs<br>PROCUREMENT PROGRAMME MAINTAINED. REPORT PREPARED. ESTIMATE REVIEWED AND AWAITING APPROVAL FROM TRANSPORT SCOTLAND. |           |         | Jan 07   | Stewart McGarrity A |
|                |                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                           |          | Managing expectations on the part of TS and CEC as to the certainty with respect to costs which are reflected in the business case.                                                            |           |         |          |                     |
|                |                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                           |          | Ongoing fortnightly reviews with bidders and mid term contractual mark up to inform above treatment                                                                                            |           |         |          |                     |

\*Note: A – Stakeholder Risk Owner; B – Project Support to Stakeholder Risk Owner



| Master Risk ID            | Risk Description                                                                                                                                                                                                                                                                     | Effect(s)                                                                                                                                                                                                                                                                       | Risk Sig | Treatment Strategy                                                                                                                                                                                                      | Treatment |         | Due Date | Risk Owner*                                |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------|----------|--------------------------------------------|
|                           |                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                 |          |                                                                                                                                                                                                                         | end Dec   | end Jan |          |                                            |
| 274                       | Failure to engage with Transdev in order to adjust DPOFA in line with the development of the Infraco and Tramco procurements. This includes negotiation to secure Transdev acceptance of a subcontract to support system commissioning responsibilities.<br>EXPECT CLOSE NEXT MONTH. | <ul style="list-style-type: none"> <li>Failure to achieve most effective commercial solution</li> <li>Delay in resolution of Agreements</li> </ul>                                                                                                                              |          | Engage with Transdev to ensure adjustment to DPOFA and negotiate requirements. [PRINCIPLES AGREED WITH DETAILED DRAFTED OF LEGAL AGREEMENT ONGOING – AS A RESULT OF ACTION RISK PROBABILITY HAS REDUCED SIGNIFICANTLY]. |           |         | Feb 07   | Alasdair Richards A & B                    |
| NEW<br>To be added to ARM | Transdev Edinburgh Tram is a company limited by guarantee with negligible assets and capital. In the event of liabilities arising under DPOFA, tie has no ability gain recourse.                                                                                                     | <ul style="list-style-type: none"> <li>DPOFA liabilities are uncapped but tie has no ability to pursue parent company at present.</li> <li>£5m Performance Bond will be in place from commencement of operations but not considered enough – potential exposure £5m.</li> </ul> |          | Negotiate bond to £10m and to start June 2009.                                                                                                                                                                          | NEW       |         | Feb 07   | Alasdair Richards A&B                      |
| NEW<br>To be added to ARM | CEC do not achieve adequate capability to deliver their contribution of £45m plus additional contribution relating to Line 1B.<br><br>NEW RISK ADDED BY GRAEME BISSETT – CONFIRM RISK OWNERS.                                                                                        | <ul style="list-style-type: none"> <li>Potential showstopper to project if agreement if not reached.</li> <li>Line 1B may depend on incremental funding from CEC</li> </ul>                                                                                                     |          | Execute a process to deliver necessary degree of assurance that contributions can be made. Process to focus in particular on third party contributions.                                                                 | NEW       |         | ?        | Andrew Holmes A<br><br>Stewart McGarrity B |

\*Note: A – Stakeholder Risk Owner; B – Project Support to Stakeholder Risk Owner

**Tram – Project Risks**

| Master Risk ID | Risk Description                                                                                                                                                                                               | Effect(s)                                                                                                                                                                                                                                    | Risk Sig | Treatment Strategy                                                                                                                                                                                                            | Treatment |         |            | Risk Owner    |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------|------------|---------------|
|                |                                                                                                                                                                                                                |                                                                                                                                                                                                                                              |          |                                                                                                                                                                                                                               | end Dec   | end Jan | Due Date   |               |
| 278            | Infraco tenderers seek extensions of time during tender period<br>CLOSE – REMOVE FROM PRIMARY REGISTER                                                                                                         | <ul style="list-style-type: none"> <li>Delay to market pricing and confirmation of business case capex requirements</li> </ul>                                                                                                               |          | Agree bid programme with bidders – programme has been agreed                                                                                                                                                                  |           | N/A     | Aug-Sep 06 | Bob Dawson    |
|                |                                                                                                                                                                                                                |                                                                                                                                                                                                                                              |          | Manage bid process to ensure bidders deliver to agreed dates                                                                                                                                                                  |           | N/A     | 12 Jan 07  |               |
| 279            | Third party consents including Network Rail, CEC Planning, CEC Roads Department, Historic Scotland, Building Fixing owner consent is denied or delayed.<br><br>SUMMARY RISK – RISK TO BE SPLIT TO DETAIL LEVEL | <ul style="list-style-type: none"> <li>Delay to programme.</li> <li>Risk transfer response by bidders is to return risk to tie</li> <li>Increased out-turn cost if transferred and also as a result of any delay due to inflation</li> </ul> |          | Engagement with third parties to discuss and obtain prior approvals to traffic management plans, landscape and habitat plans, TTROs, TROs and construction methodologies in relation to archaeological and ancient monuments  |           |         | Aug 07     | Trudi Craggs  |
|                |                                                                                                                                                                                                                |                                                                                                                                                                                                                                              |          | Identify fallback options                                                                                                                                                                                                     |           |         |            |               |
|                |                                                                                                                                                                                                                |                                                                                                                                                                                                                                              |          | CEC Planning – Mock application by SDS [APPLICATION SUBMITTED; Approval has not yet been achieved although discussions are ongoing with the planning authority, SDS and tie.]                                                 |           |         | Jan 07     |               |
| 280            | SDS critical deliverables are considered to be below quality levels required or late in production<br><br>SUMMARY RISK – RISK TO BE SPLIT TO DETAIL LEVEL                                                      | <ul style="list-style-type: none"> <li>Delay in submission of information to Infraco</li> <li>Delay in achieving consents and approvals</li> <li>Dilution of effort to de-risk Infraco pricing</li> </ul>                                    |          | Identification of key areas requiring SDS attention. Re-focus SDS effort.                                                                                                                                                     |           |         | Jul 07     | Geoff Gilbert |
|                |                                                                                                                                                                                                                |                                                                                                                                                                                                                                              |          | Apply micromanagement to SDS delivery. Weekly reviews to press for deliverables. [ACTION IDENTIFIED IN MAIN REPORT. PROBLEMS REMAIN WITH SDS PERFORMANCE AND THIS HAS REQUIRED A REFOCUS ON MICROMANAGEMENT HENCE RED STATUS] |           | ?       | See MC     |               |
| 281            | Insufficient planning of procurements and controls on management and contract costs.                                                                                                                           | <ul style="list-style-type: none"> <li>Weak procurement plan</li> <li>Scope/cost creep</li> <li>Damage to reputation</li> </ul>                                                                                                              |          | Improve robustness of procurement plan.                                                                                                                                                                                       |           |         | Dec 06     | Geoff Gilbert |
|                |                                                                                                                                                                                                                |                                                                                                                                                                                                                                              |          | Finalise project estimate and functional specification and apply change control.                                                                                                                                              |           |         | Dec 06     |               |
|                |                                                                                                                                                                                                                |                                                                                                                                                                                                                                              |          | Undertake further Value Engineering                                                                                                                                                                                           |           |         | Mar 07     |               |
| 282            | Procurement strategy has high level of risk transfer to                                                                                                                                                        | <ul style="list-style-type: none"> <li>Increased price of bids</li> </ul>                                                                                                                                                                    |          | Identify feasible alternatives to risk allocation and allow negotiation of risk allocation                                                                                                                                    |           |         | Oct 07     | Bob Dawson    |

\*Note: A – Stakeholder Risk Owner; B – Project Support to Stakeholder Risk Owner



| Master Risk ID | Risk Description                                                                                                                                                        | Effect(s)                                                                                                                                                                                                                                   | Risk Sig | Treatment Strategy                                                                                                                                                   | Treatment |         |                | Risk Owner        |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------|----------------|-------------------|
|                |                                                                                                                                                                         |                                                                                                                                                                                                                                             |          |                                                                                                                                                                      | end Dec   | end Jan | Due Date       |                   |
|                | contractors which results in a failure to sustain suitable interest from the market throughout bid process.                                                             | <ul style="list-style-type: none"> <li>Withdrawal of bidders during bid process</li> </ul>                                                                                                                                                  |          | Review contract mark-ups and draft amendments                                                                                                                        |           |         |                |                   |
| 283            | Infraco tender returns are outside forecast estimates and business case capex limit<br><br>RISK CLOSED AS TENDER RETURNS WITHIN TOLERANCE LEVELS                        | <ul style="list-style-type: none"> <li>Draft Final Business Case requires major change and update</li> <li>Business case not sustainable</li> <li>Confidence is lost by Funders and politicians</li> </ul>                                  |          | Identify feasible options to enable scheme to proceed                                                                                                                |           | N/A     | Oct 06- Jan 07 | Stewart McGarrity |
|                |                                                                                                                                                                         |                                                                                                                                                                                                                                             |          | Conduct review of scenarios and approach to be taken for business case                                                                                               |           | N/A     |                |                   |
|                |                                                                                                                                                                         |                                                                                                                                                                                                                                             |          | Discuss contingency options with Funders and politicians                                                                                                             |           | N/A     |                |                   |
| 284            | If programme requires to be accelerated, early commencement of depot works is required (current programme has no contingency and shows depot works commencement Nov 07) | <ul style="list-style-type: none"> <li>Potential critical delay and increased cost should longer timescale be required</li> </ul>                                                                                                           |          | Develop procurement strategy to obtain funding.                                                                                                                      |           |         | End Dec 06     | Susan Clark       |
|                |                                                                                                                                                                         |                                                                                                                                                                                                                                             |          | Gain TS agreement for early commencement of works including earthworks. PAPER SUBMITTED TO DPD 13 FEBRUARY.                                                          |           |         |                |                   |
| 286            | Infraco refuses to accept or fully engage in novation of SDS and as a consequence award is successfully challenged                                                      | <ul style="list-style-type: none"> <li>Significant delay to delivery of Tram</li> <li>Loss of Reputation</li> <li>Significant extra costs</li> </ul>                                                                                        |          | Consult with legal on options relating to due diligence to be carried out on design and, availability of consents (esp building fixings)                             |           |         | May 07         | Bob Dawson        |
|                |                                                                                                                                                                         |                                                                                                                                                                                                                                             |          | Introduce and engage Infraco bidders to SDS as early as possible                                                                                                     |           |         |                |                   |
|                |                                                                                                                                                                         |                                                                                                                                                                                                                                             |          | Complete designs and allow due diligence to be undertaken by bidders                                                                                                 |           |         |                |                   |
| 344            | Withdrawal of bidders or submission of non-compliant bids due to non-project related issues<br>RISK CLOSED – REMOVE FROM RISK REGISTER                                  | <ul style="list-style-type: none"> <li>Less than 2 Infraco bids are submitted</li> <li>Less than 2 compliant Infraco bids are submitted</li> <li>Public sector procurement guidelines are not met resulting in significant delay</li> </ul> |          | Develop approach to maintain confidence in delivery of value two-way procurement                                                                                     |           | N/A     | Jan 07         | Bob Dawson        |
|                |                                                                                                                                                                         |                                                                                                                                                                                                                                             |          | Ongoing liaison with bidders to maintain engagement                                                                                                                  |           | N/A     |                |                   |
|                |                                                                                                                                                                         |                                                                                                                                                                                                                                             |          | Develop Fallback Plan to cover the eventuality of only one bid being returned<br>[ACTION NOT NECESSARY AS HAS BEEN CONFIRMED THAT 2 BIDS WILL BE RECEIVED ON 12 JAN] |           | N/A     | Dec 06         |                   |

\*Note: A – Stakeholder Risk Owner; B – Project Support to Stakeholder Risk Owner



| Master Risk ID | Risk Description                                                                                                                                       | Effect(s)                                                                                                                                                                                                         | Risk Sig | Treatment Strategy                                                                                                                                                                                             | Treatment |         |               | Risk Owner           |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------|---------------|----------------------|
|                |                                                                                                                                                        |                                                                                                                                                                                                                   |          |                                                                                                                                                                                                                | end Dec   | end Jan | Due Date      |                      |
| 139 & 164      | Uncertainty of Utilities location and consequently required diversion work/ unforeseen utility services                                                | <ul style="list-style-type: none"> <li>Increase in MUDFA costs or delays as a result of carrying out more diversions that estimated</li> <li>Re-design and delay to Infracore works</li> </ul>                    |          | Ground Penetration Radar surveys to confirm location of Utilities under Tramway. To be plotted onto drawings by SDS. [ACTION COMPLETE]                                                                         |           |         | End Nov 06    | <b>Susan Clark</b>   |
|                |                                                                                                                                                        |                                                                                                                                                                                                                   |          | In conjunction with MUDFA, create and implement schedule of trial excavations to confirm locations of Utilities [ACTION COMPLETE]                                                                              |           |         | Mid Dec 06    |                      |
|                |                                                                                                                                                        |                                                                                                                                                                                                                   |          | In conjunction with MUDFA, undertake trial excavations to confirm locations of Utilities.                                                                                                                      |           |         | Mid Feb 07    |                      |
|                |                                                                                                                                                        |                                                                                                                                                                                                                   |          | Review design information and re-measure during design workshops with Utility Companies and MUDFA. Develop PC Sums into quantified estimates. [DESIGN NOT YET MATURE ENOUGH TO ACHIEVE ACTION]                 |           |         | End Nov 06    |                      |
|                |                                                                                                                                                        |                                                                                                                                                                                                                   |          | Identify increase in services diversions. MUDFA to resource/re-programme to meet required timescales                                                                                                           |           |         | Dec 06-Aug 07 |                      |
| 1              | Change in anticipated inflation rate from 5% (included in base estimate)<br>RISK CLOSED – ALL BIDS OFFER FIXED INFLATION RATE, REMOVE FROM REGISTER    | <ul style="list-style-type: none"> <li>Out-turn cost higher than reported</li> </ul>                                                                                                                              |          | Update project estimate inflation allowance using TS methodology.                                                                                                                                              |           | N/A     | Jun 07        | <b>Geoff Gilbert</b> |
|                |                                                                                                                                                        |                                                                                                                                                                                                                   |          | Monitor market and inflation indexes such as BCIS to ensure early identification and that correct adjustment is applied and further updated to project estimate and update project funder at regular intervals |           | N/A     |               |                      |
| 349            | Diversion of gas main at Gogar Depot depends on construction of Turnhouse Pressure Reducing Station – land is not in LoD and there are no alternatives | <ul style="list-style-type: none"> <li>Turnhouse PRS not constructed or not completed on time resulting in critical delay to construction of depot</li> <li>Land purchase cost may be above face value</li> </ul> |          | Ensure Scottish Gas Networks understand the criticality of diversion programme                                                                                                                                 |           |         | Jan 07        | <b>John Low</b>      |
|                |                                                                                                                                                        |                                                                                                                                                                                                                   |          | Monitor SGN progress with regard to land acquisition and adjust Tram programme accordingly                                                                                                                     |           |         |               |                      |
|                |                                                                                                                                                        |                                                                                                                                                                                                                   |          | Ensure Tram Project remains in background in order to prevent escalation of land price                                                                                                                         |           |         |               |                      |
|                |                                                                                                                                                        |                                                                                                                                                                                                                   |          | Develop strategy to allow commencement of Depot earthworks without prior diversion of Gas Main [ACTION COMPLETE]                                                                                               |           |         | Dec 06        |                      |

\*Note: A – Stakeholder Risk Owner; B – Project Support to Stakeholder Risk Owner

| Master Risk ID | Risk Description                                                                                                                                                                                                                                                                                                                                                                              | Effect(s)                                                                                                                                                                | Risk Sig | Treatment Strategy                                                                                                                                                                                                                                                                                                                                       | Treatment |         |            | Risk Owner                     |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------|------------|--------------------------------|
|                |                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                          |          |                                                                                                                                                                                                                                                                                                                                                          | end Dec   | end Jan | Due Date   |                                |
| 271            | Failure to reach a suitable agreement with CEC regarding:<br>1. Roads maintenance responsibility where the tram has been installed in CEC maintained roads;<br>2. What is and is not realistically within the scope of the tram infrastructure delivery contract;<br>3. The way in which tram UTC priorities are handled at key junctions.<br><br>SUMMARY RISK – TO BE SPLIT TO DETAIL LEVEL. | <ul style="list-style-type: none"> <li>Delay to project while agreement with CEC is reached.</li> <li>Sacrifices being made to ensure agreement is concluded.</li> </ul> |          | Final agreement to be approved by Roads Authority, CEC Promoter, CEC in-house legal and tie                                                                                                                                                                                                                                                              |           |         | Feb 07     | Trudi Craggs                   |
|                |                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                          |          | Final alignments in place [Agreement has not been reached on the final alignment. However there are ongoing discussions through the Roads Design Working Group and between SDS, TEL and CEC and good progress is being made. It is hopefully that all alignments will be agreed by the end of February, although they may still require to be modelled.] |           |         | End Dec 06 | Keith Rimmer (1)               |
| 172            | Area immediately west of Gogarburn of possible contamination has been highlighted during desk study as unlicensed tip. Special foundation may be required to cope with unstable ground.                                                                                                                                                                                                       | <ul style="list-style-type: none"> <li>Increase in costs over base estimate to provide special foundation solution</li> </ul>                                            |          | Obtain ground investigation information, design accordingly and include costs in base estimate.<br>DETAILED SI REPORT AVAILABLE W/E 9 FEBRUARY – DESIGN AND ASSESSMENTS WILL BE AVAILABLE AFTER PUBLICATION.                                                                                                                                             | NEW       |         | Feb 07     | SDS – Ailsa McGregor (for tie) |
|                |                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                          |          | Include SI Report and Information in next issue of information to Infraco                                                                                                                                                                                                                                                                                | NEW       |         | Mar 07     |                                |
| 352            | Some high risk properties may result in higher compensation claims than anticipated.                                                                                                                                                                                                                                                                                                          | <ul style="list-style-type: none"> <li>Additional uplift on compensation claims</li> </ul>                                                                               |          | Initiate early negotiations between DV and Landowners.                                                                                                                                                                                                                                                                                                   | NEW       |         | Mar 07     | Geoff Duke                     |
|                |                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                          |          | Liaise with CEC Planning                                                                                                                                                                                                                                                                                                                                 | NEW       |         | Mar 07     |                                |
|                |                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                          |          | Feed information back to base estimate costs                                                                                                                                                                                                                                                                                                             | NEW       |         | Feb 08     |                                |



tie Limited  
 ETN PROJECT PROGRESS REPORT FOR DEC 06 - PROJECT SPEND TO MAR 2007  
 PHASING OF VALUE OF WORK DONE  
 Date:- 31.01.07

Cumulative Approved Budget  
 Cumulative Current Forecast Value to expend Budget

| Figures in '000s                     | Approved Budget | Cumulative Approved Budget vs Forecast |                         |               |        | Value of Work Done (VOWD) Review |              |                                                                                                       | Apr - Mar 07 Review |          |                                                                                                                                                                                        |                                                                                                  |
|--------------------------------------|-----------------|----------------------------------------|-------------------------|---------------|--------|----------------------------------|--------------|-------------------------------------------------------------------------------------------------------|---------------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
|                                      |                 | Apr 06 - Mar 07                        | Spend/Bud to date (Jan) | Feb-07        | Mar-07 | 07/08                            | Previous     | Variance (current minus previous)                                                                     | Comment             | Previous | Variance (current minus previous)                                                                                                                                                      | Comment                                                                                          |
|                                      |                 |                                        |                         |               |        |                                  |              |                                                                                                       |                     |          |                                                                                                                                                                                        |                                                                                                  |
| <b>IMPLEMENTATION</b>                |                 |                                        |                         |               |        |                                  |              |                                                                                                       |                     |          |                                                                                                                                                                                        |                                                                                                  |
| 1 tie RESOURCES                      | 5,706           | 4,698                                  | 5,155                   | 5,706         |        |                                  |              |                                                                                                       |                     |          |                                                                                                                                                                                        |                                                                                                  |
|                                      |                 | 4,788                                  | 5,395                   | 5,933         |        | 4,768                            | 21           |                                                                                                       | 5,909               | 24       |                                                                                                                                                                                        |                                                                                                  |
| 2 DPOF                               | 389             | 328                                    | 358                     | 389           |        |                                  |              |                                                                                                       | 389                 |          |                                                                                                                                                                                        |                                                                                                  |
|                                      |                 | 328                                    | 358                     | 389           |        | 328                              |              |                                                                                                       |                     |          |                                                                                                                                                                                        |                                                                                                  |
| 3 LEGALS                             | 2,634           | 2,160                                  | 2,416                   | 2,634         |        |                                  |              |                                                                                                       |                     |          |                                                                                                                                                                                        |                                                                                                  |
|                                      |                 | 1,807                                  | 2,083                   | 2,338         |        | 1,979                            | (172)        | Properly work down on forecast. This work shall ramp up Feb/Mar to meet land take commitments for 1a. | 2,453               | (117)    | Effect of Property re- forecast (see vovd comment) and reduction in Feb/Mar for general adive.                                                                                         |                                                                                                  |
| 4 SDS                                | 13,002          | 10,402                                 | 11,702                  | 13,002        |        |                                  |              |                                                                                                       | 13,002              |          |                                                                                                                                                                                        | Year end forecast under review. No change to date                                                |
|                                      |                 | 10,402                                 | 11,702                  | 13,002        |        | 10,402                           |              |                                                                                                       |                     |          |                                                                                                                                                                                        |                                                                                                  |
| 5 JRC                                | 902             | 672                                    | 702                     | 902           |        |                                  |              |                                                                                                       |                     |          |                                                                                                                                                                                        |                                                                                                  |
|                                      |                 | 835                                    | 940                     | 1,020         |        | 803                              | 32           |                                                                                                       | 1,003               | 17       | Further scope change under review for additional TRO & wider area impacts modelling work to inform business case. Confirmation of additional cost and programme validation by end Feb. |                                                                                                  |
| 6 TSS                                | 4,296           | 3,476                                  | 3,886                   | 4,296         |        |                                  |              |                                                                                                       |                     |          |                                                                                                                                                                                        |                                                                                                  |
|                                      |                 | 3,460                                  | 3,917                   | 4,358         |        | 3,492                            | (30)         |                                                                                                       | 4,358               |          |                                                                                                                                                                                        |                                                                                                  |
| 7 UTILITIES                          |                 |                                        |                         |               |        |                                  |              |                                                                                                       |                     |          |                                                                                                                                                                                        |                                                                                                  |
| 8 DESIGN SUPPORT                     |                 |                                        |                         |               |        |                                  |              |                                                                                                       |                     |          |                                                                                                                                                                                        |                                                                                                  |
| 9 3RD PARTY NEGOT                    | 280             | 232                                    | 255                     | 280           |        |                                  |              |                                                                                                       |                     |          |                                                                                                                                                                                        |                                                                                                  |
|                                      |                 | 129                                    | 138                     | 158           |        | 136                              | (8)          |                                                                                                       | 280                 | (124)    | Network Rail legal funding pushed out to 07/08 to support approval process of the APA.                                                                                                 |                                                                                                  |
| 10 LAND & PROP                       | 10,713          | 271                                    | 32                      | 10,713        |        |                                  |              |                                                                                                       | 10,704              | (3)      |                                                                                                                                                                                        |                                                                                                  |
|                                      |                 | 15                                     | 29                      | 10,701        |        | 18                               | (3)          |                                                                                                       |                     |          |                                                                                                                                                                                        |                                                                                                  |
| 11 TROs                              |                 |                                        |                         |               |        |                                  |              |                                                                                                       |                     |          |                                                                                                                                                                                        |                                                                                                  |
| 12 COMMS / MKTG                      | 638             | 560                                    | 609                     | 638           |        |                                  |              |                                                                                                       | 640                 | (11)     |                                                                                                                                                                                        |                                                                                                  |
|                                      |                 | 557                                    | 599                     | 620           |        | 568                              | (11)         |                                                                                                       |                     |          |                                                                                                                                                                                        |                                                                                                  |
| 13 TEL                               | 620             | 520                                    | 570                     | 620           |        |                                  |              |                                                                                                       | 620                 |          |                                                                                                                                                                                        |                                                                                                  |
|                                      |                 | 520                                    | 570                     | 620           |        | 520                              |              |                                                                                                       |                     |          |                                                                                                                                                                                        |                                                                                                  |
| 14 SERV INTEG PLANNING               | 58              | 58                                     | 58                      | 58            |        |                                  |              |                                                                                                       | 58                  |          |                                                                                                                                                                                        |                                                                                                  |
|                                      |                 | 58                                     | 58                      | 58            |        | 58                               |              |                                                                                                       |                     |          |                                                                                                                                                                                        |                                                                                                  |
| 15 PUK                               | 80              | 68                                     | 74                      | 80            |        |                                  |              |                                                                                                       | 80                  |          |                                                                                                                                                                                        |                                                                                                  |
|                                      |                 | 68                                     | 74                      | 80            |        | 68                               |              |                                                                                                       |                     |          |                                                                                                                                                                                        |                                                                                                  |
| 16 FINANCIAL ADVISORS                | 38              | 38                                     | 38                      | 38            |        |                                  |              |                                                                                                       | 38                  |          |                                                                                                                                                                                        |                                                                                                  |
|                                      |                 | 38                                     | 38                      | 38            |        | 38                               |              |                                                                                                       |                     |          |                                                                                                                                                                                        |                                                                                                  |
| 17 INSURANCE                         | 1,024           | 1,018                                  | 1,021                   | 1,024         |        |                                  |              |                                                                                                       | 1,008               |          |                                                                                                                                                                                        |                                                                                                  |
|                                      |                 | 49                                     | 55                      | 1,008         |        | 49                               |              |                                                                                                       |                     |          |                                                                                                                                                                                        |                                                                                                  |
| 18 CONSTRUCTION Utilities incl MUDFA | 3,235           | 1,550                                  | 1,850                   | 3,235         |        |                                  |              |                                                                                                       |                     |          |                                                                                                                                                                                        |                                                                                                  |
|                                      |                 | 1,793                                  | 1,922                   | 3,273         |        | 1,793                            |              |                                                                                                       | 3,273               |          |                                                                                                                                                                                        |                                                                                                  |
| 19 Infraco                           | 282             | 41                                     | 262                     | 282           |        |                                  |              |                                                                                                       |                     |          |                                                                                                                                                                                        |                                                                                                  |
|                                      |                 | 0                                      | 0                       | 20            |        | 21                               | (21)         | refer to Apr-Mar 07 Review comment                                                                    | 82                  | (62)     | Forecasted spend on badger works for 1a revised and re-programmed for Mar07                                                                                                            |                                                                                                  |
| 20 Tramco                            |                 |                                        |                         |               |        |                                  |              |                                                                                                       |                     |          |                                                                                                                                                                                        |                                                                                                  |
| 99 OTHER                             | 145             | 125                                    | 135                     | 145           |        |                                  |              |                                                                                                       | 144                 | (9)      |                                                                                                                                                                                        |                                                                                                  |
|                                      |                 | 125                                    | 139                     | 139           |        | 125                              |              |                                                                                                       |                     |          |                                                                                                                                                                                        |                                                                                                  |
| SPECIFIED CONTINGENCY                |                 |                                        | 0                       | 285           |        |                                  |              |                                                                                                       |                     |          |                                                                                                                                                                                        | Forecasted surplus for 06/07 derived from current Approved Funding less latest VOWD to year end. |
| <b>BUDGET TOTAL</b>                  | <b>44,041</b>   | <b>25,977</b>                          | <b>29,120</b>           | <b>44,041</b> |        |                                  |              |                                                                                                       | <b>44,041</b>       | <b>0</b> |                                                                                                                                                                                        |                                                                                                  |
| <b>CURRENT FORECAST</b>              |                 | <b>25,261</b>                          | <b>26,195</b>           | <b>44,041</b> |        | <b>25,166</b>                    | <b>(199)</b> |                                                                                                       | <b>44,041</b>       | <b>0</b> |                                                                                                                                                                                        |                                                                                                  |

Note - Budget lines reflect November 2006 Transport Scotland Approval of £44m for the current financial year 2006/07.

## Edinburgh TRAM Project

### Appendix D

Paper to : Tram Project Board  
Subject : GOGAR Depot Advanced Ground Excavation Stage One  
Date : 14<sup>th</sup> February 2007

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#### TPB approval sought for commencement of GOGAR Depot Advanced Works Programme Stage One

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### 1.0 Background

- 1.1 There is a requirement to build a Tram Depot at Gogar as part of the Edinburgh Tram network Installation.  
It has been identified that there will be a substantial programme advantage by carrying out Mass Excavations in two stages. Stage One prior to MUDFA Utility diversions ( with the exception of the High Pressure Gas Pipe removal that is programmed to be removed under Infracore ) followed by Stage Two excavations prior to Infracore works.
- 1.2 This paper is in relation to Stage One works only, a further paper will follow for Stage Two works.
- 1.3 A Design Assumption review was carried out on 12<sup>th</sup> December 06 followed by a Depot Feasibility Report on 12<sup>th</sup> January 07.  
Further to these studies and meeting's it has been identified that by carrying out the Advanced works a more robust and cost efficient programme can be delivered.

### 2.0 Workslope

- 2.1 The programmed works for Stage One excavations are the removal of the surface bunds and excavating the Depot to a level approximately 1 metre above the Utilities that are to be diverted.
- 2.2 A three metre exclusion zone on both sides of the Gas pipe will be set up.

### 3.0 Programme

- 3.1 The Programme for Stage One Advanced works is as follows.
- 3.2 The Procurement Process has been programmed to start on 20<sup>th</sup> Feb 07 leading up to a Contract Award on 17<sup>th</sup> May 07.
- 3.3 Following the Contract Award Site works will start on 18<sup>th</sup> May 07 with a Programmed completion date 21<sup>st</sup> June 07.
- 3.4 The MUDFA Utility Diversions will take place directly after the completion of

## Edinburgh TRAM Project

Stage One excavation works starting on 22<sup>nd</sup> June 07 to completion on 23<sup>rd</sup> August 07.

- 3.5 The Stage Two Excavation works are programmed to follow on from the Utility Diversions however they will be the subject of a separate paper.

### 4.0 Advanced Works Benefits / Opportunities

- 4.1 The advanced works programme provides a streamlined flow of works leading up to the start of the Infraco Construction phase.
- 4.2 The proposed programme milestones clearly define the individual Contractors progress and delivery requirements in relation to the advancement of the programme.
- 4.3 The Site will be well established before the Main Construction phase starts with access arrangements in place, temporary utility supply's connected, accommodation / offices & security in place. A simple transfer of lease between contractors will negate the need to re-establish site facilities between different contractors on separate phases of the works.
- 4.4 The early completion of the excavations will allow the first stages of the Infraco to start on programme.
- 4.5 Any Groundwork and or Utility issues will be identified and acted on at an early stage.
- 4.6 tie ltd are currently in negotiation with several companies with a view to an alternative arrangement for the spoil disposal. This could provide a substantial saving on the cost figures below.
- 4.7 The progression of advanced works can lead to the early installation of the Test Track resulting in quicker delivery of the first Trams.

### 5.0 Risk

- 5.1 Utility diversions may be delayed due to problems that may be encountered while they are being worked on, damage to electricity supply cables, communications cables, water mains, sewerage pipes, gas pipes and or drains. ( **Low Risk** )
- 5.2 Excavations may be delayed due to accidental damage that may be caused to electricity supply cables, communications cables, water mains, sewerage pipes, gas pipes and or drains while excavating. ( **Low Risk** )
- 5.3 Late delivery of Stage One excavations delaying MUDFA Utility diversions. ( **Low Risk** )
- 5.4 Breakdown of wheel wash plant delaying spoil transportation. ( **Low Risk** )
- 5.5 Traffic Jam causing delays to transportation of spoil from site. ( **Low Risk** )

## Edinburgh TRAM Project

5.6 Discovery of contaminated materials during excavation. ( **Low risk** )

5.7 Breakdown of excavating equipment. ( **Low Risk** )

5.8 Power or water supply failure. ( **Low Risk** )

### 6.0 Costs

6.1 Preparatory works estimated costs are £257,177. This includes the initial site set up, welfare facilities, security, wheel wash facilities, de-watering facilities construction of haul roads. This can be divided between Stage One & Two Advanced works.

A sum of £128,588.5 for Stage One.

6.2 Excavation & Disposal of Spoil –  
minimum of 122,000 m<sup>3</sup> – maximum of 250,190m<sup>3</sup>. (Cubic Metres)  
minimum of £2,818,956 - maximum cost £5,780, 939 for both Stage One & Two Advanced works.

A minimum cost £1,409,478 – maximum cost £2,890,469.5 for Stage One.

6.3 As stated in item 5.6 above, there may well be considerable saving with regard to spoil disposal.

### 7.0 Stakeholders

7.1 The immediate requirement following this is to gain sign off by CEC, TEL and Other operators via TEL to this programme.

### 8.0 Contract Details

8.1 The Contract will be let as an Engineering Construction Contract ( E.C.C. ) with tie ltd amendments, this type of contract was formerly known as a New Engineering Contract ( N.E.C. ).

### 9.0 Liquidated Damages

9.0 The Stage One works are programmed to run for 25 working days with the Utility diversion works following on. The Infraco works are programmed to follow on directly after the Utility diversions hence any delay in completion of these works will have a knock on effect on the Infraco works.  
There will be a requirement to include a clause in the contract to include any Financial penalty values incurred as a result of any delays.

### 10.0 Recommendations

TPB is requested to:

- Note the contents of this paper
- Endorse the work being done to finalise the programme and obtain approval from the key stakeholders

## Edinburgh TRAM Project

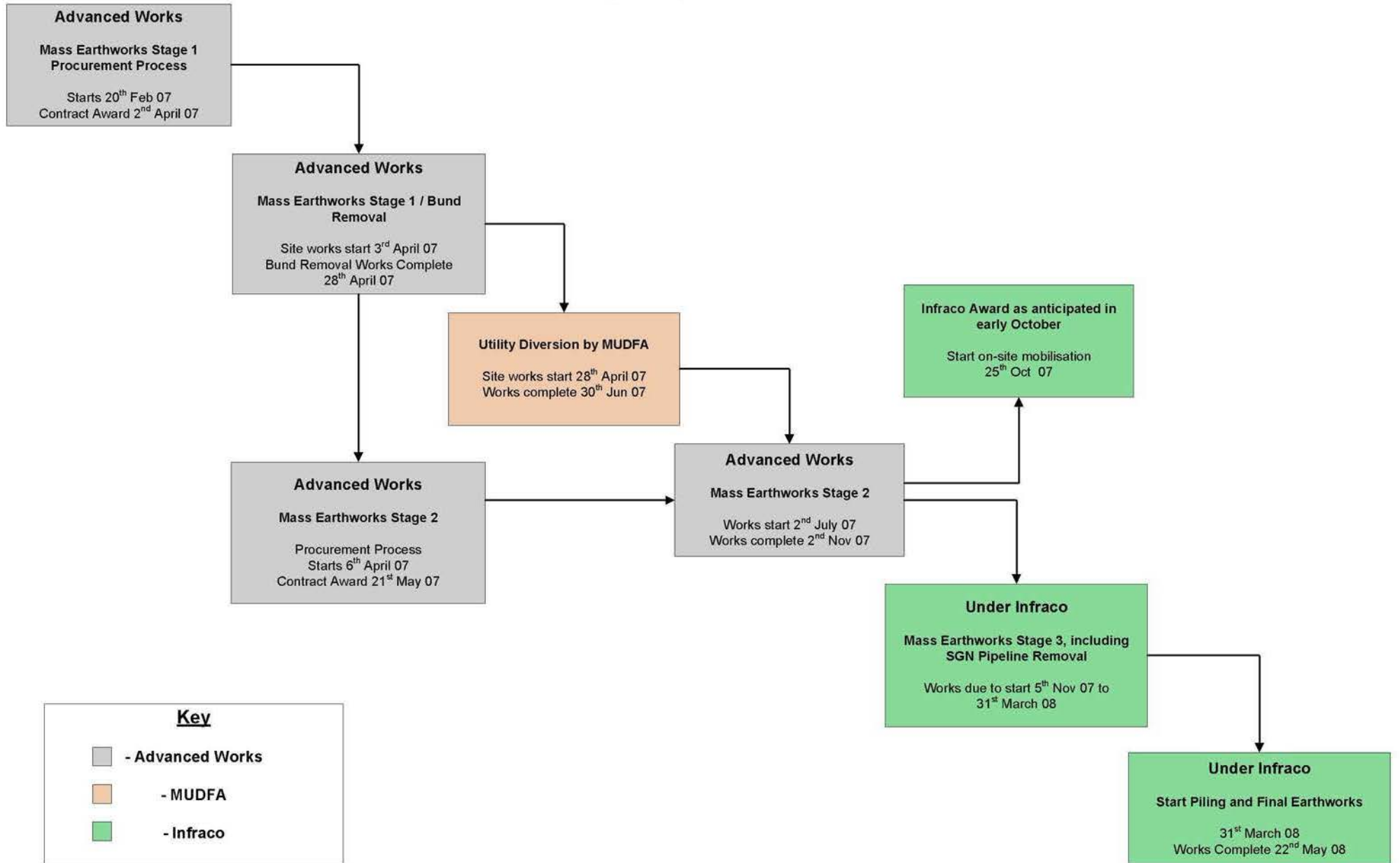
**Proposed** James Buchanan Date 14/02/07  
Depot project Manager

**Recommended** Susan Clark Date 14/02/07  
Delivery Director

**Approved** ..... Date: - .....  
David Mackay on behalf of the Tram Project Board



## Gogar Depot Advanced Works



Appendix D

**Paper to** : **Tram Project Board**

**Subject** : **Immunsation of Network Rail equipment for the effects of the DC traction system, relocation of plant and equipment and associated Network Rail possession strategy**

**Date** : **14<sup>th</sup> February 2007**

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**TPB asked to give approval to recommendations as per section 6.0**

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**1.0 Background**

- 1.1 At the Tram Project Board meeting on 25 September, a paper was presented on the options for taking forward the works required to modify some of Network Rail's (NR) signalling equipment, namely track circuits, in order to immunise it against the effects of the tram DC traction system.
- 1.2 The immunisation of NR track circuits will be necessary mainly due to stray current interference and electromagnetic compatibility (EMC) reasons. In rail systems such as the Edinburgh Tram, where DC current is drawn from OLE, then travels through the running rails as part of the traction return circuit to the substation, some of these current leaks into the surrounding area in order to find its way back via the path of least resistance. This is known as stray current. When in close proximity to NR's DC track signalling circuits, this stray current can "trick" the circuits into thinking a train is on the line and turn the signals to red, resulting in chaos trying to maintain safe passage of trains. This is clearly a situation to avoid and hence the need for the immunisation works.
- 1.3 Three options were presented for the delivery of the works:-
  - Option 1 – the NR works are procured as part of the Infraco works i.e. they are designed by SDS, delivered by the Infraco and funded by Transport Scotland (TS) and The City of Edinburgh Council (CEC) on a pro-rata basis to reflect the funding they are providing to the project.
  - Option 2 – the NR works are procured as part of the tram project but designed and delivered by NR through a direct contract between **tie** and NR. Again this option would be funded by TS and CEC on a pro-rata basis.
  - Option 3 – the NR works are removed from the scope of the project and are designed, constructed and delivered by NR.

## Edinburgh TRAM Project

There would be a direct contract between TS and NR. These works would be funded from funds from the project budget.

- 1.4 The preferred option of the **tie** team was that TS should contract directly with NR as it had the most influence on NR and would be in the best position to ensure that the works were delivered on time and within budget. However the Tram Project Board decided that, while NR was the party best placed to design and carry out the works **tie** should be the party to contract direct with NR.
- 1.5 Since the Tram Project Board meeting various meetings have taken to place with both NR and TS.
- 1.6 This paper provides the Tram Project Board with an update in relation to discussions and the way forward agreed with Transport Scotland.

### 2.0 Immunisation Works

- 2.1 Technical Solution – it was agreed that there was not an “off the shelf” solution. The most appropriate solution would require to be agreed between all of the parties, including NR. However it was agreed that the solution would require to provide immunisation from both AC and DC currents to satisfy the specification of both Edinburgh Tram Network and the Airdrie Bathgate Project.
- 2.2 Programme – TS advised that the overriding factor in relation to programme was the need to avoid disruption to customers and they stressed that TS would not sanction carrying out immunisation works twice. For that reason, there would be pressure on the Airdrie – Bathgate project to meet the tram programme even if that meant bring forward some of their works.
- 2.3 Procurement – it was agreed that there needs to be visibility, transparency and accountability under the contract with NR as well as a robust reporting process, change control process and escalation mechanism. On the assumption that this could be achieved, it was agreed that TS should contract directly with NR, with a back to back agreement being entered in to between tie/CEC and TS to ensure tie/CEC has adequate contractual protection/remedies.  
In order to ensure transparency and effective and robust reporting, it was acknowledged that TS may have a different role at the Tram Project Board in relation to this aspect of the project and would have to be accountable to the Tram Project Board for delivery of the immunisation works to programme, cost and technical scope.
- 2.4 Management of the contract – it was acknowledged that TS do not have the capability to manage the contract so may require an agent to manage the contract. **tie** could take on this role, as TS’s agent having a reporting but not a decision making role, given the potential conflict of interest.

## Edinburgh TRAM Project

- 2.5 Cost and risk share – three options were discussed
- a Both the cost and the risk are shared between CEC and TS
  - b TS are liable for the cost but the risk is shared between CEC and TS; or
  - c TS take all of the cost and the risk (this could be set against other elements of the project where CEC could take all of the cost and risk for example in respect of the TRO process).

Where the risk was passed to TS whether in whole or in part, there would be a need to ensure that there any risks and damages associated with, for example, a failure on the part of TS to deliver the completed immunisation works on programme, were adequately backed off. This requires to be discussed and agreed with TS and CEC.

### 3.0 Relocation of Plant and Equipment

- 3.1 It was agreed that these works should be designed and constructed by NR. While ideally these works could be done as part of the same contractual arrangement, it should be recognised that the timing for delivery is different as the existing equipment requires relocation before tram infrastructure can be constructed i.e. much earlier in the programme (Refer to 5.4).
- 3.2 These works could be instructed by TS by way of a letter under the Framework Agreement with NR or through the Asset Protection Agreement currently being negotiated with NR. The same issues outlined above in relation to the immunisation works apply equally here and could be dealt with in the same way.

### 4.0 Possessions

- 4.1 Tram currently has an application in for seven possessions beginning Christmas 2007, through to December 2008. These are primarily to be used in construction of structures. NR also has an application for twenty one possessions in relation to the Airdrie to Bathgate project, through the same period, some of which may be available to piggyback onto. The final access plan will be published in January 2007 whereupon potential piggyback opportunities can be discussed.
- 4.2 Applications for possessions from Christmas 2008 through 2009 need to be applied for in June 2007. SDS will continue to apply for these on behalf of and in consultation with preferred Infracore bidder.
- 4.3 Similarly, any possessions required between Christmas 2009 and 2010 will need to be applied for in June 2008. Infracore would apply for these.

## Edinburgh TRAM Project

- 4.4 With regard to the relocation of existing plant & equipment it is believed, at present, that much of this work can be done during standard non disruptive possessions. This will become clearer when the design for the relocation is developed; however, it is likely that a small number of disruptive possessions will be required for testing and commissioning.

### 5.0 Programme

- 5.1 The key programme dependency of the immunisation works is System Energisation ("Power On"). That is, the tram system cannot be energised until these works have been completed. The first "Power On" date is currently scheduled for **5 October 2009**, to energise the Test Track.
- 5.2 The priority is to establish a technical solution to the immunisation issue. To aid this, SDS is presently undertaking a series of surveys and modelling tests to establish an accepted zone of influence, which in turn, will define the scope of works required and provide useful information in agreeing the technical solution. These surveys/tests will take up to 6 months to produce the desired results, by which time there should be sufficient detail to allow NR to provide a quotation for the works. Until this detail is developed it is difficult to quantify the timescales accurately.
- 5.3 The Testing & Commissioning phase of works is likely to require multiple possessions. Again, until a technical solution is agreed, it is unclear the number of possessions required, what durations they will need be and what number of the total will require to be "wheels free". It is expected that both disruptive and non-disruptive possessions will be required; however, if NR is to be the delivery agent for these works, they will make the necessary applications themselves.
- 5.4 With regard to the relocation of existing plant & equipment, this needs to be finished prior to InfraCo undertaking construction of tram infrastructure in the area. This is currently programmed for **April 2008**.

### 6.0 Recommendation

The TPB is asked to approve the following:

- 6.1 Agree that NR should design and construct the immunisation works and the works to relocation the plant and equipment;
- 6.2 Agree that TS should enter in to the contract with NR with a back to back contract with tie/CEC in relation to the immunisation works;

## Edinburgh TRAM Project

- 6.3 Note the position re the procurement of the relocation of the plant and equipment;
- 6.4 Instruct CEC and TS to agree the cost and risk allocation for the immunisation works and the relocation of the plant and equipment and to complete this agreement by the end of March 2007.
- 6.5 Note the possession strategy; and
- 6.6 Note the programme and critical milestones.

Prepared by: Trudi Craggs, Development and Approvals Director

Recommended by: Matthew Crosse, Project Director

Date: 6 February 2007

Approved ..... Date:- .....  
David Mackay on behalf of the Tram Project Board



## Edinburgh TRAM Project

### Appendix D

Paper to : Tram Project Board  
Subject : Railways and Other Guided Transport Systems (ROGS)  
Date : 14<sup>th</sup> February 2007

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TPB is requested to approve the recommendations as per 5.0

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#### 1.0 Background

- 1.1 The Edinburgh Tram system requires Safety Approval prior to opening to passengers. When the Edinburgh Tram Project was conceived it fell within the scope of the Railways and Other Transport Systems (Approval of works, plant and equipment) Regulations 1994, commonly referred to as ROTS.
- 1.2 In April 2006, subject to transitional provisions over six months, ROTS was replaced by the Railways and Other Guided Transport Systems (Safety) Regulations 2006, commonly referred to as ROGS.
- 1.3 Regular interface meetings with Her Majesty's Railway Inspectorate (HMRI) have been held since October 2006.
- 1.4 The impact of the ROGS safety approval regime are;
  - There is no requirement for the HMRI to give prior consent or approve a written safety verification scheme.
  - A competent person has to be appointed to provide an independent safety verification of the project.
  - The Safety Case is replaced by a Safety Management System.

#### 2.0 Safety Approval Key Dates

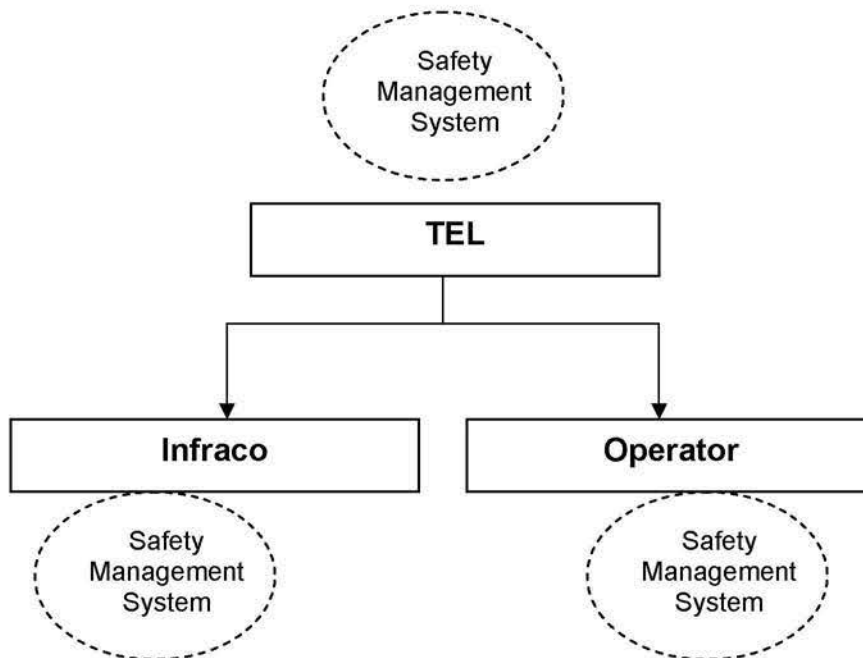
- 2.1 The introduction of the ROGS Regulations allows for transport systems which were already under development to continue.
- 2.2 There is a transition phase for tram systems between October 2006 and October 2010.
- 2.3 Tram systems which will be open to public service **before 1<sup>st</sup> October 2010** can continue through ROTS approval.
- 2.4 Tram systems which open to public service **after 1<sup>st</sup> October 2010** must seek approval through ROGS.
- 2.5 Due to the projected date for public service for the Edinburgh Tram being December 2010 it is clear that we must follow the ROGS safety approval regime.

## Edinburgh TRAM Project

### 3.0 ROGS Approval

#### 3.1 Safety Management System

- 3.1.1 Schedule 1 of ROGS gives guidance on the requirements and the basic elements of a safety management system.
- 3.1.2 All parts of the safety management system must be documented.
- 3.1.3 The diagram below shows the relationship between TEL, the Operator and the Infraco when the tram system is operational and that each element will have a documented safety management system.
- 3.1.4 The TEL safety management system will need to define how they are going to check the competence of both Infraco and the Operator; the audit, monitoring and checks they will employ to ensure that both have and maintain effective safety management systems.



#### 3.2 Written Safety Verification Scheme

- 3.2.1 To comply with the requirements of ROGS, Reg. 6(4)(a), a written safety verification has to be established and meet the requirements set out in Schedule 4 of the regulations.
- 3.2.2 The 'responsible person', **tie** Limited, must write the safety verification scheme in conjunction with the competent person.

## Edinburgh TRAM Project

### 3.3 Competent Person

3.3.1 To comply with the requirements of ROGS, Reg. 6(4)(b), a competent person needs to be appointed by tie Limited to undertake the safety verification of any new or altered vehicle or infrastructure’.

3.3.2 The competent person should be appointed early enough to enable any safety matters they raise to be taken into account before the design and construction is completed or selected.

3.3.3 The competent person will assist in devising the written safety verification scheme.

3.3.4 Any design work completed or selected to date which has a ‘letter of no objection’ from the HMRI can be provided to the competent person to assist the verification process.

3.3.5 An organisation that appoints a competent person will need to provide them with any information and resources they may reasonably require.

3.3.6 tie have requested that TSS provide a proposal and cost for the competent person role.

#### 3.3.7 Role of the Competent Person

3.3.8 The competent person will audit and inspect, as agreed in the written safety verification scheme, the project methodology and the actual project design, installation and testing arrangements.

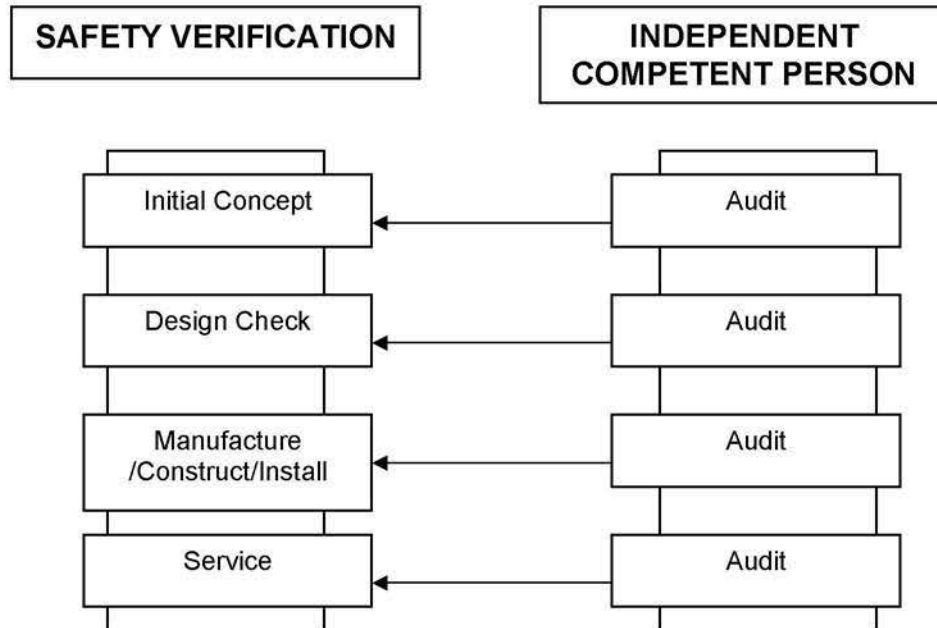
3.3.9 This will involve checking and commenting on;

- designs of the tram vehicles and the infrastructure;
- manufacture, test and inspection of the tram vehicles;
- manufacture, test and inspection of the infrastructure;
- pre-operational tests and inspection

3.3.10 The auditing and inspection occurs during initial concept, design, manufacture/construction/installation and service. The diagram below outlines the process for safety verification;



## Edinburgh TRAM Project



3.3.11 The competent person is defined as 'a person with sufficient practical and theoretical knowledge as well as experience of the particular task, plant machine, procedure, equipment (etc) involved to enable them to thoroughly examine and identify any defects or weaknesses during examinations, and to assess their importance in relation to safety, function and continued use of plant, machine, procedure (etc) and to be aware of their own particular limitations with regard to the task to be undertaken'.

3.3.12 Independence

3.3.13 To be independent a competent person should have no conflict of interest and the ability to demonstrate impartiality. The competent person may be an 'in-house' person but it is essential that they are sufficiently independent and impartial to allow objective decisions to be made.

### 4.0 HMRI

4.1 The HMRI will not approve or authorise any of the works undertaken through the ROGS safety approval regime for a tramway. The independent competent person in their safety verification role will provide this role.

4.2 ROGS does not provide for the HMRI to be involved in drawing up or approval of safety verification schemes or to be involved in the detailed aspects of the design or specification of design.

4.3 The HMRI will monitor the effectiveness of the safety verification schemes by sampling.

4.4 The Tram project will continue to involve the HMRI through the regular interface meetings.

## Edinburgh TRAM Project

### 5.0 Recommendations

TPB is requested to:

- Note the contents of this paper
- Accept the ROGS approval process for the project
- Agree to continue to involve the HMRI through the interface meetings
- Agree to the appointment of a Competent Person to assist in writing the Safety Verification Scheme
- Agree to writing to the HMRI advising them of this change in Safety Approval process
- Recommend that this paper be presented to TPB for approval

**Proposed** Tom Condie Date 06/02/07  
HSQE Manager - Tram

**Recommended** Matthew Crosse Date 06/02/07  
Delivery Director

**Approved** ..... Date: - .....  
David Mackay on behalf of the Tram Project Board

## Edinburgh TRAM Project

### Appendix E

Paper to : Tram Project Board  
Subject : Interchange at the Foot of the Walk  
Date : 14<sup>th</sup> February 2007

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#### For Information for the TPB only

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### 1.0 Background

- 1.1 In May 2006, a change request was issued to SDS to design various interchanges along the tram route. One of the areas where it was important to ensure that there was an effective interchange was at Foot of the Walk. This is probably the most important interchange to TEL given that the majority of their current services are truncated here by the tram.
- 1.2 SDS has been liaising closely with both the City of Edinburgh Council Roads Authority and Planning Authority (CEC) and also with Transport Edinburgh Limited (TEL) in order to reach a solution which balances and in so far as possible, resolves all of the issues arising in this area. There are various issues which must also be taken in to account namely the CEC requirements for additional parking and loading and pavement provisions along Leith Walk as well as the TEL requirement to make provision for future bus routes along Constitution Street.
- 1.3 Accordingly, taking all this on board, SDS has proposed two alternative options. CEC has also proposed an option. This paper sets out the options and the way forward.

### 2.0 SDS Options

- 2.1 SDS Proposal A, as shown on Drawing 1, comprises the following:-
  - Bus stops as close as practicable to the junction of Foot of the Walk. Existing bus stops would be moved to a point along Duke Street and Great Junction Street that minimises the distance that pedestrians must traverse.
  - Pedestrian crossings relocated to the desire lines (or as close thereto as possible).
  - Pedestrian crossings integrated in to the traffic signals in the area in order to minimise the overall traffic impacts to the area.
  - It is generally within the envelope of the existing roadway, thus construction would also be minimised.
  - Walking distance to/from the proposed eastbound bus stop would be approximately 40m and approximately 50m to/from the proposed westbound bus stop.
  - The eastbound bus stop would have sufficient room for a shelter.



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- The pavement at the westbound bus stop is relatively narrow – a narrow shelter with minimal side panelling could be provided to maintain pedestrian flows along the pavement. It should be noted that where it is located on the Drawing is the optimum location to avoid an unacceptable narrowing of the pavement.

2.2 This option could be improved operationally by:-

- Providing bus priority in the eastbound and westbound directions by way of a separate signal phase
- Strategic placement of additional signing, subject to approval of the planning authority, to clearly guide passengers.

2.3 SDS Proposal B, as shown on Drawing 2, comprises the following:-

- A westbound bus lay-by within the existing pedestrian area in front of Woolworths – this will require work outside of the limits of deviation under the Edinburgh Tram (Line One) Act 2006 (although CEC could invoke other powers in order to carry out the works).
- The existing war memorial and millennium monuments would require to be relocated/removed.
- The westbound bus would turn right on a new signal stage in to the stop and would require a separate stage to allow the westbound bus to exist the stop.
- The eastbound bus stop would be pushed to the east to minimise pedestrian walking distances.
- The existing available pedestrian space is reduced by 336 square metres.
- The pavements to and from Great Junction Street on the north side of the road are reduced.
- The space available does not allow for the provision of 2 buses from the same direction to safely be situated within the stop.
- This layout eliminates the need for passengers transferring from a westbound bus to the tram to cross Duke Street as part of the interchange
- Walking distance to/from the eastbound bus stop is approximately 115m and approximately 40m to/from the proposed westbound stop.

2.4 These are currently with CEC and TEL for consideration and optimisation. As a result CEC has developed a third option as they are concerned that the lay-by solution would not work in traffic capacity terms without excessive queuing which would also hold up buses and passengers from interchanging.

### 3.0 CEC option

3.1 The CEC option is shown on Drawing 3.

3.2 CEC acknowledge that this option would not provide as good an interchange point as the SDS Proposal B, but it would still provide some interchange possibilities, particularly if a covered walkway was also designed to tie into the tram stop. This option would also provide an element of bus priority whilst maintaining capacity for general traffic, although there is a need to retain a suitable footway width at the northwest corner at the building.

## Edinburgh TRAM Project

### 4.0 Way forward

- 4.1 All three options will require to be modelled to assess how they work in traffic capacity terms.
- 4.2 There will require to be further close working between SDS, tie, CEC and TEL in order to reach a solution. It may be that these proposals require further refinement in order to be acceptable to CEC and TEL. The results of the traffic modelling will also be fundamental to the acceptability of the proposals.

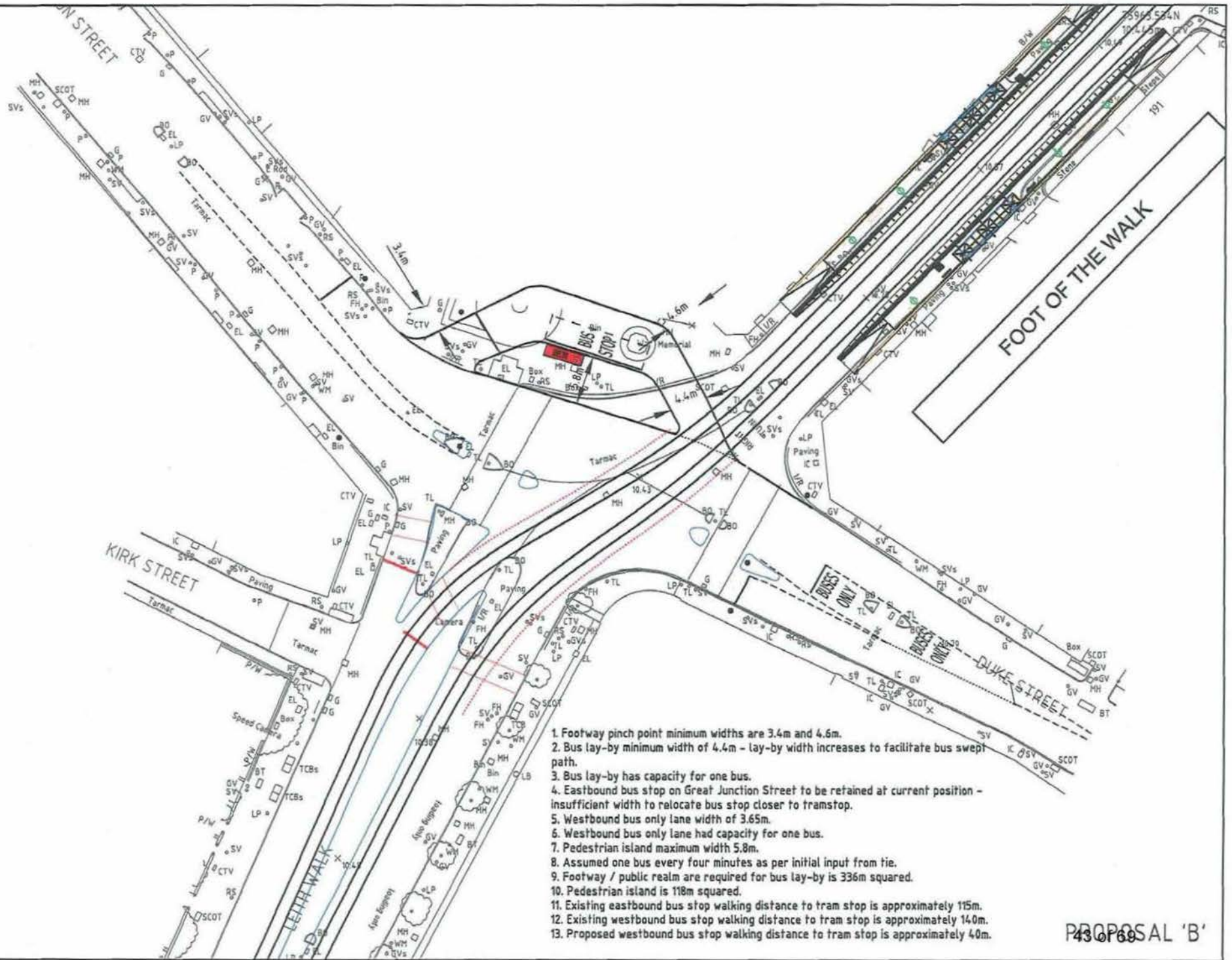
**Proposed**                      Trudi Craggs                                              Date:- 12/01/07  
Development and Approvals Director

**Recommended**                Matthew Crosse                                              Date:- 12/01/07  
Project Director

**Approved**                      .....                                              Date:- .....  
David Mackay on behalf of the Tram Project Board

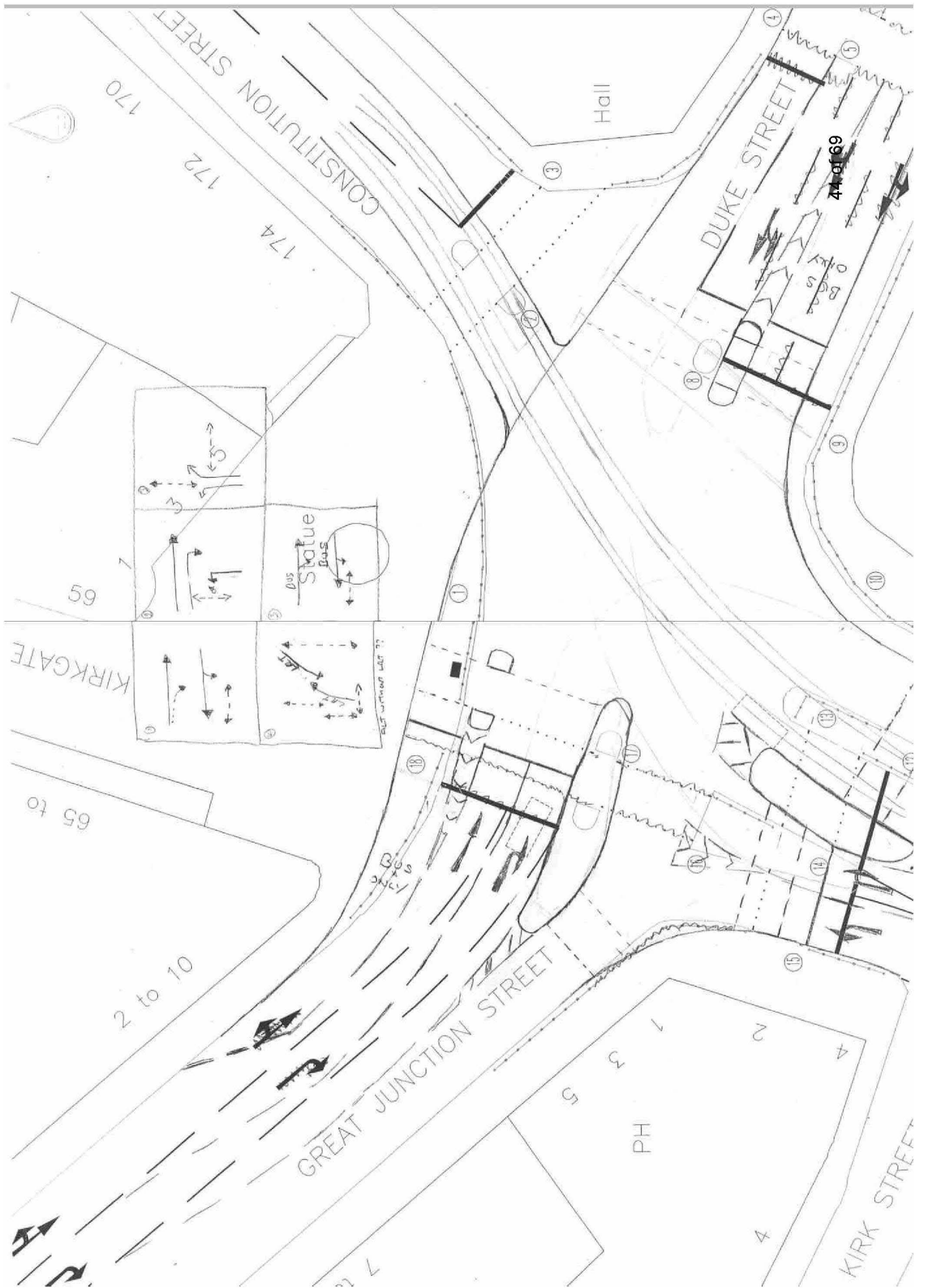






1. Footway pinch point minimum widths are 3.4m and 4.6m.
2. Bus lay-by minimum width of 4.4m - lay-by width increases to facilitate bus swept path.
3. Bus lay-by has capacity for one bus.
4. Eastbound bus stop on Great Junction Street to be retained at current position - insufficient width to relocate bus stop closer to tram stop.
5. Westbound bus only lane width of 3.65m.
6. Westbound bus only lane had capacity for one bus.
7. Pedestrian island maximum width 5.8m.
8. Assumed one bus every four minutes as per initial input from tie.
9. Footway / public realm are required for bus lay-by is 336m squared.
10. Pedestrian island is 118m squared.
11. Existing eastbound bus stop walking distance to tram stop is approximately 115m.
12. Existing westbound bus stop walking distance to tram stop is approximately 140m.
13. Proposed westbound bus stop walking distance to tram stop is approximately 40m.





## Edinburgh TRAM Project

### Appendix E

Paper to : Tram Project Board  
Subject : Progress in relation to the structures charette  
Date : 14<sup>th</sup> February 2007

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#### For Information to the TPB only

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#### 1.0 Background

- 1.1 SDS submitted their preliminary design to tie on 30 June 2006. This was reviewed by tie, CEC, TEL and Transdev and a series of Design Approval Panels (DAP) took place in July and August. The remit of the DAPs was to reach a consensus on the design and to grade the designs by using a red, amber, green marking system.
- 1.2 Red meant that SDS had to rethink the preliminary design – in essence it was unacceptable and had to be resubmitted. Amber meant that the design was acceptable however the comments raised at the DAP should be taken forward to the detailed design. Green meant that the design was acceptable without comment.
- 1.3 The planning authority had various concerns regarding some of the structures along the route. While the preliminary design produced functional concepts which were structurally sound, the bridges in the view of the planning authority were not “statements” or “iconic”.
- 1.4 Accordingly further design work took place and on 14 November 2006 a charette took place in order to expedite matters and to give SDS direction as to how they should be proceeding with the design of these “red” structures. At the charette, the structures which were discussed were the Edinburgh Park Viaduct, the Carrick Knowe Bridge and the Coltbridge Viaduct.
- 1.5 The remit of the charette provided that CEC’s charette team were to report back to the Planning Summit within 3 working days i.e. by Friday 18 November 2006. CEC failed to do so and despite a further week extension nothing was forthcoming. There continued to be no response from CEC and given the impacts this was having on the design programme, tie (Andie Harper) emailed CEC (Andrew Holmes) on 13 December 2006 indicating that CEC had been timed out. The email set out how tie’s position on the outcome of the charette. Again there was no response from CEC
- 1.6 Although there had been no response from CEC, there was always a concern that the planning authority could still refuse the necessary prior approval further down the line. Accordingly tie continued to try to resolve the issue with CEC and to close out the issue.

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- 1.7 At the weekly meeting with CEC on Friday 2 February, the delay with the structures was discussed and the following was agreed:-
- Coltbridge Viaduct – a further meeting was required between the parties to discuss potential solutions
  - Carrick Knowe – a change request would be issued confirming that the bridge would be future proofed so as not to preclude pedestrian access
  - Edinburgh Park Viaduct – a further meeting was required between the parties to consider the options
- 1.8 Accordingly a meeting took place with CEC on 7 February 2007
- 2.0 Outcome of meeting and way forward**
- 2.1 The meeting was attended by CEC (Ian Spence, David Cooper, Riccardo Marini, David Wilson (part only), tie (Trudi Craggs) and SDS (Jason Chandler, Colin Walker).
- 2.2 The meeting focused on the Edinburgh Park Viaduct. Given the impact this matter was having on programme, it was agreed that we would focus on the preliminary design as the starting point. This approach by CEC was welcomed by all parties and was a significant move forward, given previous discussions and even the meeting on Friday 2 February.
- 2.3 CEC confirmed that they had established the following required design principles which had to be met in the bridge design:-
- High quality design that is simple and elegant
  - Alternatively high quality design with superstructure of “iconic” status
  - Bridge access “ramps” that positively respond to and contribute to their immediate locations
  - Consideration of existing and/or potential immediate land uses
  - High quality of landscape integration
  - Avoid potentially oppressive soffit areas of bridge structure
  - High specification of materials and design detail
- 2.4 With these in mind there was a constructive discussion at to what refinements could be made to the current design. This included “skinnying” the supporting pillars, using bearings to give the feeling that the structure was floating, “bolting” on curved design elements to the sides of the structure, using lighting to highlight the structure and its curves and using centre poles rather than side poles as currently designed.
- 2.5 SDS are currently refining the design and a further meeting is due to take place on 23 February 2007. This should allow the parties to reach agreement on the substructure/structural elements to allow SDS to progress the detailed design. The design detail will be developed in parallel.
- 2.6 While it is important to ensure that the planning authority have bought in to the design, the project will need to continue to be mindful of the costs. For

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example if centre poles are the preferred option this could add around £500k to the cost of the project.

- 2.7 While the majority of the meeting focused on the Edinburgh Park Viaduct, the same principles apply to Coltbridge Viaduct and this will be reviewed accordingly. In relation to Carrick Knowe, there was a suggestion that local communities are involved in the finish of the structure by designing artwork or “tags” which could be used to make a feature of the finishes of the bridge.

Prepared by: Trudi Craggs, Development and Approvals Director

Recommended by: Matthew Crosse, Project Director

Date: 16 January 2007

Approved ..... Date:- .....  
David Mackay on behalf of the Tram Project Board



## Edinburgh TRAM Project

### Appendix E

Paper to : Tram Project Board  
Subject : Earl / Tram Utilities and Advanced Works strategy  
Date : 14<sup>th</sup> February 2007

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#### TPB asked to approve recommendations as per 5.0

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### 1. Introduction

- 1.1 Reports to the EARL Project Board on 18<sup>th</sup> January and 22<sup>nd</sup> February 2006 presented the project Utility Management Strategy. This proposes that **tie** will undertake the design and deliver all physical works for diversions and protection works. Each utility company will approve the **tie** design and commission the physical works delivered by **tie**.
- 1.2 This approach provides **tie** with economies of scale for both the design and physical works. Furthermore it allows control of the programme and costs to remain with the project team rather than with a number of external bodies.
- 1.3 In particular it provides the EARL project with the opportunity to utilise the Multi Utility Diversion Framework Agreement (MUDFA) Contractor appointed by the Tram project.
- 1.4 After endorsement by the EARL Project Board, a variation clause was inserted into the MUDFA contract to facilitate delivery of any works required by EARL.

### 2.0 Utility Management Strategy

- 2.1 The Utility Management Strategy recommended the EARL project should procure advanced utility diversionary works in the Airport area for the following reasons:
  - Experience gained in delivery of works in the Airport prior to appointment of the EARL Rail Infrastructure Contractor;
  - Opportunity to reflect this knowledge in the EARL Rail Infrastructure Contractor procurement process and allocate risk to most appropriate party;
  - Opportunity to provide the EARL Rail Infrastructure Contractor with a worksite clear of utilities, allowing concentration on the programme critical path activities; and
  - Maintenance of project profile through a staged delivery of physical works.
- 2.2 The Utility Management Strategy also proposed an integrated approach between the EARL and Tram project teams in the Gogar to Airport corridor.

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### 3.0 Utility Management Plan

- 3.1 The work detailed below has been undertaken following authorisation of the Utility Management Plan by the EARL Project Board in February 2006:
- 3.2 SDS (the Tram designer) was requested to provide a cost estimate to develop the detailed design for EARL utility diversions in the Gogar to Airport corridor. They reverted with a quote of £360k. This variation was not taken up because of the risk of worsening design performance on the core Tram works.
- 3.3 The TSDS contract was awarded with the option to deliver utility design and management of the physical works contractor. Following the decision not to use SDS to produce the EARL utilities design, the EARL project team held detailed planning discussions with TSDS on delivery of utilities design. After review of the problems faced by SDS in mobilising for utilities design on the tram project, it was agreed this work would have to be outsourced from the core TSDS team to a specialist utility design house. The EARL project team were not convinced during the review process that all the required interfaces (between the apparatus owners, the designer(s) and MUDFA) would be effectively managed by the TSDS management team. We therefore refrained from commencing the design works until all other viable options were explored.
- 3.4 The MUDFA contract was awarded with the ability to vary in works for the EARL project. A detailed scoping exercise is underway with AMIS at present and this has resulted in a request from them to be considered to produce the required design. This has the obvious advantage that an interface risk between designer and implementation contractor is removed from tie. The MUDFA contractor is programmed to commence utility diversion works at the airport for Tram in Q4 2007.
- 3.5 An integrated set of drawings were produced for the Gogar to Airport corridor showing topographical information, all known services and the swept paths for both Tram and EARL alignments. From these it was identified that all services in the Gogar area affected by EARL also required to be relocated to facilitate construction and operation of the Tram depot. Accordingly SDS has been instructed to produce a utilities design which accommodates the alignments of both projects. The EARL project will be issued with the design to review and approve prior to implementation works being delivered by the MUDFA contractor. Costs for the physical works will be shared proportionally between both projects.
- 3.6 BAA have explicitly advised that they require utility diversions in the airport required by Tram and EARL to take place at the same time. A desktop analysis of costs estimates that savings of at least 10% for both projects are achievable should implementation works be undertaken at the same time by the MUDFA contractor.
- 3.7 A new alignment to that contained in the EARL Bill for replacement of Eastfield Avenue Bridge at the airport has been agreed with BAA. The existing road bridge is the main conduit of services in the airport over the Gogar Burn. These services will therefore have to be diverted onto the new structure. It is also a requirement of the EARL Master Agreement with BAA

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that the new bridge is constructed before the existing one is removed. This is because the bridge provides the only east – west road access across the Gogar Burn in the landside area of the airport.

- 3.8 The replacement Eastfield Avenue Bridge crosses the Gogar Burn approximately 1.5m higher than the existing structure in order to accommodate EARL and its required flood defences. Liaison between EARL and Tram has ensured that the SDS design is being progressed with these levels as a constraint. A number of planning workshops have been undertaken to understand the interfaces between EARL and Tram construction works in the period 2008 – 2010. Tram construction works are scheduled to commence in the airport area in Q2 2008. In order to avoid disruption to the operational Tram services and / or abortive works, the new Eastfield Avenue road and bridge must be in place by the point tram construction works commence. If the new bridge is not in place at the point the MUDFA contractor diverts utilities in the airport area, a temporary services bridge over the Gogar Burn will have to be provided to accommodate the new routes.

### 4.0 TSDS review of EARL Utilities

- 4.1 A detailed review of EARL utilities by TSDS has identified little or no advantage in advanced delivery of any diversions except the following:

- Those in the Airport area
- Those affected by the Gogar depot works for Tram
- The long lead High Pressure Gas Mains diversions being delivered by Scotland Gas Networks. (A feasibility study has been commenced by SGN to verify and cost the scope of these works. SGN has already advised they would not be in a position to undertake the physical works until summer 2009 due to long lead materials and their core renewals workload.)

- 4.2 The Tram and EARL projects continue to liaise to produce an integrated workplan for delivery of Utility diversions in the Gogar to Airport corridor.

### 5.0 Recommendations to the TPB

- 5.1 The EARL project team request the MUDFA contractor provide a cost for production of detailed design of Utility diversions in the Airport area. The SDS team will incorporate the diversions require for EARL in the Gogar Depot area in the Tram design. The TSDS consultant will deliver all other utilities design in conjunction with the Utility Companies.

- 5.2 The project team request permission to investigate delivery of the replacement Eastfield Avenue bridge as advanced works. The Reference design for this can be accelerated without impact on other TSDS deliverables and issued to BAA for approval in April 2007. In order to align timescales with the MUDFA programme of diversions, there would be two procurement options:

1. Use the MUDFA contractor to undertake the works.
2. Use BAA framework contractors to undertake the works.

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BAA has confirmed they would be willing to deliver construction of the bridge if paid for by the project. Procurement advice has been received that seeking prices from both MUDFA and BAA framework contractors would provide competition and allow the project to demonstrate value for money.

- 5.4 The project team request that budget provision is made in the 2007/08 business plan and funding requested in order to undertake advanced utility diversion works in the Airport area by the MUDFA contractor. (Budget estimate (TBC) is £5m )
- 5.5 The project team request that budget provision is made in the 2007/08 business plan and funding requested in order to undertake advanced delivery of the replacement Eastfield Avenue Bridge by the most appropriate and efficient procurement means. (Budget estimate is £1.5m)

|                    |                                                           |                 |
|--------------------|-----------------------------------------------------------|-----------------|
| <b>Proposed</b>    | Scott Prentice<br>EARL Project                            | Date:- 06/02/07 |
| <b>Recommended</b> | Barry Cross<br>Project Director                           | Date:- 06/02/07 |
| <b>Approved</b>    | .....<br>David Mackay on behalf of the Tram Project Board | Date:- .....    |



## Edinburgh TRAM Project

**Paper to** : **Tram Project Board**  
**Subject** : **Traffic Management Update**  
**Traffic Regulation Orders (TROs)**  
**Date** : **14<sup>th</sup> February 2007**

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**The TPB is asked to approve recommendations as per 6.0**

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### **1.0 Introduction**

1.1 The Paper reviews and updates the position on the work taking place to facilitate the desired changes to the legal process, a TRO strategy to de-risk the Tram programme, the re-calibration of the traffic modelling suite to support the detailed TRO design and the commencement of work to assess the off-line wider area TRO and traffic management requirements.

### **2.0 Proposed Amendment to the Local Authorities Traffic Orders (Procedure) (Scotland) Regulations 1999**

2.1 Following approval by the Scottish Parliament the Edinburgh Tram Project is now in the detailed procurement stage. A suite of Traffic Regulation Orders will be required to facilitate the operation of the Tram. These Orders will contain a wide range of traffic management measures some of which are necessary to accommodate Tram and some of which are required to address the impacts of traffic diverted by tram in the wider adjacent areas. The former are referred to as “core” measures and the latter are “consequential” measures.

2.2 The implications of having to hold a public hearing of objections in relation to the “core” measures are of concern. The nature of that concern is that there will be little if any scope for objectors to persuade a Reporter to abandon or to modify a core measure without undermining the operation of the tram system which has already been endorsed by Parliament at significant public expense.

2.3 The fact that the outcome of such a public hearing into objections could even be perceived to be prejudged creates a legal risk to the overall process. No-one would wish to raise the expectations of objectors who should be entitled to assume that they have some prospect of influencing the outcome of the hearing. Another consideration is the value of committing further public resources to hold a public hearing in these circumstances.

## Edinburgh TRAM Project

- 2.4 It should be emphasised however that excepting the core measures from a hearing should not diminish the right of the individual to object to any proposed traffic management measure. It will be necessary for CEC as the Roads Authority to consider on how best to process such objections to ensure that the objector's views can be taken into account and addressed wherever possible without going through the prolonged statutory process involved in a public hearing.
- 2.5 Representations incorporating the above have been made to the Scottish Executive to remove the requirement for a mandatory Public Hearing in relation to Orders supporting major transport projects already endorsed by the Scottish Parliament. These representations were also given helpful support by Transport Scotland at a meeting with the Scottish Executive held on 26 January 2007. The meeting was followed up by a formal written request from CEC asking that the Executive give the highest possible priority to taking the matter forward with a view to Scottish Ministers approving and initiating a public consultation on the proposed changes to the existing Regulations ahead of the election in May.

### **3.0 Commencing INFRACO without The TRO in Place**

- 3.1 The current project programme is based on the presumption that the TRO for the Tram must be in place before construction of INFRACO commences on street. In view of the slippages which have occurred to the SDS design outputs this original assumption will, if left unmodified, have an adverse impact on the Tram Project Programme.
- 3.2 It is now therefore an inflexible and undesirable constraint within the Programme and a new strategy is required to de-risk the Programme and regain more strategic flexibility in the delivery of the project. There is also a need to recognise that there are too many indeterminate aspects (e.g. scale of objections) and blocks of statutorily required time which cannot be reduced that make it essential to create flexibility around the date for determining the TRO(s).
- 3.3 A more practical and preferred approach which removes the TRO process from the Tram programme critical path is to commence the INFRACO works under a TTRO before the TRO is in place.
- 3.4 This approach has in the past not been favoured because of the potential legal problem of the TTRO remaining in place after construction of a works section and thereby "mirroring" subsequent permanent features of the TRO. This could be challenged as a pre-emption of due statutory process. A memorial has therefore been prepared for the opinion of Senior Counsel on whether it is valid to commence the INFRACO works under a TTRO if the Council has not yet made the TRO. To aid Senior Counsel in reaching his opinion a

## **Edinburgh TRAM Project**

consultation was held attended by tie and CEC at which SDS presented some preliminary road layouts giving a reasonable indication of the nature and scale of the “mirrored” measures.

- 3.5 The preliminary indications are that there is potential for adopting the revised strategy without necessarily falling foul of the conventional legal protocols in respect of the “mirroring” issue. For example, it would be practical in many cases to proceed initially with only the partial construction of physical street features which would normally have been constructed in one pass but, which would not be required until a tram became operational.
- 3.6 By deferring appropriate features the use of the road can be made consistent with extant TRO measures during the post construction/pre-tram operational period and can therefore be completed once the TRO has been made. These features are minor in relation to the mainstream INFRACO works.
- 3.7 There are also parallel possibilities to consider fast tracking certain TRO features which do not in themselves trigger a mandatory Public Hearing. These options require further development following the receipt of Senior Counsel’s opinion and the agreement of CEC as the Roads Authority.

### **4.0 Traffic Management – JRC Transport Model Suite**

- 4.1 As part of the due diligence work required for the Draft Final Business Case Scott Wilson undertook a review of the JRC modelling suite and reported on 14 December 2006. This concluded that whilst the model validation was broadly acceptable there were some calibration issues in relation to highway flows that should be addressed.
- 4.2 The JRC contractor is currently undertaking re-calibration and updating of the transport model suite, this activity being covered under the existing contractual arrangements. This exercise is intended to refine the models to better support the detailed Tram design, inform the TRO process and provide more robust support of the TRO Statement of Case at a future Public Hearing.. This process is being carried out in conjunction with CEC, their advisors, SDS and the TSS team who carried out the DFBC due diligence. The model suite update is programmed for completion by the end of March 2007.

### **5.0 Consequential Wider Area TRO Requirements**

- 5.1 The Tram design is due to reach PD2 stage in early March. Work has been commenced now to scope the next stage of assessing the consequential traffic impacts and necessary changes to traffic

## Edinburgh TRAM Project

management arrangements that occur in adjacent areas as a consequence of the core tram design features.

- 5.2 The initial work will use the existing high level traffic model coded with the PD2 design features to make a first pass assessment of traffic changes in sensitive areas such as Haymarket and the West-end. This will permit more detailed assessments of probable traffic management requirements and junction issues that require specific design measures.
- 5.3 These early actions will be used to build up a scope for the fully detailed work to be undertaken later on with the re-calibrated modelling suite and will also inform a resource appraisal to ensure that all of the subsequent activities required are captured, programmed and resourced leading to a fully defined TRO.

### 6.0 Recommendations

The TPB is requested to:

- Note the formal request made to the Scottish Executive to commence the process leading to a possible amendment of the Traffic Order Regulations with a view to excepting the Tram core measures from a mandatory public hearing process
- Note the work taking place with Senior Counsel to inform a proposed change in strategy to de-risk the Tram programme by commencing INFRACO works without a TRO necessarily being in place
- Note the re-calibration work to the JRC modelling suite following the due diligence review for the DFBC
- Note the commencement of work to assess and design the required consequential TRO requirements

|                    |                                                           |                |
|--------------------|-----------------------------------------------------------|----------------|
| <b>Proposed</b>    | Keith Rimmer<br>Traffic Management Director               | Date: 13/02/07 |
| <b>Recommended</b> | Matthew Crosse<br>Project Director                        | Date: 14/02/07 |
| <b>Approved</b>    | .....<br>David Mackay on behalf of the Tram Project Board | Date: .....    |





**tie Limited  
Edinburgh Tram Network**

**Minutes**

**MUDFA Sub Committee Board Meeting**

**12 February 2007**

**10am**

**tie offices - Macadam Room, Citypoint**

**In Attendance:**

|                              |           |
|------------------------------|-----------|
| Willie Gallagher (SCB Chair) | <b>WG</b> |
| Matthew Crosse               | <b>MC</b> |
| Susan Clark                  | <b>SC</b> |
| Bill Campbell                | <b>BC</b> |
| Andy Malkin                  | <b>AM</b> |
| Suzanne Waugh                | <b>SW</b> |
| Tom Condie                   | <b>TC</b> |
| Steven Bell                  | <b>TC</b> |
| Stuart McGarrity             | <b>SM</b> |
| Steve Hudson                 | <b>SH</b> |
| Duncan Fraser                | <b>DF</b> |
| Tom Clark                    | <b>TC</b> |
| Lorna Davis                  | <b>LD</b> |

|            | <b>KEY TASKS AND ACTIONS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>ACTION BY</b> | <b>DATE DUE</b> |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-----------------|
| <b>1.0</b> | <b>Design</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |                 |
| <b>1.1</b> | <p>First sections deadlines were not met by SDS, however 1B &amp; 1C were delivered last week. Approval of the trial site by SUs is still an issue. AD stated that he expected Scottish Power (SP) to respond by 9<sup>th</sup> February, SP then stated they would respond by 13<sup>th</sup> February. Also Scottish Water have not responded. This is currently one week behind schedule. It is critical that this is dealt with. It was confirmed by AD that although the utilities have a duty to supply the information requested they do not have a duty to supply this within a set timescale.</p> <p>The overall problem appears to be resources. AD to speak to utilities and ascertain exactly what resources they have and what they will actually need. They have five packs at the moment but will have up to eleven packs to deal with. They need to be aware of volume of workload.</p> | <b>AD</b>        | <b>13.02.07</b> |



|     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |              |                      |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------------------|
|     | AD to prepare a one page summary of issues with Scottish Water and also a one page summary of issue with BT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | AD           | 13.02.07             |
|     | It was decided that AD would keep chasing utilities and contact today in order to agree a formal date with them for approval of designs. WG to arrange meeting with the Utility Directors to support this from the top.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | AD<br>WG     | 13.02.07<br>16.02.07 |
| 1.2 | MC expressed concern that all focus is on the trial site when we need to look at the whole project. AD confirmed that he is not just working on trial site and that he is covering all sections. SUs have five design packs for approval                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | SC           |                      |
| 1.3 | AD to prepare a progress report for each design section for future meetings. It was asked that we keep in mind that any changes to packs have potential impacts on traffic management.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | AD           |                      |
| 1.4 | AM stated that we should reconfigure teams and be more internal in order that tie, SDS and AMIS work more closely together and this can be achieved by meetings and discussions. SC stated that we need clarity on meetings and exactly what we are trying to achieve at each meeting.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |                      |
| 1.5 | WG asked if Section 1A actually applies to Phase 1A as this is not clear. AD to ensure that drawings reflect that they apply to design section 1A and not Phase 1A.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | AD           | 16.02.07             |
| 2.0 | <b>AMIS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |              |                      |
| 2.1 | Progressing well. Traffic advanced information is going through. Communications plan is issued and agreed in principle working closely with SW. Stakeholder packs ready to go to print but will not go out until after Minister's decision is made. The packs will not include any dates, these will be added to the letter to go out with the packs.                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              |                      |
| 2.2 | There are activities which would need to happen in advance of ministerial decision if the date of 19 March 2007 were to be achieved. These include release of communication packs and road opening notices.<br><br>It was agreed that we will possibly need to revise the trial date due to the delay in the Minister's decision in as a result of this. We have to also take into consideration the Edinburgh half marathon on 1 <sup>st</sup> April 2007. A revised trial date impacts the whole process so whole programme will need to be looked at.<br><br>SC will communicate any change to the trial date. WG stated that he did not feel there would be any public repercussions arising from a change of trial date. There are currently 34 days to go to our trial date of 19 <sup>th</sup> March 2007. | SC<br><br>SC | 14.02.07             |
| 3.0 | <b>Trial Areas</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |                      |
| 3.1 | WG stated we need to review impact of moving trial date for each section                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |              |                      |
| 3.2 | The design programme needs to be integrated with the AMIS programme and John McAloon is working on this.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | SC           | 26.02.07             |
| 3.3 | WG stated that for each site we need to detail the following points:<br><br>Milestones SDS Design Process<br>SUs approval of design                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |              |                      |



|            |                                                                                                                                                                                                                                                                                                                                      |                                  |                                        |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|----------------------------------------|
|            | Progress with Works Orders<br>Traffic Management arrangements<br>AMIS progress with method statements, resources. This will be reviewed each month.                                                                                                                                                                                  |                                  |                                        |
| <b>4.0</b> | <b>Construction Programme</b>                                                                                                                                                                                                                                                                                                        |                                  |                                        |
| <b>4.1</b> | SC confirmed as follows:<br>St Andrew Street - stand alone project<br>Roseburn – can be moved if necessary<br>Gogar – going to Tram & EARL Project Board to be carried out in conjunction with EARL works and avoid having to carry out works twice.<br><br>SC to prepare one page for each section and look at issues for each one. | <b>SC</b>                        | <b>14.02.07</b>                        |
| <b>4.2</b> | Works Orders go to AMIS who cost and issue within ten days a Works Order Confirmation which then allows us to go on site. A flowchart is required that shows the procedure from Design to starting construction. SC to have a look at this design.                                                                                   | <b>SC</b>                        | <b>26.02.07</b>                        |
| <b>5.0</b> | <b>Traffic Management</b>                                                                                                                                                                                                                                                                                                            |                                  |                                        |
| <b>5.1</b> | The TTRO is due to go out mid February but it was agreed to hold this for a couple of weeks until after ministerial decision.                                                                                                                                                                                                        |                                  |                                        |
| <b>6.0</b> | <b>Commercial/Risk Opportunities</b>                                                                                                                                                                                                                                                                                                 |                                  |                                        |
| <b>6.1</b> | We will report against anticipated final sum. However there is currently not enough detail. SC will have this detail within the next couple of months once the first design sections are approved by AMIS. SC to work with SM on financial report                                                                                    | <b>SC/SM</b>                     | <b>31.03.07</b>                        |
| <b>6.2</b> | SC to renew outputs and report on opportunities at this meeting. tie/AMIS/SDS to get together to discuss drawings which are fed to utilities to inject VE into design process. This may result in tie cutting into 20 day approval period.                                                                                           | <b>SC</b><br><br><b>SC/AD/AM</b> | <b>12.03.07</b><br><br><b>12.03.07</b> |
| <b>6.3</b> | SM stated that change control process must be understood. How will SDS handle this if changes are requested? Martin Hutchinson is currently going through change control procedures. SM to produce commercial financial report and discuss change control process with SC.                                                           | <b>SM</b>                        |                                        |
| <b>7.0</b> | <b>Communications</b>                                                                                                                                                                                                                                                                                                                |                                  |                                        |
| <b>7.1</b> | Standard packs are approved. 100,000 will be sent out together with detailed letters which are awaiting final approval. The customer interaction cycle for the trial section will be four weeks and for all others sections will be eight weeks                                                                                      |                                  |                                        |
| <b>7.2</b> | The helpline voice will be changed to a more welcoming tone. The number has also been changed                                                                                                                                                                                                                                        |                                  |                                        |
| <b>7.3</b> | In relation to incoming correspondence flow a meeting is being held on 14 <sup>th</sup> February. TS, CEC and tie to map out flow and test against different options                                                                                                                                                                 | <b>SW</b>                        | <b>16.02.07</b>                        |
| <b>7.4</b> | Tram Bus – will appear after ministerial announcement.<br>Site Branding – Signs being designed and will go to stakeholders for approval at the end of this week.                                                                                                                                                                     | <b>SW</b>                        | <b>16.02.07</b>                        |





|     |                                                                                                                                                                                |          |          |
|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|
|     |                                                                                                                                                                                |          |          |
| 7.5 | PPE Kit will include the tram logo. There will be visuals for all vehicles and CEC will be including these on council vehicles also.                                           |          |          |
| 7.6 | All Communications procedures going into programme this week. Dates will need to be revised due to delay in ministerial decision.                                              | SW       | 16.02.07 |
| 7.7 | There will be an ongoing communications review through the tram helpers but also a formal four week review.                                                                    |          |          |
| 7.8 | We need to be aware of dates clashing with PURDA. tie cannot be seen to promote any political party. Therefore funding cannot be mentioned. Detailed guidelines are needed.    | LD       | 16.02.07 |
| 7.9 | Clarity required on roles/responsibilities between tie/AMIS                                                                                                                    | SW       | 26.02.07 |
| 8.0 | <b>Recommendations</b>                                                                                                                                                         |          |          |
| 8.1 | Changes to be made to trial date. Issues to be updated.                                                                                                                        | WG/MC/SC |          |
| 9.0 | <b>AOB</b>                                                                                                                                                                     |          |          |
| 9.1 | MC emphasised the importance of the tram event in bringing everyone together as a team with better integration. Tram event takes place Thursday 15 <sup>th</sup> January 2007. |          |          |
| 9.2 | Next Meeting to take place 12 <sup>th</sup> March 2007 at 10am.                                                                                                                |          |          |



## Edinburgh TRAM Project

**Paper to** : **TPB**  
**Subject** : **Additional TPB meetings**  
**Date** : **13 Feb 2007**

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**TPB requested to approve additional TPB Meetings to support the procurement process.**

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- 1.0 Given the programme for conducting the Infraco and Tramco bid evaluation and negotiations, we are unable to align the requirements of our programme to current dates for TPB.
- 2.0 Based on current timescales, 2 additional TPBs will be required. The table below outlines current DPD and TPB meetings schedule and when additional TPB meetings will be required.

| <b>DPD</b>           | <b>TPB</b>           | <b>Additional TPB</b> |
|----------------------|----------------------|-----------------------|
| <b>09.00 - 12.00</b> | <b>09.30 - 12.45</b> | <b>tbd</b>            |
| 13-Feb               | 20-Feb               |                       |
|                      |                      | 9-Mar                 |
| 13-Mar               | 20-Mar               |                       |
| 12-Apr               | 19-Apr               |                       |
| 10-May               | 17-May               |                       |
| 07-Jun               | 14-Jun               |                       |
| 05-Jul               | 12-Jul               |                       |
|                      |                      | 19-Jul                |
| 02-Aug               | 09-Aug               |                       |
| 30-Sep               | 06-Sep               |                       |
| 27-Sep               | 04-Oct               |                       |
| 25-Oct               | 01-Nov               |                       |
| 22-Nov               | 28-Nov               |                       |
| 18-Dec               | 20-Dec               |                       |

- 3.0 Depending on the issues arising from the evaluation process, further special TPB meetings may be required. The team will provide advance notice of this.

**Edinburgh TRAM Project**

**Proposed** Geoff Gilbert Date:- 06/02/07  
Project Commercial Director

**Recommended** Matthew Crosse Date:- 06/02/07  
Project Director

**Approved** ..... Date:- .....  
David Mackay on behalf of the Tram Project Board

## Edinburgh TRAM Project

**Paper to** : **Tram Project Board**

**Subject:** **Monitoring Financial Contributions to the Tram Project**

**Date** : **14<sup>th</sup> February 2007**

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**Position statement on proposed approach to the delivery and monitoring of financial contributions to the Tram Project by CEC.**

**Views from the TPB are invited on the preferred way forward.**

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### **1.0 Introduction**

1.1 The Tram Project Draft Final Business Case (DFBC) was approved by CEC in December and is currently awaiting Ministerial approval. It is anticipated that construction will be an integrated two-stage process:

- Line 1a – Newhaven / Airport to be constructed 2007-2010
- Line 1b – Roseburn / Granton to be constructed 2009-2011

1.2 Assuming Ministerial approval of the DFBC, funding is confirmed at £545m from CEC and TS. This remains subject to finalisation of the basis for grant indexation, but the planning assumption is for £500m indexed grant and a £45m cash and in-kind contribution from CEC. The capital cost of Line 1a falls within this envelope by c£33m but the incremental cost of 1b at £80m takes the funding requirement outwith the envelope by £47m.

1.3 The CEC contribution incorporates several strands as set out in the table in the report which accompanied the DFBC at the December Council meeting.

|                                      | January<br>Estimate<br>£m | 2006 | November<br>Estimate<br>£m | 2006 |
|--------------------------------------|---------------------------|------|----------------------------|------|
| Council Cash                         | 2.5                       |      | 2.5                        |      |
| Council Land                         | 6.5                       |      | 6.2                        |      |
| Developers Contributions – Cash      | 10.2                      |      | 24.4                       |      |
| Developers Contributions – Land      | 7.9                       |      | 2.2                        |      |
| Capital Receipts (Development Gains) | 5                         |      | 2.8                        |      |
| Capital Receipts                     | 12.9                      |      | 6.9                        |      |
| Total                                | 45                        |      | 45                         |      |

## Edinburgh TRAM Project

- 1.4 At the TPB meeting in January 2007, it was agreed that a coordinated approach to these matters was required and that this may well include external parties to augment existing skill sets.

### 2.0 Programme

- 2.1 It is a mutual objective of Transport Scotland and CEC to optimise third party contributions ("TPCs") in support of the final business case financial close in October 2007. The programme to finalise TPCs (and self-generation of cash from capital asset sales) will require to be matched up with the procurement programme leading to financial close in October 2007.
- 2.2 It will need to be recognised and clearly understood that most if not all such contributions will remain conditional at financial close and that means will be required to manage the ensuing risk.

### 3.0 Overall approach

The workstreams are as follows:

#### 3.1 North East Waterfront

Forth Ports plc site comprising Western Harbour, Britannia Quay, Ocean Terminal, Waterfront Plaza, Edinburgh Harbour and Leith Docks. The former are largely consented and have S75 agreements in place. Leith Docks is the largest unconsented area and is critical to FP future numbers and share valuation. Submission of an OPA for the docks site is due in Q2 2007 and OPA plus Masterplan for "the Hub" (comprising the central Ocean Terminal and Waterfront Plaza) is anticipated in Q4 2007. In both cases, dialogue is underway between FP and CEC Planning. Possible other opportunities may occur within the other sites as changes to plans are formally assessed.

#### 3.2 Granton

The three current adjacent sites are owned by Secondsite, Waterfront Edinburgh Limited (owned jointly by CEC and SEEL) and Forth Ports (Granton Harbour). All are partially consented and developed.

#### 3.3 Other sites – Line 1a

South of the Waterfront area, through the city and out to Sighthill, the Gyle, RBS and the Airport.

#### 3.4 Other sites – Line 1b

Corridor from Roseburn to Granton.



## Edinburgh TRAM Project

### 3.5 EDI JV sites

Arrangements to work with EDI, the Council's arms-length development company, were reached some years ago to exploit Council owned sites. No further progress was made, but EDI (at the Council's request) performed a further review in late 2006 and focussed on the following batch of sites.

- Roseburn Terrace (highways input required in order to see whether access can be achieved)
- Craigleith
- Gyle/Broomhouse
- Land in front of Saughton House - Broomhouse Drive
- Stenhouse Drive
- Balgreen primary school site
- Leith Walk (probably the best and most obviously developable site)
- Constitution Street (adjacent to Forth Ports)
- Telford drive
- Culltins Rd Batching site

### 3.6 CEC capital receipts

Portfolio of opportunities identified by CEC

### 3.7 CEC land contribution

Portfolio of land required for tram.

### 3.8 CEC cash contribution

3.9 In addition to the workstreams above which will provide the basis for the CEC contribution, a further workstream is required to develop the financing arrangements between CEC and TS which covers timing of contribution, risk-sharing and other detailed matters. This is also being monitored by the TPB.

## 4.0 Rationale and approach

CEC have committed to delivery of a minimum of £45m. The principal project risks are therefore:

- 4.1 To demonstrate to TS that Ministerial aspirations for optimising private sector contributions are fulfilled; and
- 4.2 To seek the optimum third party contributions as further support to the funding of Line 1b, potentially in excess of £45m.
- 4.3 This paper summarises the workstreams required to deliver the CEC contribution and provides a basis for the TPB to monitor progress.

## **Edinburgh TRAM Project**

Attempts have been made to create a coordinated approach to these workstreams, but no agreement has yet been reached on how this should be done.

### **5.0 Property Contribution Group**

- 5.1 A paper was prepared by GB and circulated within CEC, setting out a proposal to create a “Property Contribution Group” (PCG) involving officials from tie and CEC Planning, City Development and Finance with CEC Legal fully involved as they require. The Group would have no authority to take decisions on behalf of CEC on these matters, all of which must ultimately be concluded by appropriate personnel within CEC. The purpose of the PCG would be to assist and facilitate, with support from external experts on a basis to be agreed. The focus of the group would be on third party developer contributions and the EDI arrangements – as detailed above.
- 5.2 A contrary view has been articulated, essentially requiring that all such matters remain within the remit of existing processes within CEC. The attachment to this paper sets out that view. There is some overlap of objectives, but disparity of view on how to execute.
- 5.3 It is important that clarity is achieved before enlisting expertise from PUK or external parties. A further productive avenue would be to engage with other rail delivery companies who have relevant experience. An invitation to speak with London CrossRail is outstanding and other schemes to contact would be Nottingham, Dublin and DLR. However, the roles and responsibilities of the different parties needs to be agreed to avoid wasted time and money.

### **6.0 Advice required from TPB**

The TPB is invited to offer views on the best way forward.

## Edinburgh TRAM Project

### Appendix A

#### Attachment Email from City Development Department

Graeme

Duncan Fraser is out of the office for the next few days and has asked me to forward CEC's comments on your draft *CEC Financial Contribution* paper.

I've attached comments from our Property Management team [see below] and comments from the Planning and Legal teams are listed below:

#### Planning

Planning accepts the need to maximise developer contributions and to ensure the other elements making up the CEC £45 million commitment are also delivered.

While it is useful to have a group that can report to the Tram Project Board and with the ability to pull in extra resources, it must be made clear that this group does not have any decision making powers, and that the statutory functions and duties of the Council must be fully respected. For this reason the terms of reference for this group must take into account the above and the group has to be lead by CEC. Where any additional resources are required they must have a duty of care to the Council rather than tie. CEC have to take into account a wider remit than tie when deciding upon planning applications and taking other decisions in general.

The actions outlined in the paper are acceptable but again the Tram Project Board must be made aware that the Property Contribution Group may be involved in developing strategy and negotiating with third parties but will not be able to take decisions and for that reason will have to take direction from CEC.

*Footnote: David Cooper notes that he made these points at a recent meeting with you.*

#### Legal

The proposed structure does not sit well with the principles of corporate governance. The TEL Board and TPB can have no locus to oversee the statutory planning function of the Council. Of course there would be no issue with Andrew Holmes and Donald McGougan as CEC Directors having an overview.

It is not acceptable that the PCG excludes the Council Solicitor or her representative. The Council Solicitor will be asked to execute the Section 75 agreements and therefore representation on that group is essential.

## **Edinburgh TRAM Project**

As to whether external legal support is used for Section 75s, before a view is taken please detail the scope, value and timeframe of likely agreements. There is also the issue of procurement and EC competition if external support is used. We would wish to reserve our position with a view to looking more widely at potential external partners.

I hope this all makes sense, but if you need anything further please get back to me Graeme.

Alan Bowen  
Senior Professional Officer  
Strategic Services  
Transport  
City Development Department



## **Appendix B**

### **Paper attached to email**

#### **Property Contribution Group**

Notes on the draft paper by G Bisset:

- Governance
- Membership
- Responsibilities
- Timescales
- Effectiveness
- EDI

#### **Governance**

Section 75's are the responsibility of Planning as part of the Planning Process

#### **Land sales**

The Council currently has a robust capital receipts programme and all surplus sites will be targeted to provide the receipts required for the scheme. There is no requirement to set up an external team to duplicate this work.

There is a need for clarification of what role is envisaged for the 'Lead Advisor/Negotiator'.

Sales of Council land need to be reported to the Council's Executive and can only be actioned by internal staff. The process of negotiating with Departments to get land declared surplus is complex and sensitive – and best achieved by internal staff.

#### **Membership**

Why is no one from the Corporate Property Team on the proposed Team?  
I would suggest the existing Land Team should be part of this important task as they have now shown commitment to the scheme, amassed a good working knowledge of the scheme and have developed relationships with Tie staff.

#### **Responsibilities**

The use of outside agents has previously proved time consuming for internal staff. This is due to the need to negotiate with departments and politicians in order to bring assets to the point of sale. The work normally undertaken by agents - the actual finding of a purchaser - is often as little as say 1/3 of the time required for the process.

## **Edinburgh TRAM Project**

There then follows the reporting to Committee and the completion of the sale documents all of which needs extensive input from internal staff.

The Council's Asset Management Group / Capital Investment Group is charged with finding sufficient capital and the process of recommending allocation of funds to projects.

### **Timescales**

There is sufficient time to achieve best value sales to receive the capital in 2008/09

### **Effectiveness**

This group appears to be unnecessary as existing teams and procedures are in place.

### **EDI**

No JV is currently in place and would only be put in place if EDI can demonstrate they can provide an uplift in value over the normal sales process. The report in 2004 was subject to scrutiny and the Director of City Development is interalia to report back on the viability of development options following appraisal before proceeding. The sale of land with residential development potential does not need EDI experience to achieve and the cost structure of the draft JV is onerous to the Council compared with normal marketing.

### **£45 Mil**

Council is committed to find this sum even if the method of funding may vary from that outlined at present. This is a commitment and the Council will meet it. It is an internal matter as to where the Council finds the funding.