



## **Transport Edinburgh**

**Edinburgh Trams**

**Lothian Buses**

### **Tram Project Board Report on Period 3 Papers for meeting 2<sup>nd</sup> July 2008**

**09:00am – 11:00am**

**Distribution:**

**Attendees**

David Mackay (Chair)  
Willie Gallagher  
Bill Campbell  
Stewart McGarrity

Neil Renilson  
Dave Anderson  
Steven Bell  
Graeme Bissett

Donald McGougan  
Cllr Phil Wheeler  
Alastair Richards  
Marshall Poulton  
Elliot Scott (minutes)

**In addition – for information only**

Cllr Ricky Henderson  
Cllr Allan Jackson  
Kenneth Hogg  
Susan Clark  
Norman Strachan  
Iain Coupar  
Keith Rimmer

Cllr Gordon Mackenzie  
Cllr Tom Buchanan  
Peter Strachan  
Duncan Fraser  
Rebecca Andrew  
Alan Coyle

Brian Cox  
Neil Scales  
Geoff Gilbert  
Dennis Murray  
Jim McEwan  
Tony Glazebrook

TRAM PROJECT BOARD

**Transport Edinburgh**

**Edinburgh Trams**

**Lothian Buses**

FOISA exempt  
 Yes  
 No

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**Agenda Tram Project Board**  
**Brunel Suite – Citypoint, 2<sup>nd</sup> Floor**  
**2<sup>nd</sup> July 2008 – 9.00am to 11.00am**

**Attendees:**

David Mackay (Chair)  
Willie Gallagher  
Bill Campbell  
Stewart McGarrity

Neil Renilson  
Dave Anderson  
Steven Bell  
Graeme Bissett

Donald McGougan  
Cllr Phil Wheeler  
Alastair Richards  
Marshall Poulton  
Elliot Scott (minutes)

Apologies:

- 1 Review of previous minutes and matters arising
- 2 Presentations
- 3 Project Director's progress report for Period 3
  - TEL Business Plan and Phase 1b;
  - Legal services; and
  - Haymarket traffic calming.
- 4 Health and safety – update
- 5 Change requests / risk drawdown
  - A8 Sewer.
- 6 FOISA
- 7 Risk
- 8 Date of next meeting
- 9 AOB

**Edinburgh Tram Network Minutes**

**Tram Project Board**

**4<sup>th</sup> June 2008**

**tie offices – Citypoint II, Brunel Suite**

<b>Members:</b>			
David Mackay (Chair)	DJM	Bill Campbell	WWC
Willie Gallagher	WG	Donald McGougan	DMcG
Cllr Phil Wheeler	PW	Neil Renilson	NR
<b>In Attendance:</b>			
Steven Bell	SB	Graeme Bissett	GB
Alastair Richards	AR	Cllr Ricky Henderson	RH
Cllr G Mackenzie	GM	Cllr Alan Jackson	AJ
Brian Cox	BC	Stewart McGarrity	NS
Duncan Fraser	DF	Norman Strachan	SMcG
Jim McEwan	JMcE	Elliot Scott (minutes)	ES

**Apologies:** Marshall Poulton, Dave Anderson

<b>1.0</b>	<b>REVIEW OF PREVIOUS MINUTES</b>	
1.1	The previous minutes were taken as read.	
<b>2.0</b>	<b>Presentation – Overview</b>	
2.1	WG gave an overview of the fatality at the Foot of the Walk where a Carillion van hit a member of the public. The accident was not associated with, or near to, tram works. WG stated his intention to write to Carillion to pass on <b>tie's</b> condolences.	WG
2.2	WG appraised the Board of Contract Close and thanked them for their support throughout the procurement phase.	
2.3	He outlined the current status of progress including the start of Frank McFadden as Infraco Director on 7 July, the current actions in place to manage the contract, Infraco pre-mobilisation activities and the ongoing concerns and actions with Carillion supervision and resources.	
<b>3.0</b>	<b>Presentation – Safety</b>	
3.1	SB updated the Board on current safety issues, including that the Investigation into the RIDDOR accident was complete and recommendations are being actioned and that the Panel of Inquiry into the Traffic Management near miss would be reporting to him today. Safety tours were ahead of programme and showing improving site control by contractors and quality issues are being addressed.	
3.2	SB will report to a future TPB the proposal of the safety leadership initiative with BBS.	SB

<b>4.0</b>	<b>Presentation – Contractual final position</b>	
4.1	SB updated the Board on the final position achieved with Infraco (Baseline budget of £512M and opening for revenue date of July 2011).	
4.2	The Board approved the change paper to formalise the change in Project budget from £498M to £512M.	
<b>5.0</b>	<b>Presentation – Design and consents</b>	
5.1	SB updated on the current position in relation to design and consents which was being facilitated by the task force. He highlighted the need for continued excellent support from CEC, together with a “chaser” to close out timely comments from all integral parties	
5.2	Discussion focused on the external parties (Historic Scotland, Architecture and Design Scotland and Edinburgh World Heritage) and the best way to ensure the timeliness of their comments. WG to compile a list of the contacts in the different organisations and determine who is best equipped to approach each.	WG
5.3	SB also updated the Board on the status of the 3 <sup>rd</sup> party agreements: <ul style="list-style-type: none"> <li>• Forth Ports – Conclusion of the commercial issues will be finalised by 20<sup>th</sup> June;</li> <li>• SRU – The agreement should be resolved in Period 3; and</li> <li>• RBS – The agreement on the RBS tramstop is not currently a cause of delay but potentially will be if it is not resolved expediently. SB plans to close out the issue by the end of August. NR circulated an artist’s impression for the design of the tramstop.</li> </ul>	
5.4	DF highlighted the number of approvals currently being processed by CEC.	
<b>6.0</b>	<b>Presentation – MUDFA</b>	
6.1	SB appraised the Board of current MUDFA progress including the close out programmes, the current two week impact on the Infraco critical path and Revision 7 of the programme.	
6.2	DJM raised a concern over the ongoing issue of Carillion resource and supervision. WG explained that <b>tie</b> has been pushing on the issue for three months. Carillion have a core workforce with very little turnover and a number of additional agency staff where there is a high turnover rate. He continued to explain that both <b>tie</b> and Carillion had underestimated the complexity of managing so many worksites and that his focus was on finishing open worksites before starting on additional areas. Areas that affect the Infraco critical path were also being prioritised.	
6.3	DJM also enquired to ensure that <b>tie</b> was not liable for any related claims from Carillion. SB stated that there are areas where <b>tie</b> will be liable (for example prelims at the Mound where <b>tie</b> changed the phasing) and this is included in the current AFC. However, <b>tie</b> will not be liable for poor productivity by Carillion (although any prolongation may have a knock on effect on Infraco).	
6.4	AR enquired as to whether there would be a compromise in quality if Carillion are trying to do the work faster. SB replied that there have been issues, but that these have been due to “sloppiness” rather than that due to trying to work faster. Senior Carillion managers are focusing on this.	

6.5	DMcG asked if there had been issues with the utility companies following the diversionary work. SB stated that things were generally in order and, although there were some issues with Scottish Gas and that some final sewer proposals were being finalised with Scottish Water, these were not insurmountable.	
6.6	WWC explained the planned traffic management in Leith Walk would now only result in the area from Dalmeny St to the Foot of the Walk being one way for a period of time.	
6.7	WWC continued to explain the gridlock experienced on Friday 30 <sup>th</sup> May on Leith Walk. He expressed his concern over the speed of the response (both the recognition of the issue and the time to address it) and the approvals process in CEC as well as thanking both SB and DF for their support in resolving the problem. SB to action a process where similar issues in the future can be resolved immediately.	SB
6.8	PW queried whether the utility companies were happy with the diversions when Carillion had finished. SB commented that there is a sign back process between Carillion, <b>tie</b> , and the utility companies and that there have been issues but that these were being worked on. This was being escalated as appropriate.	
6.9	WG appraised the Board that, assuming the TM is approved today; a communication would go out to the public that work such as tree trimming will begin at Haymarket in the near future. WG added that, although works will stop in the city centre for the Festival embargo, works will continue at Haymarket, outside the Playhouse and down Elm Row.	
<b>7.0</b>	<b>Presentation – Infraco</b>	
7.1	SB briefly further updated on the current status of the Infraco mobilisation, including a review of the 12-week look ahead received and <b>tie</b> 's requirement for visibility of Infracos recruitment and mobilisation, especially package sub-contractors.	
<b>8.0</b>	<b>Presentation – Finance</b>	
8.1	SMcG highlighted the position achieved at Financial Close including the increase of the project control budget to £512M to be made up of incentivisation payments, the reduction in risk allowance to £30.3M and the important concessions received from Infraco.	
<b>9.0</b>	<b>Presentation – Milestones</b>	
9.1	SB appraised the Board of the milestones to be reported against in the next six months, adding that Infraco are one month behind from the start. Discussions are ongoing to mitigate any effect of this.	
<b>10.0</b>	<b>Presentation – Governance</b>	
10.1	GB updated the Board that there are no major changes to Governance for the construction period as previously approved. However, the sub-committees will not be established until the volume of material being brought to the TPB becomes too great.	

10.2	In addition, the <b>tie</b> Board has decided to meet on a different time to the TPB and focus on <b>tie</b> issues and obligations for the delivery of the Infraco contract. They will continue to support and give advice to SB in the delivery of the project and ensure adequate quality control procedures are in place.	
10.3	GB continued by stating that a framework for the flow of information to TS (and that due under FOISA), particularly in relation to the contracts, needs to be managed. GB to provide a framework on this for the next TPB.	GB
<b>11.0 Phase 1b</b>		
11.1	SMG outlined the process for reporting on the delivery of the Business Case for Phase 1b: <ul style="list-style-type: none"> <li>• 30 July TPB – Phase 1b patronage and revenue analysis;</li> <li>• 27 August TPB – Updated capex and opex estimate;</li> <li>• 24 September TPB – Consolidated proposal with financing options appraisal; and</li> <li>• 16 October – Full report on Phase 1b to CEC.</li> </ul>	
11.2	WG added that he had attended two meetings with TS, one with D McLetchie and that he had a meeting planned with the Minister. He stated that under certain circumstances, that there may be additional funding available from TS and that the timescales imposed in the Infraco contract may be beneficial in getting a resolution.	
11.3	DMcG stated that any additional funding from CEC would have to be in the context of other current issues. However, as well as the funding, it would help psychologically if the Scottish Government supported Phase 1b.	
11.4	SB added that if the option to proceed with Phase 1b in the Infraco contract was to be exercised, construction has to start on 6 July 2009. An instruction will be issued to Infraco in the coming weeks to update their estimate on Phase 1b.	SB
<b>12.0 TPB attendance</b>		
12.1	DJM reiterated the need for a more focused TPB, given Contract Close, and the people that will attend in future. The attendees of future TPB meetings will be: DJM, WG, PW, WWC, DMcG, NR, MP, DA, SB, AR, SMcG, GB and ES (minutes).	
12.2	He added that, in future, it was planned that TEL meetings will be held separately immediately following the TPB. Further details would be issued in due course.	
<b>13.0 Progress Report</b>		
13.1	The report was taken as read. SB highlighted the following issues not covered in the presentation: <ul style="list-style-type: none"> <li>• Infraco alignment with the current design – SB to report back to the TPB if further issues arise;</li> <li>• SRU pitch relocation – delay to approvals (this is being referred to the Scottish Government) may lead to the work being delayed until 2009 which would result in an unsatisfactory knock-on with other contractors;</li> <li>• NWR / Scotrail compensation – proposals have now come forward and this</li> </ul>	



	<p>should be resolved during Period 3; and</p> <ul style="list-style-type: none"> <li>• SB will take to the <b>tie</b> Board the detailed arrangements for discharging their health and safety duties. A formal paper will also be presented to the TPB regarding the CDM requirements.</li> </ul>	SB
13.2	DF queried whether there would be a simple integrated programme of traffic management (TM) for Infraco and MUDFA. WG replied that today's MUDFA sub-committee would be the last in its current format and in future it will continue as a monthly TM review.	
<b>14.0</b>	<b>Risk</b>	
14.1	SB outlined the current status of the risk register and stated that the focus is now on mitigation plans and controls for the Infraco works.	
14.2	It was noted that as the 1,500mm sewer needs to be diverted this risk will crystallise and will be confirmed once a price is received from Carillion.	SB
14.3	It was noted that risk 44 could now be closed. <i>Post meeting note – the risk is still live, but the cause has been changed to “SDS contractor does not deliver the required Prior Approval consents in line with SDS V31”.</i>	SB - done
<b>15.0</b>	<b>AOB</b>	
15.1	Gogar interchange – WG and JMCE updated the Board on discussions held between TS and themselves. TS have indicated that they plan to fund the interchange and do not want to delay tram construction. However, the position of the tramstop has not been determined and DJM expressed his concern that this could lead to a delay to the tram project. NR explained that, although he had been trying to meet on site with Bill Reeve for some time, Bill had yet been unable to do so. DJM and NR to discuss and agree on a way forward.	DJM / NR
15.2	TEL policy in regard to bicycles – AR updated that TEL are continuing to engage with SPOKES in relation to cycles and the tram network, and as part of this continue to keep the TEL policy under review in connection with cycles. TEL will continue to keep the Board informed and recognised the interest SPOKES are taking in the project.	
15.3	Concessionary fares – NR gave an overview on the issues involved and the decisions needed from TS in regard to concessionary fares: <ul style="list-style-type: none"> <li>• To include trams in the scheme (even though they had indicated that it would be, this needs to be legislated); and</li> <li>• The equipment specification needed to administer the scheme.</li> </ul> DMcG added that TEL may need the equipment even if TS decide not to include tram in the scheme.	
15.4	DF raised the issue of contract alignment, specifically in relation to: <ul style="list-style-type: none"> <li>• Area wide TM arrangements;</li> <li>• Additional works instructed by CEC; and</li> <li>• Future-proofing.</li> </ul> SB to report to the next TPB.	SB
15.5	NR updated that negotiations are continuing with CAF and the Department for Transport to get sign off for the tram branding. No major changes are expected at this juncture.	

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Yes

No

15.6	DJM appraised the Board that he had received a letter from James Stewart of PUK congratulating the team on achieving Contract Close and offering their support if needed in the future.	
15.7	Date of the next TPB meeting – 2 July 08.	

Prepared by Elliot Scott, 4<sup>th</sup> June 2008

## Project Directors report

### Health, Safety, Quality and Environment

There were no RIDDOR incidents in the period and the AFR for the project is now 0.12.

There were 21 other incidents reported, two of which were categorised as serious and 19 as minor:

- The first serious incident involved a traffic light cable being struck during MUDFA excavation works resulting in significant traffic disruption. The traffic light contractor completed repairs but further problems were encountered resulting in further delays; and
- The second serious incident involved the Infracore demolition sub contractor mobilising on site without authorisation from **tie** or the Infracore Principal Contractor. Work was stopped and an investigation carried out. An internal communication error has been highlighted as the cause with remedial actions implemented;

Trends are being analysed and remedial actions implemented.

#### Close out of previous significant incidents

The serious incident reported last period, involving the trailer of a Moxi dumper tipping over during shifting of spoil on the archaeological dig site at Gogarburn has been investigated. A report has been completed and this will be concluded in Period 4.

The investigation report from the RIDDOR accident in Period 1 has been reviewed and commented on by **tie**. These comments are with the contractor for inclusion in a final version of the report. Recommendations are being tracked to ensure close out.

The Panel of Inquiry established to investigate the traffic / pedestrian management arrangements in Constitution Street after a near miss in April has concluded and the report has been published. Recommendations have been accepted and are being implemented; and

There were seven near misses reported and no environmental reports for the period.

Two audits were planned in the period. One audit was re-scheduled due to the auditor illness. The other audit on MUDFA inspection, test and handback was completed with three audit findings being raised. Close out actions and target dates have been agreed with the auditee. Six NCRs have been raised and two closed on the MUDFA contractor in the Period.

## **Progress – Design**

Generally, design progress has addressed challenging work in the period.

Any slippage on delivery of IFC's and impact on programme is being carefully monitored and potential mitigations identified. The design and consents taskforce is targeting any IFC slippage on approvals associated with the construction critical path are being identified and mitigated. Where necessary, issues are being escalated with **tie** / CEC / Infraco immediately.

- To date 58 Prior Approvals have been submitted to CEC and 35 granted - 49% granted (compared with v31 plan of 65 and 40 - 56% granted);
- To date 67 Technical Approvals have been submitted to CEC and 35 granted - 38% granted (compared with v31 plan of 74 and 44 - 48% granted); and
- To date 14 Issue for Construction (IFC) drawings have been submitted to **tie** - 13% submitted (compared to v31 plan of 18 - 16% submitted);

## **Progress – MUDFA**

Progress has started to show improved production rates with known barriers to production have been addressed and recovery works are underway.

In overview MUDFA works are 2-3 weeks behind on Infraco critical activities. **tie** and Carillion are currently agreeing Revision 07 of the MUDFA programme to mitigate any potential impact on the Project critical path. Final agreement is expected in Period 4.

Traffic management and modelling has benefitted from additional scrutiny and support during the period. MUDFA Haymarket phasing works has been communicated (expected to commence at the end of July), and an assessment of the TM integration requirements for Infraco and MUDFA works has been made, along with enabling works on George Street.

There is continued focus on the completion and hand-back of work-sites, especially on Leith Walk, St Andrews Square, Constitution Street and Shandwick Place.

## **Progress – Infraco (including Tramco)**

The first contract progress meeting was held with Infraco and weekly production and commercial meetings have also commenced.

Infraco's rate of mobilisation is disappointing; particularly the lack of progress in deploying package sub-contractors and this has been formally communicated to BBS and escalated to Consortium Board level.

However, having undertaken more detailed programme analysis, **tie** considers this mobilisation slippage can be recovered and are developing these plans with Infraco through a series of workshops. **tie** continues to work with Infraco to speed up the early construction activities.

A number of contract instructions have been issued to Infraco in respect of value engineering and instructions to proceed at risk where final design information is not available.

Tramco progress is acceptable and currently focused on documentation and designs.

### **Progress – Other**

The pollution prevention project at Haymarket depot is a concern to **tie** as the project is slipping behind schedule – this has potential to impact on the main Infraco programme and has been escalated with Network Rail's director.

Discussions are ongoing with NR and ScotRail in relation to compensation for the Haymarket carpark. **tie** had hoped to conclude this during the period but NR and ScotRail are only just preparing their estimates for **tie** consideration. This is expected to be concluded during Period 4.

**tie** expects the 3<sup>rd</sup> party agreements with SRU, Forth Ports and Stanley Casinos to be concluded in Period 4;

The actual resource and detailed technical solution to implement the immunisation works is under discussion with NR;

Tender documents for the relocation of the Murrayfield training pitches (principally driven by the CEC Flood prevention scheme) were returned on the 2<sup>nd</sup> June and a recommendation will be made to **tie** Board at this board meeting.

The planning application for this work was approved by CEC and it has now been referred to the Scottish Ministers for their endorsement. Discussions are ongoing with SRU in respect of the start and end dates for this work.

### **Cost**

The AFC for Phase 1a of the project remains unchanged from last period at £512m, including a risk allowance of £30.3m. Funding available remains at £545m.

There are no significant changes pending and cumulative expenditure to date (end of P3 08/09) on Phase 1a is £158.1m.

COWD year to date, at £28.1m, is £5.7m lower than the 'budget' for the year to date. This is primarily due to delayed closure of the Infraco contract suite and temporary slippage in utilities diversion work. However, the FY08/09 outturn estimate remains at £151m and, as before, includes a risk allowance of £9.3m.

The TS share of Phase 1a costs in FY08/09 at 91.7% (500/545) would be between £130m of Base Costs or £138m of the total costs including Risk Allowance. This is being kept under review in the context of a current cap on FY0809 funding from TS

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Yes

No

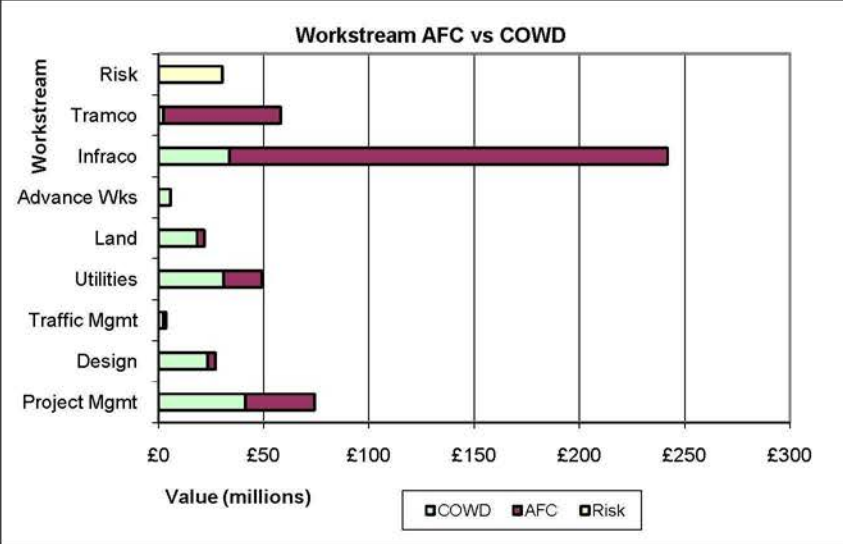
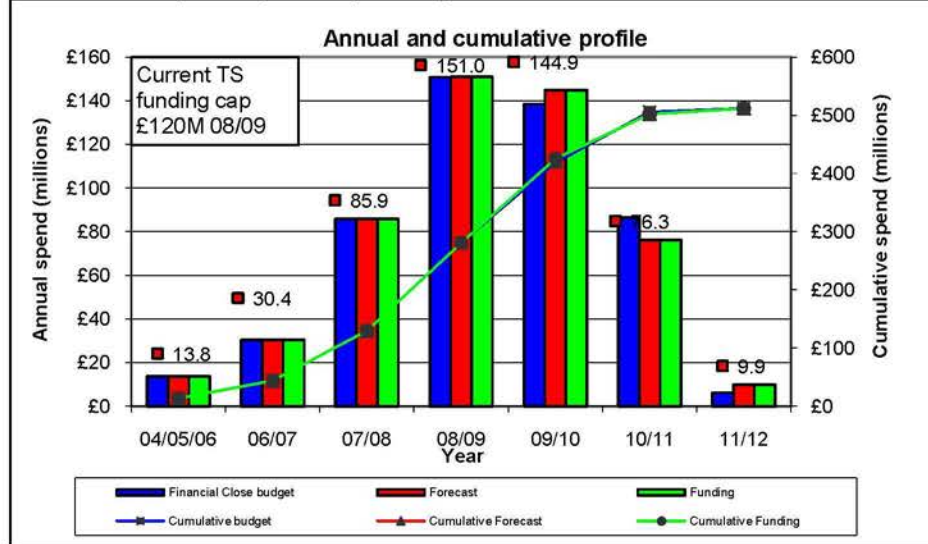
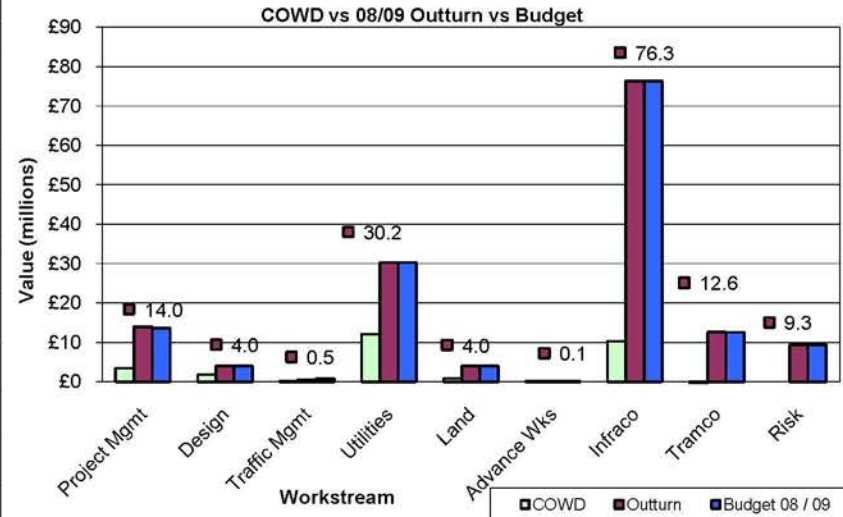
of £120m. The fall back position is that CEC would temporarily “fund” the shortfall of between £10m and £18m until the start of the FY09/10, although **tie**'s view is that at these levels the time lag between certification of work done and payment will ensure that CEC is unlikely to be required to find significant additional cash to meet a shortfall due to the current TS funding cap.

A project led by S McGarrity has been initiated to deliver an updated business plan and financing plan for Phase 1b for presentation to CEC in the autumn of 2008.

FOISA exempt

☐ Yes  
☐ No

Period 3 - 08/09 COWD (£000s)				
Workstream	F/cast	Act	Var	Comments
Project Mgmt	1,126	1,079	(47)	Over accrual for late TSS timesheets
Design	385	386	0	
Traffic Mgmt	110	32	(78)	Legal and modelling support lower than forecast
Utilities	5,218	3,546	(1,673)	Slippage in programme (Scottish Water and Scottish Power)
Land	168	392	224	Business Support payments made earlier than forecast
Advance Wks	17	16	(2)	
Infraco	5,674	5,009	(665)	Slow progress in mobilisation and initial activities
Tramco	0	(99)	(99)	COWD aligned with initial payment, Tramco physical profile and final currency hedge
Risk	0	0	0	
<b>Total</b>	<b>12,699</b>	<b>10,360</b>	<b>(2,339)</b>	As above



**Risk**

The potential risk associated with the slow mobilisation of Infraco is being addressed as noted above.

Further development of risk mitigation plans is underway and there is no change in the period.

A risk drawdown is expected in Period 4 to deal with a necessary sewer diversion at the A8.

**Programme**

No changes have been made to the Master Tram Project Programme in the period.

Revision 7.0 of the MUDFA programme will be agreed in Period 4.

Infraco submitted a 12-week look-ahead for the purposes of planning method statements and access permits. Detailed planning of potential mitigation plans are being actively progressed.

**OGC review**

Last October the Tram Project went through OGC gateway 3 and subsequently a risk review process. The project was given a green light, but as expected there were a number of recommendations or comments – where these have not been fully completed the update is as follows:

<b>Review</b>	<b>Recommendation / Comment</b>	<b>Status</b>
OGC Recommendations		All completed
OGC Comment	Recognition that the TEL management team will require to be strengthened over the construction period. This to form part of next year's planning process	Strategy meeting held
Risk Review Recommendation	A contract management strategy is developed at the earliest opportunity.	A Commercial Director is now in post and contract procedures will be complete by end P4
Risk Review Recommendation	Appropriate schedule monitoring and risk simulation software is procured and taken into use in the project team and that schedule monitoring and simulation be introduced as tools in the risk management and mitigation process.	Software now being installed – complete by end P4



**Communications**

The first four of the Final Design presentations to resident and business frontagers were held, with the remaining four held in the first week of Period 4.

Work continued with traders regarding effective marketing of the 'Open for Business' strategy – West End Market and Leith radio promotions.

Business Support: To date 575 application packs have been delivered, 289 packs accepted and £1,077,000 has been committed.

Events next period include a MSP briefing on the tram project and future opportunities and project promotion through Edinburgh Festival and Fringe bulletins and events.

**Primary risk register**

ARM Risk ID	Risk Description			Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
	Cause	Event	Effect								
916	CEC do not achieve capability to deliver	CEC are unable to honour their funding commitment	Potential showstopper to project if contribution not reached. Line 1B may depend on incremental funding from CEC	D McGarrity	NIL - 0.00	Project	CEC has formed a multi-discipline Tram Contributions Group to monitor identified sources of £45m contribution including critically developers contributions. tie are invited to that group. (see add info)  CEC to deliver necessary contributions for 1a  Tram Project Board to monitor progress towards gaining contributions	Complete	Complete	28-Sep-07	CEC
139	Utilities diversion outline specification only from plans	Uncertainty of Utilities location and consequently required diversion work/ unforeseen utility services within LoD	Increase in MUDFA costs or delays as a result of carrying out more diversions than estimated	G Barclay	High - 25.00		Carry out GPR Adien survey Identify increase in services diversions. MUDFA to resource/re-programme to meet required timescales.  In conjunction with MUDFA, undertake trial excavations to confirm locations of Utilities and inform designer	Complete	Complete	31-Oct-07	J Casserty
								Complete	Complete	23-Nov-07	J McAloon
								On Programme	On Programme	Ongoing	A Hill
164	Utilities assets uncovered during construction that were not previously accounted for; unidentified abandoned utilities assets; asbestos found in excavation for utilities diversion; unknown cellars and basements intrude into works area; other physical obstructions; other contaminated land	Unknown or abandoned assets or unforeseen/contaminated ground conditions affect scope of MUDFA work.	Re-design and delay as investigation takes place and solution implemented; increase in Capex cost as a result of additional works.	I Clark	High - 25.00		Carry out GPR Adien survey Identify increase in services diversions. MUDFA to resource/re-programme to meet required timescales.  In conjunction with MUDFA, undertake trial excavations to confirm locations of Utilities and inform designer	Complete	Complete	31-Oct-07	J Casserty
								Complete	Complete	23-Nov-07	J McAloon
								On Programme	On Programme	Ongoing	A Hill
342	Tram alignment at A8 crossing at Gogar coincides with 1500mm sewer	1500mm sewer required to be diverted	Capex cost to cover BT data nest/cable move; additional design costs; delay while works to undertake move are carried out; additional tunnelling costs.	I Clark	High - 24.00		Confirm if diversion required  Confirmation of BT requirements to tie	On Programme	Complete	8-Mar-08	G Barclay
								Complete	Complete	15-Oct-07	I Clark

ARM Risk ID	Risk Description			Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
	Cause	Event	Effect								
352	Increase in land values	Higher land compensation claims than anticipated	Additional uplift on compensation claims	A Slim	High - 23.00		Close out	On Programme	Complete	28-Mar-08	A Slim
							Initiate early negotiations between DV and landowners	On Programme	On Programme	Ongoing	A Rimoul
							Liaise with CEC Planning	On Programme	On Programme	Ongoing	R McMaster
173	Uncertainty over extent of contaminated land on route	Tramway runs through area of previously unidentified contamination and material requires to be removed and replaced (dig and dump).	Increase in costs to remove material to special and other tip.	B Bell	High - 23.00		Issue contamination and gl report to Infracore bidders	Complete	Complete	2-Mar-07	B Dawson
							tie to obtain ground investigation and contamination reports from SDS	Complete	Complete	30-Mar-07	A McGregor
44	SDS contractor does not deliver the required prior approval consents in line with SDS v31	Late prior approval consents	Delay to programme with additional resource costs and delay to Infracore. Impact upon risk balance.	D Sharp	High - 23.00		Evaluation of prior approval programme	On Programme	On Programme	31-Oct-08	D Sharp
							Hold fortnightly Roads Design Group	On Programme	On Programme	Ongoing	T Glazebrook
							Twice-weekly meetings of Approvals Task Force	On Programme	On Programme	31-Oct-08	D Sharp
							Informal consultation prior to statutory consultation	On Programme	On Programme	31-Jul-08	T Glazebrook
							Integrate CEC into tie organisation/accommodation (office move)	Complete	Complete	4-Jun-07	T Glazebrook
528	Major single safety incident (including a dangerous occurrence) during construction	Safety incident during construction	Delay (potentially critical) due to HSE investigation and rework. PR risk to tie and stakeholders.	S Clark	High - 23.00		All Site Staff to get CSCS or equivalent	On Programme	On Programme	Ongoing	C McLaughlan
							Develop and Implement Incident Management Processes	Complete	Complete	27-Apr-07	T Condie
							HSGE Audits, site inspections and Management Safety Tours to be carried out	On Programme	On Programme	31-Dec-10	T Condie
							Safety Induction to be carried out for all site staff	On Programme	On Programme	31-Dec-10	T Condie
							Site Supervisors to be appointed by tie	Complete	Complete	28-Feb-07	S Clark

FOISA exempt

Yes  
 No

ARM Risk ID	Risk Description			Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
	Cause	Event	Effect								
931	Utilities assets uncovered during construction that were not previously accounted for; unidentified abandoned utilities assets; known redundant utilities; unknown live utilities; unknown redundant utilities.	Unknown or abandoned assets impacts scope of Infraco work	Re-design and delay as investigation takes place and solution implemented; increase in Capex cost as a result of additional works.	D Sharp	High - 20.00		GPR surveys in areas where there are likely to be services	Complete	Complete	1-Apr-07	T Glazebrook
							MUDPA trial holes to verify GPR surveys	On Programme	On Programme	31-Jan-09	P Douglas
914	Required approval/acceptance turnaround time does not reflect SUC standard practice; SUCs do not have enough resource or process capability to achieve 20 day turnaround	Statutory Utility Companies unable to meet design approval/acceptance turnaround time to meet programme	Additional period required for design approval/acceptance turnaround	D Sharp	High - 20.00		SDS to obtain consent for design in accordance with programme requirements - Scottish Water and all Telecoms	On Programme	On Programme	30-Aug-08	I Clark
							SDS to obtain consent for design in accordance with programme requirements - SGN and Scottish Power	On Programme	On Programme	30-Aug-08	M Blake
271	Inadequate quality of submission of approval. Partial submission of package. Programme compression. Lack of CEC resources.	Failure to process prior approvals applications within 8 weeks	Delay and disruption to Infraco programme	T Glazebrook	High - 15.00		Agree approvals submission arrangements with CEC to align with SDS design programme and procurement programme.	On Programme	On Programme	31-Aug-08	T Glazebrook
							Assure the quality and timing of submissions	On Programme	On Programme	29-Aug-08	D Sha
							Final agreement to be approved by Roads Authority, CEC Promoter, CEC in-house legal and tie	Complete	Complete	28-Feb-07	T Craggs
							Finalise alignments and gain agreement from CEC	Complete	Complete	29-Dec-06	T Craggs
							Where appropriate increase case officer resource to cope with programme compression	On Programme	On Programme	28-Aug-08	D Fraser
							Twice-weekly meetings of Approvals Task Force	On Programme	On Programme	31-Oct-08	D Sharp

FOISA exempt

Yes  
 No

ARM Risk ID	Risk Description			Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
	Cause	Event	Effect								
1033		Failure of Infraco to mobilise in time to commence work in line with programme.	Delay to programme. Cost overruns. Negative publicity. Criticism from stakeholders	G Bell	High - 19.08		Continued focus at Infraco progress meetings as well as programme workshops to mitigate the impacts of any delay	N/A	On Programme	1-Oct-08	G Bell
							Implementation of Advanced Works programme in order to mitigate potential future issues during construction	N/A	On Programme	1-Aug-08	R Bell
							Infraco given instructions to proceed at risk	N/A	On Programme	1-Aug-08	R Bell
							Pressure from Approvals Task Force to ensure Technical and Prior Approvals are delivered	N/A	On Programme	1-Oct-08	D Sharp

**Paper to:** TPB                      **Meeting date:** 02/07/08

**Subject:** Phase 1b Business Plan and Funding – Principles and Progress

**Agenda item:**

**Preparer:** S McGarrity

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## Summary

**tie** and TEL will work with Council colleagues over the summer months with a view to re-appraising the incremental effect on TEL's business of introducing Phase 1b and developing an agreed Phase 1b Funding Proposal. The appraisal will encapsulate a fresh examination of the assumptions driving prospective patronage, revenues and operating costs from Phase 1b across the board and the marginal impact of constructing Phase 1b.

If the resultant recommendation by TEL is to proceed with Phase 1b and a credible approach can be agreed for closing the gap between existing approved funding and that required to deliver Phase 1b also, then the proposal is to present the updated plan and funding arrangements to the Council on **16<sup>th</sup> October** following TPB endorsement on **24<sup>th</sup> September**. This timetable is extremely challenging.

A primary driver of the need for an early decision on Phase 1b is the likely advantage (in terms of programme and cost) of using options under the existing contracts (MUDFA, Infraco & Tramco). The first watershed will be the decision to divert utilities under the MUDFA contract which we currently believe will need to be instructed during October prior to the contractor commencing demobilisation and to mesh with an Infraco start date by the first week of July 09.

Under existing Grant conditions, TS endorsement of the updated projections and the funding strategy is required to use any part of the existing Grant for the purposes of Phase 1b. Engagement with TS at senior level on their requirements and the prospect of incremental Grant funding for Phase 1b should now be progressed.

The final Funding Proposal for Phase 1b is highly likely to require some CEC borrowing, either directly by CEC or indirectly by TEL. **tie**/TEL's primary role here must be to help CEC evaluate the TEL business as a possible source of future cash surpluses / profits and the risks associated therewith. Evaluation of other sources of income against which CEC can borrow (including asset sales, developers' contributions and the TIF scheme under study) must, as with the previous £45m for Phase 1a, be assessed by CEC.

## Approach and Progress

Following Financial Close on the contracts for Infrastructure and Vehicles for Phase 1a, **tie** and TEL will now work with appropriate input from CEC officers to develop updated Phase 1b projections and a funding proposal which will in turn support deliberation by TPB, TEL and the Council of if and when we should commit to the construction of Phase 1b and how the costs of construction will be funded.

The exam questions we are seeking to answer are:

- Does the economic business case for Phase 1b still stack up?
- Has there been any material change in the prospective revenues and operating costs of Phase 1b?
- What are the risks that the introduction of Phase 1b would give rise to operating losses for TEL to absorb or that may require a subsidy?
- When is the optimum time to commit to Phase 1b construction?
- How much is the gap between available funding (£545m) and the aggregate funding for capital expenditure to build Phase 1 in total and what are the credible ways to fund that gap?

There are 4 broad workstreams which have already been initiated and which will converge in the autumn. These workstreams must progress in parallel in accordance to deliver in accordance with the outline timetable below.

### 1. Update economic assumptions and forecast of patronage and revenues

The TEL Business Plan included in the Final Business case for Tram was based upon outputs from the integrated public transport model developed by the JRC contractor. We will now deliver a comprehensive update to the forecast of future patronage and revenues for Phase 1b by the JRC contractor using the latest version of their model and updating the inputs thereto. The most significant inputs in this regard are the assumptions about the extent of timing of new development across the city but in particular in the Phase 1b catchment area as new developments were the driver of over 70% of Phase 1b patronage in the first version of the TEL Business Plan. Development at Granton has not and will not proceed at the same rate as was assumed in the original forecasts.

In terms of the broader economic appraisal of Phase 1b (STAG appraisal) we are currently assuming that the analysis provided in the Final Business Case remains valid and that any impact of updated assumptions will be on the timing of delivery of anticipated benefits only. The marginal Benefit Cost Ratio attributable to Phase 1b in the FBC was over 4 and there would need to be a very significant change in either the costs or benefits to make Phase 1b unviable from an economic benefits perspective.

**Progress** – We've had a slow start to updating our new development assumptions due to uncertainty over who is best placed to support us in the CEC family. However we have in the process identified and aligned ourselves with a study being conducted for CEC by PwC to assess development potential in North Edinburgh in the context of a

possible financing of a package new infrastructure through a Tax Increment Finance scheme. This will ensure that we have consistency across the two pieces of work. We will now reengage with CEC Planning regarding development assumptions elsewhere – e.g. City Centre, Edinburgh Park and West Edinburgh. The JRC contractor (Steer Davis Gleave w/ Colin Buchanan) are fully mobilised on this work.

## 2. Update TEL Business Plan

Forecast patronage and revenues from 1. above feed into the comprehensive TEL Business Plan financial model which consolidates the bus and tram businesses and includes forecast operating costs, lifecycle costs (heavy maintenance and refurbishment), management costs, tax and dividends. These models will be updated and as previously the marginal impact on future TEL profits and cash surpluses of introducing Phase 1b will be isolated and sensitivity analyses presented.

The previous TEL Business Plan did not take account of significant tax allowances on the Phase 1a assets which may be available to the business – this update will examine the way in which the business and its ownership could be structured to maximise access to these tax allowances.

**Progress** – A first draft of an updated operating cost model has been completed already. There are significant cost drivers which are under careful consideration including current trends in fuel, power and wages costs.

## 3. Update Phase 1b capex estimate

The current estimate of the marginal capital cost of Phase 1b is £87m as reported in the Final Business Case. This estimate will now be updated as part of the determination of how much additional funding is now required as outlined as part of 4. below.

This process will require a negotiation with Infraco (BBS) of their fixed price to deliver the Phase 1b infrastructure which starts with the pricing details they submitted at Preferred Bidder stage but will also depend inter-alia upon a final value engineered design.

The contract with BBS provides that once instructed this fixed price will be agreed within 12 weeks and that it will remain valid if Phase 1b is instructed in sufficient time to commence construction of the Phase 1b infrastructure by the first week of July 2009.

Fixed prices have already been agreed for Tram vehicles. The current procurement and programming assumption is that Phase 1b utility diversions will be instructed under the MUDFA contract and that the instruction to proceed with Phase 1b utility diversions would need to be given to MUDFA in November 08. It may be possible, subject to compliance with procurement obligations, to procure the utility diversions are carried out by Infraco at an acceptable cost.

**Progress** - We will work with Infraco over a period of 2-3 months to negotiate a value engineered cost for the Phase 1b infrastructure. In the event this is not concluded by



the end of the summer, we will still be able to present an updated cost estimate for Ph1b based upon existing knowledge and with a risk allowance which reflects a higher degree of confidence in our figures. It is unlikely there will be a material change in the total estimated cost of £87m as reported in the FBC.

#### **4. Identify and evaluate “gap” funding sources and recommended approach**

Under the terms of the existing Grant from Scottish Ministers, at anytime during calendar year 2009 CEC may ask for the scope of the funding to be increased to include Phase 1b conditional inter-alia upon demonstrating that

- Phase 1a is on time and budget,
- CEC has adequate financial resources to meet the incremental costs of Phase 1b
- There will not be a requirement an ongoing subsidy for the Edinburgh Tram Network during the operational phase.

Aggregate funding of £545m has already been secured (£500m from Scottish Ministers and £45m from CEC) compared to an aggregate cost estimate today of £599m (comprising £512m for Phase 1a and £87m for Phase 1b). On this basis there is a requirement to secure additional funding of £54m. However it would be prudent to secure access to higher figure to provide clear headroom between the cost estimate and the additional funding and thus be confident on affordability. A figure of £60m to £65m might be sensible and this will be addressed in the development of the funding proposal.

In the timescales being contemplated, the sources of additional funding for Phase 1b which will be evaluated are:

1. Developer contributions relating to the Phase 1b route, especially around the Granton waterfront
2. Council capital receipts
3. Future free cash flows or availably profits of the TEL (Tram & Bus) business
4. Borrowing by CEC either directly or indirectly through TEL and serviced/repaid by a combination of 1. to 3. above.
5. Additional funding from Scottish Ministers

The completion of this appraisal will require the active involvement of Council officers in re-evaluating the potential for developers contributions in relation to Phase 1b and the capacity/risk bearing appetite of CEC to borrow against these forecast contributions. The financing proposal will include a thorough risk balanced appraisal of the capacity of CEC or TEL to borrow against future TEL surplus cash flows.

**Progress** - Early engagement is a must at a senior level with TS/Scottish Ministers regarding the appetite for further investment in Trams (probably sharing the marginal cost with CEC) or the time horizon within which such an appetite might develop. It is important that CEC officers now commence evaluation of future developers' contributions, capital receipts and other sources of income which might be availability to service or repay borrowings.

**Phase 1b in the context of extensions to the Edinburgh region public transport network**

Subject to establishing Phase 1b as a viable part of TEL's business, It should remain the goal to construct Phase 1b in the timescales anticipated in the FBC by exercising the options in the MUDFA, Infraco and Tramco contracts to do so. This will deliver Phase 1b in the fastest possible time (and therefore delivers the economic benefits at the earliest opportunity) and at the lowest price. If this opportunity is not taken whilst the existing contractors are mobilised and have incurred the sunk costs associated with mobilisation then Phase 1b may be much more expensive thereafter in capital cost terms whether by negotiation of an extension to the option with the existing contractors or by separate procurement.

However, if negotiating a later option or separate procurement were to become a desirable option (e.g. due to concern about the timing of incremental funding becoming available or the financial viability of Phase 1b in the short term) then aggregation with possible further extensions to the Tram network, such as the Granton to Newhaven link (Phase 2), all or part of Line 3 to the South East or any other valid extension to public transport network in the Edinburgh region may deliver economies of scale in the costs of construction and funding of the combined investment.

**Outline Timetable**

The JRC contractor (Steer Davis Gleave / Colin Buchanan) have already been instructed and a firm timetable for agreeing the Phase 1b infrastructure price is being discussed with BBS. The milestone reporting dates are:

Report to TPB on progress	Each period
Updated patronage & revenue estimates	TPB 30 <sup>th</sup> July
Updated TEL Business Plan	TPB 27 <sup>th</sup> August
Phase 1b Capex estimate	TPB 27 <sup>th</sup> August
Funding Options Appraisal	TPB 24 <sup>th</sup> September
Final Consolidated Document	Council 16 <sup>th</sup> October
TS decision	End November

Engagement with TS on the Government's appetite for providing additional funding and our approach should commence immediately.

There is a safety valve in this programme in that it should be possible to slip the delivery of the final document to November/December without impacting upon our ability to instruct the utility diversions through MUDFA in the event we are unable to finalise and agree the sources of new funding or procure the approval of TS in the timescales anticipated. This is without prejudice to the existing requirement to report back to the Council on progress with Phase 1b in the autumn of 2008.

### **Resources and Budget Implications**

The external resources which we anticipate using on this project are the JRC contractor and perhaps some refreshed advice from our tax advisors PwC. We anticipate being able to procure these resources at little or no impact on the Phase 1a Control Budget.

Overall project management will be delivered by Stewart McGarrity and Alastair Sim of **tie** and Alastair Richards of TEL and will be overseen at all stages by Neil Renilson. Other **tie** and TEL resources will be called upon as the workstreams dictate.

CEC are represented by Alan Coyle from Finance and Lex Harrison from Transport.

### **Progress Reporting**

A comprehensive report on progress on the development of the updated BP and financing proposal in accordance with this paper will be provided to TPB at each meeting through to October. We have also been asked to provide briefings for CEC Transport on progress every 4 weeks.

### **Decision(s) / support required**

To note and support the approach and outline timetable for the delivery as described above.

**Proposed**                      Name Stewart McGarrity                      Date: 26/6/08  
   Title Finance Director

**Recommended**              Name Steven Bell                                  Date: 26/6/08  
   Title Tram Project Director

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

**Paper to:** TPB **Meeting Date:** 2 July 2008

**Subject:** Traffic Calming Measures North of Haymarket Terrace

**Agenda Item:**

**Preparer:** Keith Rimmer

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## Summary Report

### *Previous TPB Consideration*

The TPB Period 12 (2007/8) considered a Project Change Paper regarding possible traffic calming measures to the streets north of Haymarket Terrace to deal with the adverse impacts of vehicle penetration within the residential area during the construction and operation of the Tram. The affected streets are being used by traffic seeking to avoid traffic congestion at the Haymarket Junction. It was further recognised that this situation may worsen during the Tram works in the West End and some lasting impact is likely to remain when the Tram becomes operational.

The proposal was to implement a 20mph zone traffic calming scheme using vertical features (e.g. speed cushions) to provide self enforcement in line with the appropriate Traffic Regulations.

The Paper set out the following key considerations:

- Funding – proposed that funding be provided by CEC as this is already an aspirational scheme;
- Cost Estimate – to be confirmed upon design completion;
- Procurement – As the work lies outwith the LOD then CEC could procure and undertake the work without impacting on Infracore; and
- Programme – as the scope of the works lies outside that of the Tram works there is no impact on the Tram construction programme.

The decision of the TPB was that a change request to SDS did not seem to be merited for minor traffic calming works and that subsequent to the meeting CEC agreed to carry out the design work for a scheme.

### *Present Position*

CEC duly forwarded to **tie** a design for the 'West End 20 mph Zone' during May 2008. The design proposes that thirty one sinusoidal speed humps are installed in total. Three of these require to be in setted construction with the remainder being constructed in asphalt. Gateway signs will be installed at the seven junctions entering the 20 mph zone. In addition, red surfacing will be laid on the roads at the two Palmerston Place junctions.

CEC have undertaken a detailed costing estimate based upon current CEC contract rates. The estimated cost of construction at March / April 2008 prices is £268,277.

The timeline for the West End 20 mph Scheme is proposed as follows:

- Jul / Aug 2008 Consult with emergency services  
Promote 20mph TRO  
Stage 2 Safety Audit
- Aug / Sep 2008 Local public consultation  
Revise design if required  
Approve scheme based on assessed consultation outcome  
Prepare tender documents
- Nov / Dec 2008 Issue tenders  
Promote TTRO for construction restrictions
- Jan 2009 Award tender
- Feb 2009 Pre- contract meeting
- Mar 2009 Commence construction (8 to 12 weeks)

It is likely that there will be public support for the traffic calming scheme from the local community as there has been a significant desire expressed for such a scheme for some years to mitigate the effects of persistent volumes of 'rat-running' traffic. The final traffic management arrangements for the Tram in the West End are likely to produce some further increase to these base traffic levels.

It is recommended that the TPB now decide upon whether or not to take the scheme forward to Consultation, together with appropriate funding arrangements.

### **Impact on Programme**

There is no direct effect on the project programme as the scheme would be undertaken independently of the Tram works. However, it will be necessary to carefully co-ordinate implementation taking account of the need for traffic diversions on the affected streets during the Infraco works phases in the West End.

### **Impact on Scope / Budget**

It follows from the above that there is no direct impact on the scope of the project. It is proposed that the funding is provided by CEC (as per the previous TPB consideration).

If the scheme and appropriate funding are approved then the Public Consultation process should proceed through CEC as quickly as possible to avoid any subsequent local community confusion or dissatisfaction. A decision to proceed to Public Consultation must be regarded as a commitment to proceed with the scheme in the event of a positive outcome.

**Impact on Risks and Opportunities**

A decision on whether to proceed to consultation is now urgently required. The recent commencement of a sustained engagement with the local community regarding both the issues of temporary traffic diversions and the permanent Tram design now requires a clear set of answers to questions being raised by community representatives about any **tie** / CEC intentions to put forward proposals for permanent traffic calming on the affected streets. Any failure to give clear answers on the possibility of traffic calming is likely to fuel a sense of community apprehension and hostility towards the project. Any loss of community goodwill would therefore be a lost opportunity and a potential drain on project resources.

**Summary**

The TPB should note that a Traffic Calming Scheme for the streets listed at Appendix A has been prepared by CEC, together with detailed construction costings at recent (CEC) contract rates totalling £268,000. In order to allow for future construction price inflation and administrative costs a minimum budget requirement of £300,000 is advised.

The TPB should also note the proposed scheme timeline and to approve the scheme going forward to consultation, together with the agreement of funding arrangements for its implementation in the event of a favourable response to the consultation.

**Decision required**

Confirm recommendation on funding, programme and consultation process.

**Proposed** Keith Rimmer Date: 25 June 2008  
Special Adviser

**Recommended** Steven Bell Date: 25 June 2008  
Project Director

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

## APPENDIX A

List of streets to be incorporated within the West End 20 mph zone.

Coates Gardens  
Douglas Crescent  
Eglington Crescent  
Glencairn Crescent  
Grosvenor Street  
Grosvenor Crescent  
Lansdowne Crescent  
Magdala Crescent  
Rosebery Crescent

**Paper to:** TPB                      **Meeting date:** 2 July 2008

**Subject:** Risk Drawdown: 1500mmØ Diversion sewer at A8.

**Agenda item:**

**Preparer:** John Casserly (Commercial Manager MUDFA)

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**Executive summary**

An existing 1500mm diameter sewer at the A8 underpass at Gogar requires to be diverted.

The minimum cost solution amending the piling details of the underpass is unachievable due to the levels and extent of cover of the existing sewer, and several options have been considered to avoid a full diversion. These are not acceptable to Scottish Water and a fully designed diversion including tunnelling under the A8 is required at an anticipated budget cost of circa £1.75m.

This sewer diversion was not part of the original scope of MUDFA works therefore the cost for the work is not included in the MUDFA budget. Once the requirement to divert the sewer was established an allowance of £350k was made within the Anticipated Final Cost (AFC) for a high level minimum cost solution for incorporation of the diversion within the proposed A8 underpass design.

Risk ID 342 was originally identified in the event that MUDFA would need to either divert telecoms cables above the A8 underpass or undertake a full diversion of the sewer including tunnelling under the A8.

As a result we have attached a risk drawdown request form for the sum of £1.4m to augment the £350k previously accounted for within the AFC.

**Proposed recommendation:**

The issue of a variation to the MUDFA Contractor to carry out the required diversion works on terms to be agreed but on the basis of a target cost with a potential pain / gain mechanism. The MUDFA Contractor has returned an initial submission with three competitive quotes for the works which contained a number of caveats and a high level programme.

Following a meeting with **tie** representatives the MUDFA Contractor is currently preparing a revised submission for the required works and associated programme which is expected week commencing the 7<sup>th</sup> July 2008. Upon receipt of the revised proposal from the MUDFA Contractor and subject to the terms and conditions being acceptable to **tie** we propose instructing the variation.



In order to do this within the programme timescales we seek approval from the Tram Project Board to proceed on the basis of two Tram Project Board members with the delegated authority to sign off the finalised proposal and instruct the change to the MUDFA Contractor prior to the next Tram Project Board meeting.

### **Impact on programme**

The schedule impact has not been finalised, as we await a revised submission from the MUDFA Contractor for agreement. However based upon discussions to date and review of the MUDFA Contractors draft programme we anticipate the works will be complete end January 09 and minimise programme impact on both MUDFA and the Tram Project. To enable this completion date **tie** will have to instruct the variation by 14<sup>th</sup> July 2008.

### **Impact on budget**

The total cost for these works have not been finalized, as we await a revised submission from the MUDFA Contractor for agreement. However based upon discussions to date and review of the MUDFA Contractors draft proposals we believe the cost will be circa £1.75m based on a target cost variation. There is a £350k sum allocated within the current AFC in respect of the works leaving a balance of £1.4m to be drawn down from risk.

### **Impact on risks and opportunities**

There are residual risks associated with tunnelling/directional drilling works of this nature. Although the above costs include an element of risk there is the potential, dependent upon the ground conditions encountered, that the tunnel drive may have to be stopped and re-commenced from the beginning on a new route. In order to mitigate this risk borehole information of the area has been supplied to and reviewed by the MUDFA Contractor and **tie** are looking to transfer risk to the MUDFA Contractor in the form of engagement/instruction issued such as a target cost form of variation, but this has yet to be agreed. This is likely to be the most significant issue to be resolved to allow commencement of the works.

### **Impact on scope\***

The MUDFA scope is increased as a result of the proposed 1500mm diameter sewer diversion at the A8 Gogar.

### **Decision(s) / support required**

The Board is requested to note the outline proposal to draw down risk ID 342 and to delegate a final approval to a subcommittee to validate the proposal once the final price, programme and terms and conditions are confirmed with Carillion (expected w/c 7/7/08).

**Transport Edinburgh**

**Edinburgh Trams**

**Lothian Buses**

FOISA exempt

Yes  
 No

**Proposed**                      John Casserly                      Date: 26<sup>th</sup> June 2008  
   Commercial Manager MUDFA

**Recommended**              Steven Bell                      Date: 30<sup>th</sup> June 2008  
   Project Director – Edinburgh Tram

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