



Julian Weatherley
Director

Turner & Townsend Project Management Limited
Osborne House
1 Osborne Terrace
Edinburgh
EH12 5HG

t: +44 (0)131 [REDACTED]
e: julian.weatherley@turntown.co.uk
w: turnerandtownsend.com

Edinburgh Tram Project
Full Progress Report No. 6
25th February – 27th March 2012
FINAL

March 12



CONTENTS

1	Executive Summary	3
2	Health, Safety & Environment	5
3	Programme	9
4	Commercial	10
5	On Street - Enabling Works & Utility Legacy Works	21
6	On Street - Main Works	23
7	Off Street Works	26
8	Trams	30
9	Assurance	31

Appendix 1 – Dashboards

Appendix 2 – Health, Safety & Environment

Appendix 3 – Cost Report and Contingency Analysis

Appendix 4 – Change Log

Appendix 5 – Risk Register

Appendix 6 – Route Map

Appendix 7 – Acronyms

Rev	Originator	Approved	Date
0	Shirley-Anne Collin	Julian Weatherley	26-03-2012
1	Shirley-Anne Collin	Julian Weatherley	27-03-2012
© Turner & Townsend insert company. All rights reserved March 12. This document is expressly provided to and solely for the use of Client Name and must not be quoted from, referred to, used by or distributed to any other party without the prior consent of Turner & Townsend insert company who accept no liability of whatsoever nature for any use by any other party.			
DOCUMENT5			

1 Executive Summary

This report covers progress made during the period from 25th February to 23rd March 2012. It incorporates progress reported within Infraco and CAF Progress Report No. 4-13 to 3rd March 2012.

There were two reportable accidents during the period. Farrans ruptured a gas main supplying the airport causing disruption to airport operations and an HV cable was cut by a McNicolas operative in South St Andrew St. Additionally, an HV cable was severed by Farrans in the New Ingliston area. A number of improvement measures will be implemented across the project as a result.

Results of tests undertaken by SEPA on soil removed from the Baird Drive area are expected by the end of March 2012.

The 22 week saving gained through the implementation of Cost Engineering initiatives remains in-tact although ongoing utilities works will draw down this contingency over the coming period.

Following handover of sites at St Andrew Street and Shandwick Place, Infraco are progressing with piling and track formation works. Infraco have been working cooperatively to enable discovery utilities works to be addressed alongside the main BBS works.

South St Andrew Street was handed over to Infraco on programme on 24th March 2012; however Turner & Townsend have retained possession of localised sites in order to address outstanding utilities and drainage works.

A revised drainage design is required throughout the On Street section as a result of Infraco being unable to obtain Scottish Water's approval to their current proposals. This has had resulted in a cessation of Infraco works at Haymarket and is likely to impact on the progression of both On and Off Street works. Re-design works are progressing well, however the programme and cost implications of the re-design are currently unclear.

Turner & Townsend have re-structured their On Street team to place greater emphasis on the resolution of Scottish Water snags and legacy works. Tender documents are now being prepared for the works in Leith Walk.

Princes St works, including remedial works, continue to progress ahead of programme.

It is anticipated that an approved way forward for the Murrayfield ground improvement works will be in place by the end of March. Construction is due to commence in mid April.

First ScotRail has raised concerns over a number of incidents which have occurred at their Depot and have threatened to stop works in the area in the event of further incidents.

Following localised settlement of Network Rail's track adjacent to Water of Leith Bridge tamping of the ballast has been successfully undertaken, allowing excavation works to re-commence.

Good progress has been made to some Off Street areas with the airport retaining wall works now back on programme and the A8 underpass fully excavated with traffic management being removed on programme at the end of March.

A de-scoped solution to Edinburgh Gateway has now been confirmed by Transport Scotland and instructed to Infraco.

SGN and NIL have now reached an agreement with the wording for the wayleave, although not yet signed. This has affected the start date of the SGN contractor. Turner and Townsend are facilitating ongoing discussions; however assistance has been requested from CEC on the issue.

Nine trams have now been delivered to Gogar depot.

Formalisation of operational responsibility of the depot remains outstanding.

The majority of Cost Engineering initiatives have now been instructed into the project.

The QSRA is being concluded which will enable the QCRA to be developed informing the forecast risk profile and status of mitigations. Meetings are being arranged with CEC to review the drafts prior to formal issue.

Meetings have been held with CEC and BBS regarding the allocation of costs resulting from the drainage re-design and the basis of Scottish Water approvals. Turner & Townsend will issue a summary report with final queries to BBS and hold a further meeting to discuss allocation of costs, contractor or client.

Scottish Water has submitted revised costs for the cost share (betterment and deferment) and supervision costs. The submission is being examined and a meeting is scheduled with CEC for the 27th of March 2012.

2 Health, Safety & Environment

Over the last 2 periods there have been a number of incidents that indicate that the projects approach to Health and Safety needs to develop further. Turner & Townsend are working with the principal contractor to focus on key areas. This initial drive for improvement will concentrate of site supervision and the marking of services. These areas will be monitored closely over the coming period. Following the recent significant incidents a review of the recommended actions will be undertaken; this is to develop the overall safety culture to the high standard expected. A number of initiatives will be implemented to support the further development of the Project Safety Strategy Group.

2.1 Incident reporting

A visit by the Health and Safety Executive (HSE) was made to the project to investigate the 11kV incident at South St Andrew Street. A copy of the incident report is to be forwarded to the inspector to confirm the underlying causes that were identified and the action plan to address the recommendations, no further action from the HSE is expected. McNicholas have submitted their report on the 11kV incident, this has been reviewed by Turner & Townsend; a revised report is now expected.

The incident report submitted by Bilfinger Berger with regard to the 11kV cable strike at Gogar Farm Road in P12 has been reviewed in a meeting attended by City of Edinburgh Council, Turner & Townsend and Bilfinger Berger. Turner & Townsend have requested that evidence is provided to demonstrate the recommendations have been implemented.

The gas incident on section 7 was also a RIDDOR reportable, and has been notified to the HSE. It has been investigated by BBS and Farrans and the circumstances discussed with Turner & Townsend. The report on the incident is being finalised for review, noting that the causes of this incident are very similar to the Gogar Farm incident. Effective recommendations will be agreed with BBS. A training course took place on 8th March with BBS, McNicholas and Farrans, focussing on foreman / supervisor responsibilities.

Incident Table below:

Date	Location	Detail	Contractor	Classification
Serious / significant incidents				
22/02/2012	Gogar farm Road	Damage to a HV cable. Farrans reported Scottish Power advised of disruption of supplies to thousand plus domestic households.	Farrans	Service strike
07/03/2012	South St Andrew Street	Damage to a live 11 kV cable strike in an open excavation by an operative using a stihl saw who was attempting to cut the cable. Power disruption to Balmoral Hotel, General Register House and St Andrews House + customers along Carlton Rd (123 customers affected). This incident was reported as a Dangerous Occurrence under the RIDDOR Regulations.	McNicholas	Service strike
10/03/2012	Tram Stop area, Burnside Road, Edinburgh Airport.	315mm diameter gas main damaged by bucket of 20t tracked excavator. Damaged believed to have occurred while the excavator was tracking from the upper level working platform to the intermediate platform, resulting in the ditching bucket damaging the pipe and causing a release of gas. This incident was reported as a Dangerous Occurrence under the RIDDOR Regulations.	Farrans	Service strike
08/02/2012	Baird Drive	CEC were made aware on the 23rd Feb 2012 of a SEPA	BBS	Environmental

Progress Report No. 6 25th February – 27th March 2012

FINAL

Date	Location	Detail	Contractor	Classification
		visit that took place on the 8 th Feb 2012, via a BBS internal report. SEPA visited site subsequent to receiving a number of complaints regarding waste/soil movement on site. SEPA inspected soil at Baird Drive and requested test results to be forwarded to them. Test results were forwarded to them on the 9 th Feb. BBS had interpreted these results to be inert; SEPA interpreted them to be Hazardous. Further discussions between the contractor and SEPA are taking place. SEPA referred to the issue as an academic/chemistry issue. At the time of this report (1 st march 2012) SEPA have not expressed concerns and have not taken samples. The Daily Record has been made aware of the issue and is intending to print a story on the matter.		
24/02/2012	Princes Street & The Mound	A section of AB barrier/fencing outside the Gallery blew over, a member of public was caught as the barrier toppled.	Crummock	Member of the public
01/03/2012	St Andrew Square	Member of Public fell on the temporary path (bruising to knee and arm), created because of tram works. The fall was along the temporary walkway westwards away from Harvey Nichols.	Crummock	Member of the public
Minor incidents				
24/02/2012	Shandwick Street & Canning Street	Damage to fibre optic cable serving DLA Piper Collins House.	McNicholas	Service damage
29/02/2012	South St Andrew Street	90mm PE pipe to hydrant at South St Andrew Street (outside Vodaphone & McDonalds) struck.	McNicholas	Service damage
08/02/2012	South St Andrews Street	Masonry [stone] removed from above void during works. Void thought to possibly be a Scottish Water sewer.	McNicholas	Service damage
14/03/2012	Junction of Clifton Terrace & Grosvenor Street	Damage occurred to the crown of a sewer (opening approx 6 inch round) when breaking out material above the sewer.	McNicholas	Service damage
16/03/2012	Gogar Farm Road	Damage to a 25mm dia water main	Farrans	Service damage
05/03/2012	Section 7	Vehicles parked in the Asset Team Offices car park as well as the CCRC walkway canopy and the taxi rank shelter have been subject to concrete / cement splashes.	Farrans	Member of the public
12/03/2012	Princes St outside Art Gallery	MOP tripped on paving on south side footpath outside art gallery and fell striking her left temple on the ground. She received a cut to the side of her head and was given first aid at the scene by a nurse (MOP)	-	Member of the public
22/02/2012	Ingliston Park & Ride	Diesel spill from generator set.	Siemens	Environmental
05/03/2012	Section 7	Site worker was hit in the face following release of concrete materials under pressure from pile caisson	Farrans	Minor injury
15/02/2012	Section 7a	Site worker tripped in trench and cut his arm on some steel mesh.	Farrans	Minor injury
20/02/2012	Site compound 5C	Site worker suffered seizure in site compound when leaving work.	Coffey	Near miss
22/02/2012	Section 2a	The Hiab provided for unloading railway sleepers was not the specification as included in the WPP as it did not have a slew restrictor facility and was not operating in a failsafe manner adjacent to the railway corridor.	Bam Rail	Near miss

Date	Location	Detail	Contractor	Classification
15/02/2012	Haymarket Yards	Air hose became disconnected from a breaker whilst charged with compressed air.	Grahams	Near miss
02/03/2012	South St Andrew Street	Scaffolding baton fell from adjacent construction site into McNicholas site	McNicholas	Near miss
06/03/2012	Fredrick St & Castle St	CEC Control phoned stating that a number of frames had been blown over in the high wind and that tarpaulin also required to be secured at Fredrick Street & Castle Street	Crummock	Near miss
08/03/2012	ScotRail Depot	Breach of Protocol with ScotRail – telehandler blocking the access road. Network Rail requested work cease in the area until mitigation is agreed.	Expanded	Near miss
08/03/2012	St Andrew Square	Battery within 14T excavator failed with a loud bang. Possible cause was shorting out of terminals due to chains being stored in the compartment.	Crummock	Near miss

2.2 Safety Initiatives

The Turner & Townsend Project Delivery Safety Meeting is being held monthly and provides a review of previous performance and the identification of future issues of note. These project meetings are aimed to develop the safety culture across the project.

The establishment of a Project Safety Delivery Group is being progressed, with a strategy paper being developed and potential speakers identified. This initiative was supported at the last Tram Project Delivery meeting with CEC.

2.3 CDM Regulations

The role of CDM duty holders regarding the Scottish Power works that are being undertaken out-with the Limit of Deviation are being clarified by Turner & Townsend.

2.4 Environmental

BBS continue to have discussions with SEPA regarding the classification of soil being excavated on site at Baird Drive, these discussions should be concluded early April. SEPA have undertaken their own testing and are continuing open dialog with BBS.

Turner & Townsend have been working closely with BBS to agree the new traffic management layout at Haymarket to assist residence with access across the new work site.

The Network Rail Safety Bus has been used to carry out a number of environmental briefings in the period. The attendance to these briefings has been extremely good and the intention is to run further briefings.

A meeting has been held with John Lawson CEC Archaeological Services regarding ongoing works at Haymarket. An agreement was reached that a small portion of the Air Raid shelter could be removed in order to allow works to progress. A visit to inspect the Hearts memorial (currently in storage) is to be arranged during the next period.

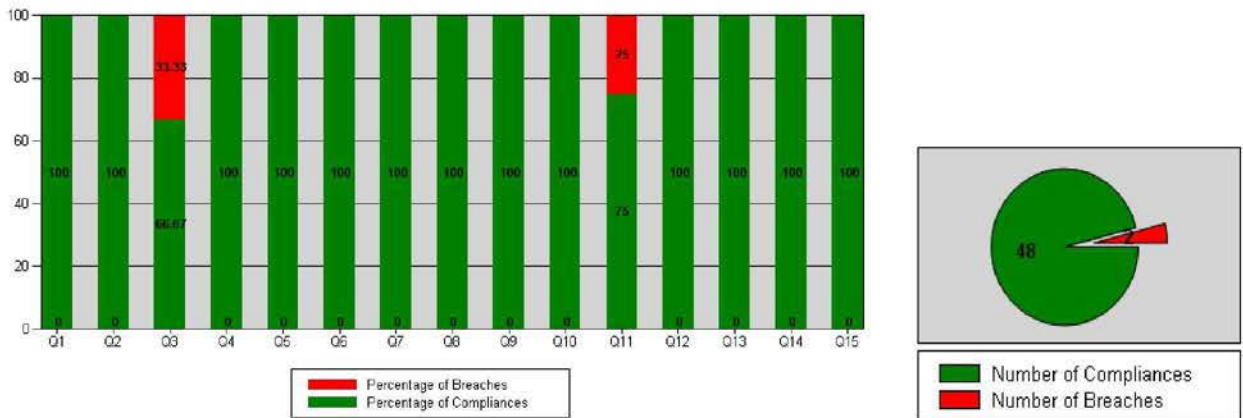
FINAL

2.5 CoCP

CoCP compliance was recorded at 94% during Period 12

The results of the CoCP monitoring have been passed to CEC communication team to be up loaded to the project web site. Details of this are in Appendix 2

CoCP



Q1. Hours of Work	Q9. Emergency Access
Q2. Notification	Q10. Parking
Q3. Notices	Q11. Litter and general housekeeping
Q4. Fencing and Hoarding	Q12. Dust
Q5. Noise	Q13. Smoking
Q6. Waste Management	Q14. Members of the Public
Q7. Waste Water and Run-Off	Q15. PPE and Behaviours
Q8. Water	

3 Programme

Turner & Townsend has undertaken a review of the Rev 4C programme produced by Infraco and confirmed the logic. The resulting 22 week saving will be impacted by the requirement to address utilities works in advance of Infraco's possession of sites. The net effect will be determined through Turner & Townsend's analysis of the submitted Rev4C updates and validation within the Master Programme.

The agreed (T&T / Infraco) position on the draw down against the progressed Rev4C programme dated 3rd March 2012 confirms that the saving still stands at 22 weeks. This will start to deplete during the coming period as a result of continued utility works in St Andrew Street and at Waverly Junction.

Turner & Townsend have produced a Programme Challenge Report in support of CEC's initiative to develop a programme which brings forward On Street and Off Street commissioning dates.

4 Commercial

4.1 Cost Summary

A summary of the key issues for the Tram Infrastructure budget, excluding legacy works is provide below:

- The forecast cost is: £489.2M
- The movement in the period is £0.7M
- The available contingency is £10.9M

The detailed Cost Report is attached at Appendix 3:

(all figures £M):

Reporting Date:	27 Feb 12	23 March 12	Movement
Original Contract Amount	479,660	479,660	0
Add: Approved Changes	1,104	72	-1,032
Add: Changes in Progress	3,593	9,602	6,009
Add: Anticipated Changes	15,227	15,902	675
Less: Funding contributions	-3,768	-8,699	-4,931
Less: Opportunities to secure	-7,310	-7,310	0
TOTAL: Forecast cost	488,506	489,227	721
Original Budget	467,407	467,407	0
Variance	21,099	21,820	721
Original forecast risk allowance	32,747	32,747	0
Less: Variance (from above)	-21,099	-21,820	-721
Forecast balance of risk allowance	11,648	10,927	-721
Anticipated Final Cost	500,154	500,154	0

4.2 Infraco

4.2.1 Approved Changes (Movement in the Period)

The changes approved this period at the CEC/Turner & Townsend weekly change meetings are provided below. (all figures £K):

Approved to 27 February reporting date	£1,104k
tNC 514 - Utility Mapping	93
tNC 576 – Depot - Reinstatement to 250mm Water main Remedial Works ¹	-23
tNC 577 - Haymarket Viaduct - Deletion of Sub Station Retaining Wall and Plinth ¹	11
tNC 578 - SI Provisional Sum Allowance	-58
tNC 580 - Cancellation of track work materials York Place to Newhaven	-1,100
tNC 581 - Omit Siemens work to Tower Place and Victoria Dock bridges	-100
tNC 589 - Descoping airport tram stop kiosk and canopy	-150
tNC 597 - Section 1D - Omit disconnection of Bus Tracker	-15
tNC 602 - Omit purchase of poles for PIDs North of York Place	-24
ICCO005 – On street works estimate period end 4/2/12	333
	£ 71k

4.2.2 Changes in Progress

Changes in Progress include items which cannot be mitigated and the change is agreed in principle. New items included in this section of the cost report during the period are:

- Edinburgh Gateway slope option. (Awaiting construction estimate): £4,850k
- Clarification on length of shelter to RBS tram stop (8m): £25k
- Section 1D - Utilities clashing with manhole 1D/NO4/03: On Street Works Estimate
- Section 1D - Incorporate geotextile liner into Clifton Terrace void in accordance with requirements from Archaeologist: On Street Works Estimate
- Shandwick place - OLE bases affecting utilities (Piling): On Street Works Estimate
- St Andrew Sq - OLE bases affecting utilities (Piling): On Street Works Estimate

It should be noted that changes relating to the On-Street Works are not agreed as fixed prices in advance as amounts are calculated each period based on work undertaken and included in our recommendation for the Independent Certifiers Change Order (ICCO) for that period. Consequently the On-Street Works changes are included in the Changes in Progress section until all of the works are

completed on site and the final amount is included in the ICCO. ICCOs for each period are included in the Approved section of the cost report.

4.2.3 Anticipated Changes

The movements in the period are provided below:

(all figures £K):

Anticipated Change to 27 February reporting date		£15,227k
Piled OLE base in lieu of utility diversion	Reduction for costs transferred to changes in progress	-230
H1 delay costs associated with utilities ⁽¹⁾	Allowance for further delays (total 11 weeks) at Haymarket – section 1 delaying the section completion date	231
Delayed commencement to St Andrew Square (from 7/2/12) ⁽¹⁾	Allowance for further delays (total 12 weeks) at St Andrew Square delaying the section completion date	424
Ongoing traffic management at Lindsay Road	Additional allowance relating to ongoing TM provided by BBS	30
LV supply to Airport Tram stop and Kiosk	Allowance removed – work to be carried out by BAA	-30
Drainage redesign and amendments to numbers / depths of manholes, carrier drains / drainage connections.	Allowance based on current understanding of scope of additional drainage	250
		£15,902k

Note ¹ : Refer to 4.2.5 Risk and Contingency below; risk adjusted sectional completion dates required to determine potential delay costs.

As design information is being developed further estimating work is ongoing on the Cathedral Lane Sub-station, piling, York Place Terminal Point, piling to OLE and the delay analysis. In addition a review of changes to date and risks will be undertaken by the end of March when the next iteration of the QSRA and QCRA are being concluded.

4.2.4 Contributions Register

Contributions from 3rd party, stakeholder or other CEC budgets are being developed in order that the amounts can be finalised. The current position is as follows.

Works	£M	Status / Action
Edinburgh Gateway Costs	0.94	TS have been provided with details and agreement of expenditure is agreed each period
New Ingliston – ducts & crossings	0.54	NIL have agreed construction elements, design costs remain to be agreed
Cathedral Lane Sub-station	0.25	In addition to the design costs shown opposite, construction costs have been submitted to Henderson Global (HG). HG have requested an explanation of the changes from the Tram only design to the new design which safeguards their substation requirements
RBS Tram stop	0.50	Initial costs submitted to RBS, final design and scope now confirmed, the final estimate likely to be c. £0.6M, final estimate to be issued to CEC prior to issue to RBS.
St Andrew Sq Public Realm design	0.13	Contribution received from separate CEC budget
CEC miscellaneous (George St)	0.32	Contribution received from separate CEC budget
Haymarket Station redevelopment	0.17	NR have agreed to undertake removal of staircase and parapet, NR to fund costs of sub-station plinth amendments and re-routing of Scottish Power cable.
Setts in On-Street Works	1.00	Setts specification and scope confirmed. Specification and scope to be confirmed for non-setted areas (prismo/thermoplastic imprint)
Edinburgh Gateway	4.85	A final construction estimate on the agreed scope is currently being prepared by BBS. Costs will be funded by Transport Scotland.
Total	8.70	

4.2.5 Risk and Contingency Analysis

A draft Quantative Risk Analysis (QCRA) was issued to CEC, 29th November 2011 for initial comment. It was agreed that the QCRA would be updated following approval by CEC for the Cost Engineering baseline instructions and incorporation of the revised traffic management arrangements into the master programme. The QSRA has been developed for discussion with CEC which will enable agreement on the basis of the potential delay costs should the programme related risks not be mitigated. The forecast delay costs can then be incorporated into the QCRA and the impact of the scope related risks will enable the QCRA to be completed by 29th March 2012.

In the interim the cost report shows the available contingency resulting from the balance of the forecast cost and the budget.

4.2.6 Opportunities and Baseline Project Instructions

The budget incorporated £2.4M for de-scoping works at Forth Ports and £7.0M anticipated reduction from the capping levels included in the assumptions for the On-Street Works. Immediately prior to the finalisation of the Settlement Agreement Infraco proposed some £1.6M adjustments to the On-Street Works, resulting in the need to secure £11.0M of savings to balance the budget.

The cost engineering work stream identified a number of value improvements and benefits to the project. These are summarised in the Baseline Project Instructions Report January 2012. The contract provides for a 50/50 share (client/contractor) for Off - Street value engineering savings and CEC and the Independent Certifier confirmed the basis of the share mechanism with Infraco. A summary of the items within the design and construction project scope are provided below.

Note: all figures are net

Item	£M	Status
Remove embargoes and revised TM	6.46	Subject to completion of sections in advance of contract dates (22 week time saving assumed in the Rev 4C programme). The Utilities diversion works required in advance of these works will utilise some of this time. Work is ongoing to mitigate this and optimise the Infraco start and finish dates.
Setts (separate CEC budget)	1.00	Part de-scope and setts funded by separate CEC budget. Initial setts estimate under discussion with BBS and specification solution required for non-setted areas
De-scope public realm at St Andrew Sq	0.70	Instructed
Contributions 3rd Party Agreements	2.68	Refer contributions register
De-scope works at Forth Ports	2.44	Instructed
Omit Airport Tram Kiosk and Canopy	0.30	Instructed, Tram stop equipment t.b.c.
Temporary tram stop at York Place	0.15	Designs in progress
Redeployment of Trams		Included in CEC budget code
Cancel track York Place to Newhaven	1.10	Instructed
Omit Siemens works at Tower Place	0.10	Instructed
Turner & Townsend / CEC resources		Ongoing
Shared recovery vehicle		Not taken forward
Road re-construction depth	0.70	Principles instructed, saving subject to site conditions
Design freeze north of York Place	t.b.c	Infraco design costs expended
Reduced requirement for storage	CEC	Included in CEC budget code
Lay off TM at Forth Ports/Leith Walk	t.b.c	TM not included in Infraco budget provision
Roseburn Viaduct Cladding	0.30	Instructed
Opportunities secured	8.62	
Opportunities to secure	7.31	

4.2.7 On Street – Schedule 45 Pricing Assumption Variations and Commercial Issues

Previous Progress Reports, refer to Nr 4 27th January 2012 section 4.2.7, have described issues that have arisen regarding interpretation of Infraco's proposal prior to mediation, "the Phoenix Proposal", the Heads of Terms following the mediation and the scope of work deemed to be included in the Settlement Agreement. It has been agreed that each issue will be examined individually to determine what technical solution is in the best interests of the project and then cost liability, contractor or client.

The On-Street Works Estimate and Commercial issues are included below. The 'RAG' status indicates: Green – variation principle and amount agreed; Amber – variation principle agreed and amount to be agreed; Red – variation principle not agreed. Please note that in the case of some On-Street Pricing Assumption Variations the final amount will only be determined when the work in all sections are completed, e.g. changes to OLE foundations resulting from utilities will be completed when the final foundations are completed in York Place.

Turner & Townsend adopts the tie Notice of Change as the referencing system to facilitate change requests and approval from CEC. Schedule 45 On Street Works entitles Infraco automatically to Pricing Assumptions Variations without the need for a tie Notice of Change. Infraco attach a PMC reference to all Pricing Assumption Variations. The Change Register tracks tNC's, PMC's and approved Change Orders which account for the agreed final costs.

See table – following page:

PMC	Description	(£M)
	On – Street	
15	Utility conflicts – investigation	0.02
25, 72 & 87	OLE foundations resulting from discovery of utilities	0.50
28	Temporary accommodation for utilities contractor	0.10
29	Road re-construction protocol (opportunity to reduce depth)	0.00
30	Additional CBR/Plate testing – ground strength	0.00
32	Utilities affecting site clearance - disconnect power to bus trackers	-0.02
35	Utilities contractor affecting Infracore progress	0.01
36	BT Fibre Optic affecting progress	0.08
37	Slit trench to validate utilities	0.01
38	Move 3 OLE foundations (St Johns Church)	0.01
40	Scottish Water diversion Princes St	0.21
43	Christmas embargo – temporary infill Princes St	0.22
44	BT diversion – Princes St (included PMC 040)	Inc
52	Install Traffic Management early Shandwick and St Andrew sq	0.13
68	Utilities affecting track drainage	0.01
69	Geo-textile liner to Clifton Terrace void	0.01
86	SW approvals - drainage redesign and new deep manholes	t.b.c
	Total On-Street Works Estimate	1.28
	Off – Street	
t.b.c	Payment for Utility diversions Off Street outwith BBS's scope	0.34
61	Temporary footpath and drainage - Roseburn Viaduct	0.30
t.b.c.	Low voltage supplies to Airport Trams top cabinet	0.03
	General	
	Rev3A to Rev 4 programme – evidence of delay costs (BB only, Siemens t.b.c)	0.60
	TOTAL	2.55

4.3 Utilities

4.3.1 Budget

The approved budget is now £4.7M which contains the original budget and drawdown for track form and OLE conflicts in St Andrew Sq and Shandwick Place to the 31st March.

The contractor has offered savings in management fee, labour, plant and material costs. In addition a further saving has been offered if the client takes the risk from the contract on disallowed costs e.g.

defect correction, vandalism and theft. A report has been produced to bring these matters to a conclusion.

4.3.2 Approved Changes

£1.8M has been approved for diversion and protection works within the track zone to 31st March 2012, refer Utilities Change Order dated 22nd December 2011.

A revised estimate and change notice is being prepared for work from the 1st April to request drawdown from the contingency budget.

4.3.3 Changes in Progress

The contract form is NEC Option E – Cost Reimbursable. The contract is being administered by an NEC change management system which tracks orders/changes for specific items of work. This enables control over commitments and managing expenditure.

4.3.4 Anticipated Change

The cost model based upon cost per conflict is being reviewed owing to the need to minimise impacts to the Infraco programme and also the drainage re-design.

Priority	Original strategy	Revised strategy
Priority 1: works in advance of Infraco	Overhead Line Bases Road Level Conflicts Tram Ducting Chambers Tram Ducting Track Construction	Overhead Line Bases Road Level Conflicts Tram Ducting Chambers Tram Ducting Track Construction Drainage – some new manholes and removal of some utilities
Priority 2: works in parallel with Infraco through call off or isolated work areas	Traffic Signal Pole Street Lighting Column Road Sign Base Kerb Re-alignment Drainage Drainage Gully	Drainage – remainder of utility conflicts Drainage Gully Traffic Signal Pole Street Lighting Column Road Sign Base Kerb Re-alignment

The key issues being addressed in the estimate include:

- There is a high degree of variability in work scope for each conflict, for example: removal of foam concrete, steelwork within the road construction, abortive excavations owing to utilities not in the locations shown on the drawings.
- The unit cost per conflict included in the original cost estimate may not account for inefficiencies resulting in the accelerated programmes for Shandwick and St Andrew Sq.
- Scottish Water has submitted a proposal for management and supervision costs for On-Street, Off-Street and Legacy Works. These costs are being challenged; however they are £1.5M in excess of the forecast allowance. It is unlikely that these costs will be agreed in advance of the historical issues associated with betterment and cost share. We are currently undertaking a review of these additional costs which we believe in some cases to be overstated and will discuss them with CEC in

a meeting planned for 27th March. Following this review, additional costs will either be included in the Anticipated Change section of the Cost Report or the QCRA as appropriate.

- The scope of the utility legacy works is being established for the purposes of developing the requirements for the tender and to establish a more robust cost forecast. The full extent of the scope is difficult to define until access to the infrastructure can be achieved. However, from the work carried out to date we anticipate that the scope requirements will result in a forecast significantly exceeding the budget allowance of £1.1M due to the volume and nature of items to be resolved which include around 800 Scottish Water snags, some of which involve substantial work and associated traffic management.

4.3.5 Utilities Off – Street

To date a total of £0.34M has been invoiced by Utility Companies for diversions and supervision on the Off Street section. These works were not excluded from Infraco's Off Street Contract Price and discussions are ongoing regarding the correct allocation of these costs.

At this stage these costs have not been included in the Anticipated Change Section of the Cost Report.

4.4 Tram Vehicles

The budget for Tram Vehicles is £62.4M which is lower than the contract sum at £63.6m.

There are no changes to the forecast during the period.

4.5 Risk

The Quantified Schedule Risk Analysis and the Quantified Cost Risk Analysis are being updated to reflect the revised programme Rev 4C, the Master Programme and further analysis on risk mitigations.

The draft QSRA will be presented to the CEC project team, 29th March 2012. Once the approach and periods for potential delay and opportunities for programme recovery are agreed, the cost impact can be incorporated into the QCRA for discussion.

4.6 Payments and Cash flow

A summary of the certified amounts are provided below. (all figures £M):

	Certified	Planned	Comment
Infraco	£268.0	£278.0	Planned – based upon Rev 3A programme
Utilities	£3.1	£3.3	McNicholas only excludes SUC costs
Trams	£56.1	£56.1	Payments in accordance with milestone schedule.

A revised cost milestone forecast has been developed based upon the Master Programme and will be presented to CEC during week commencing 26th March 2012.

4.7 Cost Engineering and time savings

The Rev 4C programme has been reviewed and there is a potential saving of 22 weeks which will be impacted by the utilities diversion works being undertaken in advance of Infraco and any delays encountered by Infraco resulting from unforeseen utilities discovered by Infraco during their works. The potential saving will be assessed by Infraco in each progress report and we will use the Master Programme to assess impacts and opportunities from the utilities diversion works.

4.8 Legacy Utilities Diversions

Following the handover of the tie cost forecasts for utilities works and the respective utility company costs (supervision costs and cost contribution for cost share, betterment, etc), a commercial position paper was submitted to Scottish Water. Scottish Water has now submitted revised costs for supervision costs and calculations in relation to cost share. These costs are being reviewed and a meeting is proposed for 27th March 2012 to review findings with CEC.

5 On Street - Enabling Works & Utility Legacy Works

5.1 Progress in Period.

5.1.1 St Andrew Street North, St Andrew Square & Shandwick Place



Utility works in Shandwick Place and St Andrew Street were substantially complete on 14th February 2012. There have been instances during the reporting period where Turner & Townsend has had to take remote areas of the sites to deal with residual utilities issues that were either not completed within the allotted time or discovered after the sites were handed back to Infraco. In all instances this has been done in consultation with Infraco. None of these interventions are likely to give rise to any significant delays and in no instances is it anticipated that the additional utility works will delay sectional completion of the Infraco Works.

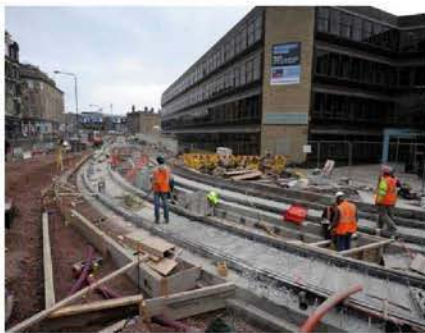
5.1.2 St Andrew Street South

In south St Andrew Street utility works have continued in line with the programme previously reported and the majority of works are due to be completed by 24th March 2012 and the site handed back to Infraco. There will however be some work areas not handed back to Infraco on this date. These include the west side of south St Andrew Street where "FibreNet" communications cable transfers will not be completed until 5th April 2012 and a site at the junction of south St Andrew Street and Princes Street where the site is being retained to construct a manhole to accommodate the drainage re-design discussed in more detail below (6.2.1). The retention of these areas has been discussed with Infraco and it has been agreed that the impact of any delays can be minimised by ensuring the Infraco Works commence on the outbound line, this has been facilitated by the closure of the bus lane on Princes Street from the Balmoral Hotel to Waverley Bridge. It is anticipated that the retention of areas will not delay sectional completion of the Infraco Works.

5.1.3 Haymarket

Turner & Townsend has taken back possession of the Haymarket 1 (H1) site during the period to facilitate drainage works required as a consequence of the re-design being carried out in response to the issues relating to connections to Scottish Water manholes raised in the progress report last month. This is discussed in more detail below (6.2.1).

FINAL



Planning for utility works in Haymarket 2-5 are now complete and works commenced on 26th March 2012 in line with the programme. The programme for utility works in this area is ten weeks.

5.2 Key Issues

5.2.1 Enabling Works

The key issues in relation to enabling works relate to the Scottish Water re-design and the retention of areas of south St Andrew Street.

5.2.2 Legacy Works

Turner & Townsend has now completed categorising the legacy issues and has produced a dashboard to track all key issues.

There are approximately seven key water issues that have the potential to cause significant difficulty for the project, these include apparatus falling within the tram Dynamic Kinematic Envelope and the tram DKE+2m that cannot be diverted and apparatus without the necessary separation distance from other utilities as a consequence of congested areas. Good progress is being made with Scottish Water on how to best deal with these issues although this has been delayed somewhat as resources have been re-directed in the short term to deal with the manhole connection issues discussed below.

Regarding the legacy works north of York Place the PQQ responses have been received and these are being analysed with a view to commencing the tender competition in mid April. As reported previously scoping these works has proved extremely challenging given the poor records available to Turner and Townsend, in finalising the contract strategy for delivery of the works the NEC Option E is emerging as the likely form of contract suitable for dealing with the uncertainty surrounding scope although this carries certain risks in relation to cost and programme certainty. Finalisation of the strategy together with a recommendation on the tender list will be presented to CEC in the coming days.

5.3 Look Ahead

The utility works in Haymarket 2-5 will be in construction and Turner & Townsend will continue to support the drainage reconfiguration by proving drain runs and manhole locations and excavating chambers to allow Infracore to construct the permanent works. Turner & Townsend will also continue to react to utility discoveries in areas handed back to Infracore and will work with Infracore in planning any "type 2" conflict works not diverted prior to sites being handed back.

Detailed planning of enabling works in York Place has now commenced in anticipation of traffic management measures being brought forward to October 2012 and this will continue in the period.

Work will continue on dealing with legacy works and progressing with the PQQ for the legacy works north of York Place.

6 On Street - Main Works

6.1 Progress in Period.

Works have been stalled in Haymarket 1 due to the re-design of the tram drainage in response to the issues raised by Scottish Water in relation to connections in to existing manholes.

Works in Princes Street continue to progress well and it is likely all civil engineering works will be completed early ahead of the Rev 4 programme July completion date. The one exception to this may be the Princes Street Stop which cannot be completed until the granite setts, which are on a long lead time from China, have been installed. The Electrical & Mechanical Works, including the overhead wires, are then due to commence in early November 2012.



Some Princes Street works were re-sequenced to ensure bus traffic could be switched on to the Mound on 3rd March 2012.

Third party approvals and consents for the Princes Street OLE re-design were progressed during the period and a formal submission was made to CEC Planning on 16th March 2012. Planning consents in relation to Dublin Street Steps and Picardy Place were not finalised during the period although it is anticipated these will be brought back on track before the Easter holiday.

All design work north of York place has been suspended and a methodology for closing out design issues has been agreed in principle. Agreeing wording with Infraco in relation to future design liability is nearing completion.

Design for works required in the Forth Ports and Lindsay Road area to make good previous Infraco and MUDFA works are being carried out by CEC and are progressing, the project is targeting the end of April 2012 to commence works in the area with a view to substantially completing any works by June this year. Turner & Townsend has also agreed with CEC and Infraco some areas of traffic management that can be removed immediately ahead of any works starting.

Turner & Townsend continues to work closely with CEC in seeking to improve stakeholder communications and a workshop is scheduled for 28th March to progress matters further.

6.2 Key Issues

6.2.1 Scottish Water Manhole Connections

As reported previously Infraco proposals to connect into existing manholes were rejected by Scottish Water at the end of February and in response a workshop was held on 1st March 2012.

Prior to the workshop Turner & Townsend and Infraco agreed a schedule of manholes and connections that required discussion, this schedule identified 33no issues. The workshop was productive and yielded possible solutions to over 80% of the issues with between 3 and 6 manholes requiring further discussion. The solutions agreed however do require re-design of the tram drainage to ensure it complies with the requirements of Scottish Water. This re-design work is underway although it should be noted that the re-design includes flow modelling of elements of the existing Scottish Water network that may give rise to specific challenges regarding pipe sizes and the number of manholes required.

In parallel with the re-design Turner & Townsend has prepared a briefing note setting out the history of the issue and a commentary on the possible apportionment of responsibility. The note concludes that Infraco has at this time not demonstrated why a Pricing Assumption Variation (PAV) has occurred. It goes on to state however that it is important to note that even in the event that Infraco is liable for changes relating to manhole connections it will still be entitled to raise a PAV for those elements of the drainage requiring redesign as a consequence of utilities. Finally the note recognises that the tram project is at a critical stage of construction and considerable effort has been expended on all sides developing close working relations between Infraco, CEC, and its representatives and Turner & Townsend. Whatever decision is reached with regards the contractual apportionment of time and cost, consideration will need to be given to ensuring the relationships, crucial to successful delivery of the project, are maintained. A meeting was held on 19th March at Waverley court between Turner & Townsend, CEC, HG Consulting and Transport Scotland to review the briefing note and a position paper has been put to Infraco for discussion.

Infraco has also queried if the Scottish Water relationship can be improved by changes in some Scottish Water personnel, this matter has been raised with Scottish Water at the monthly steering group meeting and Scottish Water is considering what changes can be made.

The manhole connections issue has the potential to be far reaching but the impact depends very much on the outcome of the flow modelling work.

6.3 Look Ahead

6.3.1 Haymarket 1

Subject to a satisfactory outcome in relation to drainage modelling Infraco Works in the area should be able to re-commence allowing the drainage to be completed and trackslab construction to commence.

FINAL

6.3.2 Shandwick Place



Piling for OLE bases will be completed during the period. Track slab construction may be delayed in the area depending on the re-design of the drainage.

6.3.3 Princes Street

Track remedial works by Infraco will continue in Princes Street.



6.3.4 St Andrew Square

Notwithstanding the localised areas retained by Turner & Townsend Infraco works will commence on the outbound track on Monday 26th March. Other works on the remainder of St Andrew Street including trackslab construction may be delayed depending on the re-design of the drainage.



6.3.5 York Place

A workshop was held on 14th March 2012 to kick off planning work in York Place. This work will continue through the period with particular focus on early access to facilitate utility diversions and the planning of cabling works from York Place to Cathedral lane sub-station.

7 Off Street Works

7.1 Progress in Period

7.1.1 Airport

Recovery is being made on the Depot to airport programme; as the secant piling rates have increased and parallel working is taking place, this should see a further improvement next period.

7.1.2 A8 Excavation

The excavation of the underpass has gone well; despite difficult ground conditions. The underpass is now fully excavated and works are on programme to allow westbound traffic to reuse the original A8 alignment.

7.1.3 Edinburgh Gateway

Transport Scotland has given a decision to progress the slope option for the Edinburgh Gateway project. The instruction for this option has been discussed with BBS and issued to them. The legal agreement for the temporary build over to the existing sewer is being progressed between CEC and Scottish Water. Further discussions are required with Network Rail, Scottish Water and Lothian Buses on the remaining responsibilities and works for the integrated project.

7.1.4 Murrayfield Ground Improvements

Discussions have been held with Network Rail on the ground improvement methodology. Following on from these discussions work package plans are with Infracore's Competent Responsible Engineer (CRE) for approval prior to submission to the Third Party Representative.

7.1.5 Other items of progress:

- Eastfield Avenue crossing construction
- Track continuing to be laid between Gogarburn Bridge and Ingliston Park and Ride
- Scottish Power commenced the High Voltage connection to the Ingliston Park and Ride substation
- Soil reinforcement of the Gogar landfill has commenced
- Progression of the Gyle Broadway crossing
- Earthworks continuing along Edinburgh Park Corridor
- Edinburgh Park station construction continuing
- Baird Drive soil reinforced wall continuing
- W3 wall construction has commenced
- W4 completed piling and wall formation continuing well
- Roseburn Street piling and pile cap construction complete
- S504 wall construction commenced

FINAL



- Murrayfield Tram Stop Steps

- Murrayfield tram stop design has been amended to address the movement in the walls



- Russell Road Bridge

- Russell Road bridge abutment walls have been cast and this construction is ahead of programme
- Laying Track from Haymarket Yards to Balbirnie

7.2 Key Issues

7.2.1 Airport

A few issues have arisen over the period affecting the relationship with the airport. The main issue being an excavator hitting a high pressure gas main at the airport, this caused disruption to airport taxi operations. Other items have been more minor in nature, however to address any concerns regular meetings have been reorganised between BAA and Turner & Townsend.

7.2.2 Eastfield Avenue

A problem with the design of the crossing has resulted in a delay to the Eastfield Avenue crossing works, this has been resolved and Infracore are still aiming to return the road to full use for the Easter holidays.

7.2.3 Ingliston Wayleave

SGN and NIL have now reached an agreement with the wording for the wayleave, although not yet signed. This has affected the start date of the SGN contractor. Turner and Townsend and CEC are facilitating ongoing discussions.

7.2.4 Edinburgh Gateway

Transport Scotland require to instruct the permanent diversion north of the proposed Network Rail station to give Scottish Water a level of comfort that these works shall be undertaken. Scottish Water

may use the non instruction of the permanent location as a reason not to issue a temporary build over for the tram alignment.

7.2.5 ScotRail Interface

The ScotRail interface remains an area of sensitivity with construction works taking place on all sides of their Depot. An incident occurred with a machine blocking the access road despite a protocol being in place, briefings to staff and Network Rail supervisors on the access road. BBS have re-briefed staff on the protocol.

7.2.6 Settlement of the Network Rail Track

Settlement of the Network Rail track has occurred adjacent to the project's works at the Water of Leith Bridge. Settlement was expected due to the works and as such a Track Monitoring Plan was agreed with Network Rail. As part of this plan BBS monitor the track three times a day. The settlement was picked up as part of this monitoring and BBS discussed the drop with the Network Rail Track Section Manager. No immediate action was required however to bring the track back up to alignment Network Rail have organised a tamper for the 22nd March 2012.

7.3 Look Ahead

- Continuation of the piling for the secant wall at the airport and parallel breaking down of the piles and commencement of the pile caps
- Commencement of the SGN/NIL diversion
- Continuation of the soil reinforcement at Gogar landfill
- A8 reopened to westbound traffic
- Continuation of Gyle Broadway and Edinburgh Park Corridor
- Bankhead Drive earthworks and drainage to commence



- **Carricknowe to Balgreen Bridge**

- Carricknowe track installation due to commence
- Water of Leith abutment and centre pier construction

FINAL



- Murrayfield Tram Stop Light weight Aggregate Fill

- Continuation of construction for the Roseburn Structures and Murrayfield Tram Stop
- Cladding of the Haymarket Viaduct

8 Trams

8.1 Progress in Period

Tram commissioning continues to be completed in line with the commissioning plan, with the Tram Inspector in attendance at all Routine Tests. These works are continuing to progress well.

Nine trams now have now been delivered; seven have successfully undergone Dynamic Testing on the Mini-Test Track.

8.2 Key Issues

The Tram Certification process has been developed; this is to be discussed with CAF (follow up meeting arranged – 28th March 2012).

An initial proposal to modify the Tram Wash Plant to ensure all areas of tram are washed has been accepted by all stakeholders due to be closed in May.

8.3 Look Ahead

Tram Delivery, Test & Commissioning:

Tram Inspector Agreement – signed copy to be issued to all parties

Tenth Tram expected delivery date: 27th March 2012



9 Assurance

9.1 Progress in Period

An initial discussion has been held with BBS to develop the System Testing & Commissioning for section B Completion. A further meeting has been arranged with CAF for the 28th March 2012 to define any further requirements.

Good progress has been made with the Employer's Requirements management process; a number of workshops have now taken place. Verification and Validation method has now agreed for 46% of the requirements.

The second Project Progress Update was given at the depot on 22nd March 2012 to Ian Raxton of Her Majesty's Railway Inspectorate (HMRI). The presentation was given by CEC, Turner & Townsend and Lothian Buses and this was well received. Further Progress Updates meetings to be arranged.

The ICP has continued to review the proposals for York place with BBS; there is now only one request for information outstanding.

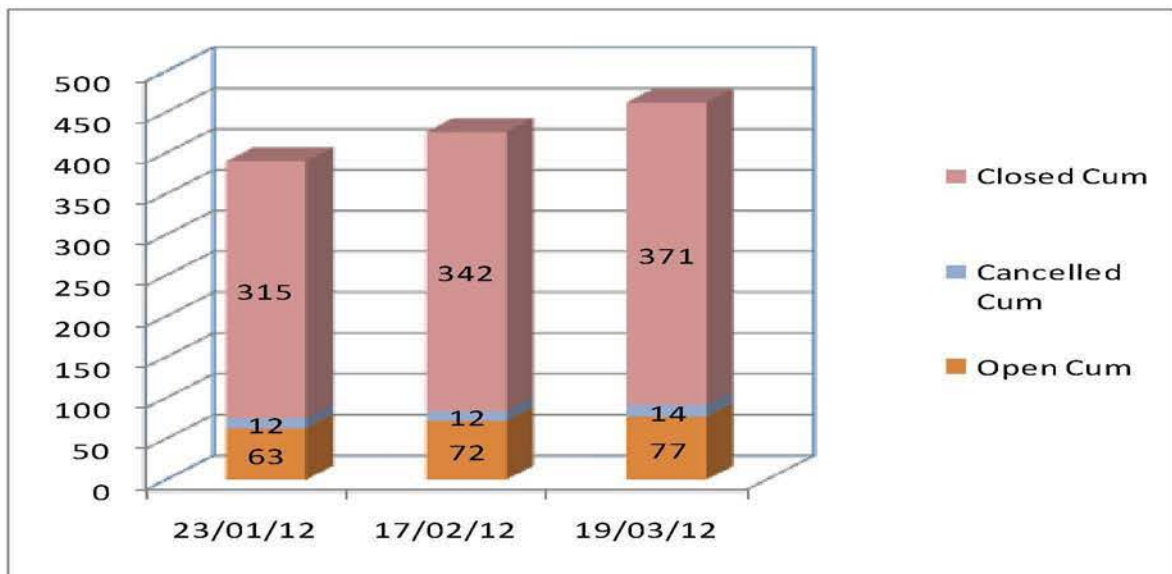
Submissions relating to Section A are currently under review by Technical Support Service (TSS), further request for formal response has been sent to TSS on 16th March 2012. This is an on going process which is supported by site audits. These will commence next period.

9.2 Quality

Total No of NCRs raised to date is 462.

36 NCRs were raised during the period and 29 NCRs were closed out during the period.

11 no open NCRs are greater than 6 months old. Details may be found within Section 6 of Deliver a Safe Tram (See Appendix 2)



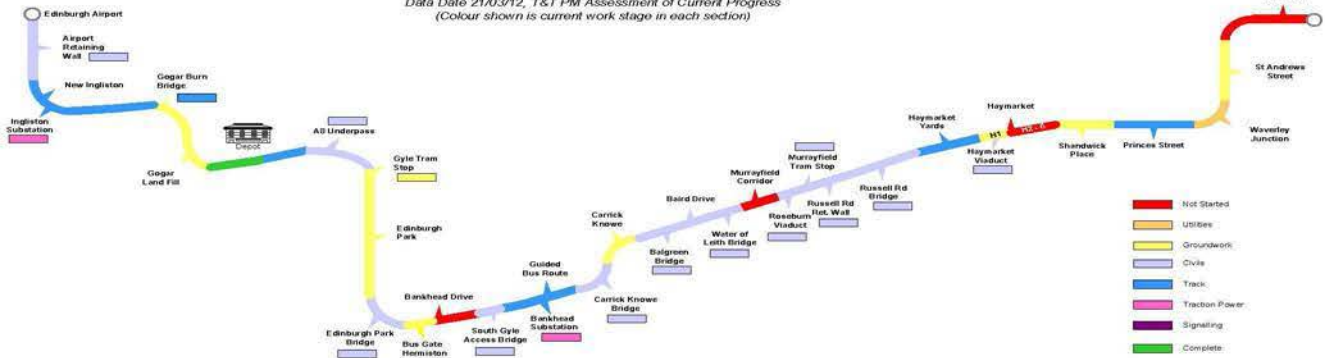
Appendix 1 – Dashboards

Produced by	Julian Weatherley & Shirley-Anne Collin	SECTION	SUMMARY DASHBOARD REPORT		Employer	City of Edinburgh Council	
Approved by	Julian Weatherley	Issue By:	Turner & Townsend Project Management Limited, 9 Lochside Avenue, Edinburgh Park		Address	Waverley Court, Edinburgh, EH8 8BG	
Status	FINAL	Issue Date	26-03-2012	REPORTING PERIOD	27 th February to 26 th March 2012	Project:	Edinburgh Tram Network

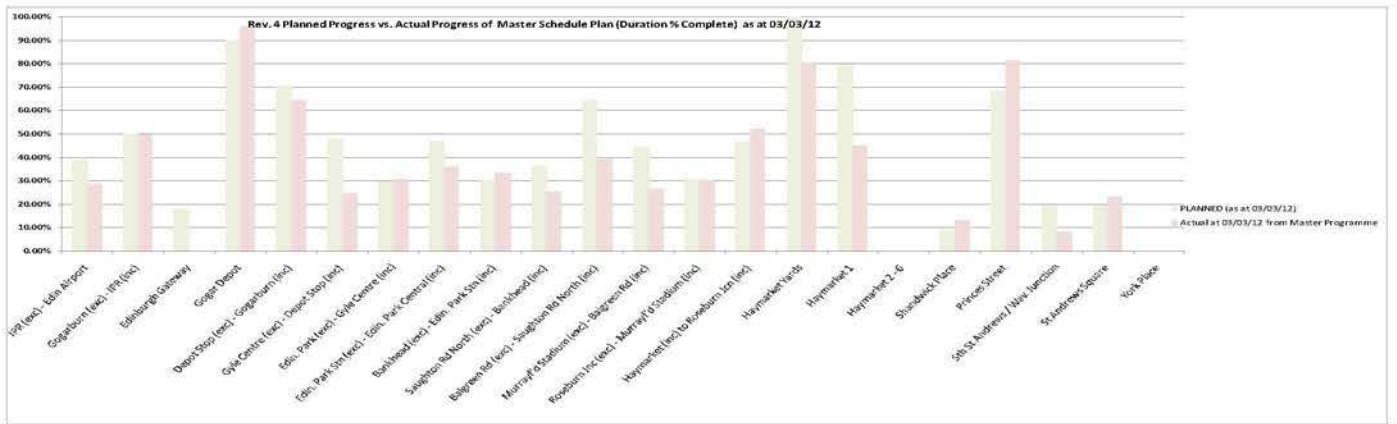
Executive Summary:	CEC Actions / Decisions
<ol style="list-style-type: none"> There were two reportable accidents during the period, in addition to a non reportable HV cable strike. A number of H&S improvement measures will be implemented across the project as a result. Results of tests undertaken by SEPA on soil removed from the Baird Drive area are expected by the end of March 2012. The 22 week saving gained through the implementation of Cost Engineering initiatives remains in-tact although ongoing utilities works will draw down this contingency over the coming period. Following handover of sites at St Andrew Street and Shandwick Place, Infracore are progressing with piling and track formation works. South St Andrew Street was handed over to Infracore on programme on 24th March 2012. A revised drainage design is required throughout the On Street section as a result of Infracore being unable to obtain Scottish Water's approval to their current proposals. Turner & Townsend have re-structured their On Street team to place greater emphasis on the resolution of Scottish Water snags and legacy works. Princes St works, including remedial works continue to progress ahead of programme. It is anticipated that an approved way forward for the Murrayfield ground improvement works will be in place by the end of March 2012. Construction is due to commence in mid April 2012. First ScotRail have raised concerns over a number of incidents which have occurred at their depot and have threatened to stop works in the area in the event of further incidents. Following localised settlement of Network Rail's track adjacent to Water of Leith Bridge, tamping of the ballast has been successfully undertaken, allowing excavation works to re-commence. Good progress has been made to some Off Street areas with the airport retaining wall, works now back on programme with the A8 underpass fully excavated with traffic management being removed on programme at the end of March. A de-scoped solution to Edinburgh Gateway has now been confirmed by Transport Scotland and instructed to Infracore. SGN and NIL have now reached agreement with the wording for the wayleave, although not yet signed. This has affected the start date of the SGN contractor. Turner and Townsend and CEC are facilitating ongoing discussions. Nine trams have now been delivered to Gogar depot. The majority of Cost Engineering initiatives have now been instructed into the project. The QSRA is being concluded which will enable the QCRA to be developed which will inform the forecast risk profile and status of mitigations in place. Scottish Water has submitted revised costs for the cost share (betterment and deferment) and supervision costs. The submission is being examined and a meeting is scheduled with CEC for the 27th of March 2012. 	<ol style="list-style-type: none"> Wayleave Haymarket - Obtain Scottish Power wayleave at Haymarket. Permit for Depot Building Warrant - Signing of permanent depot building warrant. Forth Ports Traffic Management - Agreement of scope of traffic management provisions in Forth Ports area. Scottish Water - Secure Scottish Water build over agreements. Gogar Depot - Clarity of succession arrangements for the operation of Gogar Depot. Airport Kiosk / Tram Stop - Confirmation of residual scope required (including TVMs) following deletion of kiosk and canopy. Permissions - Support in obtaining permissions at Dublin Street & Picardy Place. SW Manhole Issue: Assistance in resolving Scottish Water manhole connections issue and finalising contractual position in a timely manner.

Progress Route Map

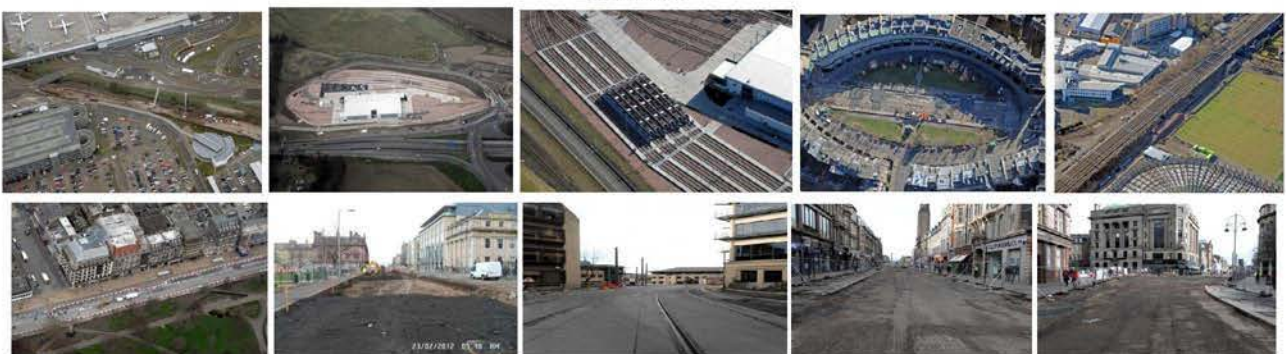
Data Date 21/03/12, 1&T PM Assessment of Current Progress
(Colour shown is current work stage in each section)



Histogram



PROGRESS



Produced by	Julian Weatherley & Shirley-Anne Collin	SECTION	SUMMARY DASHBOARD REPORT			Employer	City of Edinburgh Council
Approved by	Julian Weatherley	Issue By:	Turner & Townsend Project Management Limited, 9 Lochside Avenue, Edinburgh Park			Address	Waverley Court, Edinburgh, EH8 8BG
Status	FINAL	Issue Date	26-03-2012	REPORTING PERIOD	27 th February to 26 th March 2012	Project:	Edinburgh Tram Network

KEY MILESTONES

Section	Description	Rev 4 Schedule Date	Forecast/ Actual Date @ 3/3/12	B - A = C	Crit. Path	Comments
Section Completions						
ALL	Section A; Depot complete	16-Dec-11	16-Dec-11	0	Y	
ALL	Section B; Test Track complete	08-Mar-13	01-Apr-13	24	Y	Due to current delays in Off-Street construction, measures are being put in place by infraco to recover delays.
ALL	Section C; All construction complete	09-Apr-14	10-Mar-14	-30	Y	
ALL	Section D; open for revenue	08-Jul-14	09-Jun-14	-29	Y	
On Street						
Haymarket						
On-Street	Haymarket 1- Utility moves in advance of Infraco Works Complete	28-Oct-11	16-Dec-11	49	N	Access to site was granted to Infraco on 18-Nov-11 with only minor utilities works remaining. Full hand back was 16 Dec 11
On-Street	Haymarket 1 Complete	04-Apr-12	26-Jun-12	83	N	Further delay to H1 due to Scottish Water manhole and drainage connection issues. N.B. Delay to H1 completion does not affect overall project completion date.
On-Street	Haymarket Phase 2 Utilities Work Complete	N/A	08-Jun-12	N/A	N	All Haymarket Utilities works to be carried out in advance of construction works.
On-Street	Haymarket Civils Works for all Phases Complete	23-Jul-13	14-Mar-13	-11	N	Master Schedule (inclusive of Utility diversion Works) projecting time saving due to cost Engineering Initiatives. Savings not yet agreed with INFRACO. Discussions ongoing.
Shandwick Place						
On-Street	Start Shandwick Place Traffic Management	07-Mar-12	14-Jan-12	-53	N	Site access achieved early to facilitate Utility Clearing Works
On-Street	Start Shandwick Place Utilities Moves	N/A	03-Jan-12	N/A	N	No forecast date in Rev4. Utility works now in progress.
On-Street	Shandwick Place Utility Moves Complete	N/A	15-Feb-12	N/A	N	Current handback is approximately 4 weeks before Infraco due to Commence works
On-Street	Shandwick Place Civils Works Complete	15-Nov-13	15-Jul-13	-23	N	Whilst Master Schedule (inclusive of Utility diversion Works) is projecting time saving due to Cost Engineering Initiatives these savings not yet agreed with INFRACO. Discussions ongoing.
St Andrews Square & St Andrews St North						
On-Street	St Andrews Sq Traffic Management	14-Feb-12	07-Jan-12	-38	N	Work complete. Change over of Traffic Management system from South St Andrew's Sq to South St David's St.
On-Street	Start St Andrews Square Utility Moves	N/A	09-Jan-12	N/A	N	Utility works in progress.
On-Street	St Andrews Square Utilities Work Complete	N/A	14-Feb-12	N/A	N	Majority handed over 14th Feb in accordance with requirements of Rev.4
On-Street	St Andrews Square Civils Complete	15-Oct-12	28-Aug-12	-48	N	Progress to date shows possible completion ahead of Rev.4 scheduled date.
South St Andrews St / Waverley Junction						
On-Street	Start Utilities Works South St Andrew St / Waverley St Junction	N/A	09-Jan-12	N/A	Y	No specific activity in Rev4 plan
On-Street	Utilities Works South St Andrew St / Waverley St Junction Complete	N/A	26-Mar-12	N/A	Y	Utility Diversions now in progress. Works across Waverley Bus lane to commence 3/3/12.
On-Street	Start Civil Work South St Andrews/Waverley Junction St.	08-Feb-12	26-Mar-12	47	Y	Delayed due to required utilities diversions. Date now in accordance with VE initiative
On-Street	South St Andrews/Waverley Junction St. Civils Complete	15-Oct-12	16-Oct-12	1	Y	On-Street works have been re-sequenced in line with Cost Engineering initiatives
York Place						
On-Street	Start York Place Utility Moves	N/A	29-Oct-12	N/A	Y	On-Street works have been re-sequenced in line with Cost Engineering initiatives. Traffic light at SAS/Waverley require to be commissioned before starting this phase.
On-Street	York Place Utility Moves Complete	N/A	08-Mar-13	N/A	Y	On-Street works have been re-sequenced in line with Cost Engineering initiatives
On-Street	Start York Place Civil Works	24-Oct-12	15-Mar-13	142	Y	On-Street works have been re-sequenced in line with Cost Engineering initiatives. Delay due to required Utility Diversions
On-Street	York Place Civils Works Complete	11-Nov-13	12-Sep-13	-60	Y	Master Schedule projecting time saving due to cost Engineering Initiatives. Savings not yet agreed with INFRACO. Discussions ongoing
Princes Street						
On-Street	Princes St Highway Re-instatement and non-M&E works Complete	05-Jul-12	06-Jun-12	-29	N	Discussions ongoing with BBS indicate that works in PSt area may be completed ahead of Rev 4 date.
Off Street						
Off-Street	Forecast completion of AIR-HAY route	21-Aug-13	21-Oct-13	61	Y	Logic revised following review of Off Street section resulting in partial recovery, however end date of this section is still impacted by delay due to Water of Leith Bridge
Off-Street	Murrayfield ground improvements Complete	25-Mar-12	29-May-12	65	N	Potential impact if revised gr'd improv'ts are not agreed and approved by NR
Off-Street	Haymarket Yards Complete	27-Feb-12	16-May-12	79	N	Delay accom'd within float, no effect on forecast completion of AIR-HAY route
Off-Street	South Gyle Beam Installation Complete	11-Jul-12	28-Nov-12	140	N	Delayed subject to ground improvement methodology. Further delays due to Sheet Piling methodology and revised work sequence.
Off-Street	Water of Leith Bridge Complete	31-Aug-12	27-Nov-12	88	Y	Delay due to reverting back to original construction methodology in lieu of design for ground improvements. However, ongoing review of construction programme, in conjunction with BBS, may result in improvement to current forecast.
Off-Street	W4, 19-29, Russell Rd. Retain Complete	29-Oct-12	15-Nov-12	17	N	Delay accom'd within float, no effect on forecast completion of AIR-HAY route
Off-Street	S21A, S505, Roseburn St. Complete	18-Sep-12	09-Nov-12	51	N	Delay accom'd within float, no effect on forecast completion of AIR-HAY route
Off-Street	S22A Balgreen Road Bridge Complete	18-Sep-12	06-Dec-12	79	N	Level of Float reduced. Potential to be on Critical Path
Off-Street	Gyle Tram Stop Complete	23-Apr-13	17-May-13	24	N	Delay accom'd within float, no effect on forecast completion of AIR-HAY route
Depot & Test facilities						
Depot & Test Facilities	Mini Test Track available	02-Dec-11	12-Dec-11	10	N	Complete
Depot & Test Facilities	Soil nails, test, @ Gogar Landfill Complete	16-Jan-12	08-Feb-12	23	N	Complete
Depot & Test Facilities	Reinf'd Earth Embank't Gogar Landfill Complete	16-Mar-12	30-Apr-12	45	N	Delay is presently accom'd within float. So far, no effect on forecast AIR-Depot test track availability. However, further slippage noted and being monitored.
Depot & Test Facilities	Eastfield Avenue Complete	21-Feb-12	14-Jun-12	114	N	Delay accom'd within float, no effect on forecast AIR-Depot test track available Road returned to Airport by end of April.
Depot & Test Facilities	Ingliston Gas Mains Diversion Construction Complete	N/A	04-Jul-12	N/A	N	Delayed Start due to wayleave agreement. Start date of 2nd Apr. Maintained SGN programme and 20 duration for completion of Civils.
Depot & Test Facilities	A8 Underpass Completion & Traffic Back	13-Jun-12	29-Mar-12	-76	N	Anticipated that traffic will be back over the full junction on 31-Mar-12.
Depot & Test Facilities	Gogar Burn Tram Stop Complete	17-Oct-12	03-Sep-12	-44	N	Ahead of Schedule
Depot & Test Facilities	IPR-GBN Interim Test Track available		03-Sep-12	N/A	N	The interim test track, IPR-GBN, is a proposed milestone
Depot & Test Facilities	AIR-Depot Test Track available	07-Dec-12	11-Jan-13	35	Y	Delay due to late start of the retaining wall at the Airport, Infraco feel this is recoverable.
Tram Test & Commission						
Tram Test & Commission	Trams 15 Commission	08-Mar-13	01-Apr-13	24	Y	8th Tram Delivered as planned on 21/2/12
Tram Test & Commission	T2 Performance Tests. Complete	09-Apr-14	10-Mar-14	-30	Y	
Tram Test & Commission	Shadow Running, AIR-YRK, Complete	08-Jul-14	08-Jun-14	-30	Y	

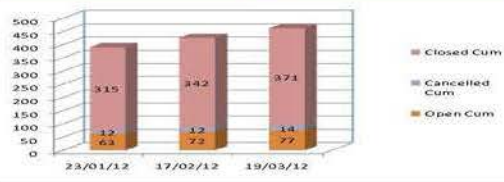
Produced by	Martyn Ayres & Shirley Collin	SECTION	HS&E, QUALITY, ASSURANCE		Employer	City of Edinburgh Council
Approved by	Julian Weatherley	Issue By:	Turner & Townsend Project Management Limited, 9 Lochside Avenue, Edinburgh Park		Address	Waverley Court, Edinburgh, EH8 8BG
Status	FINAL	Issue Date	26-03-2012	REPORTING PERIOD	27 th February to 26 th March 2012	Project:
						Edinburgh Tram Network

PROGRESS

SUMMARY

- Health and Safety** - The team have been focusing on the incidents that have occurred on resulting in damage to services. Two of the service strikes have been classified as dangerous occurrences under RIDDOR. A meeting has been held with the Health and Safety Executive to review one of the incidents - an 11kV cable strike by McNicholas.
- The possibility of forming a Project Safety Strategy Group to raise the profile of health and safety on the project is being progressed.
- Environmental**- Continuing discussions are ongoing with Scottish Environmental Protection Agency regarding the classification of material from Baird Drive.
- Assurance** - Further documentation for section A has been issued by BBS for review. This process is on going.
- We are currently working with BBS to review the trends in relation to NCR's, a key area of concern is workmanship. This area continues to produce the majority of NCR's.

QUALITY



Total No of NCRs raised is 462.

36 NCRs were raised during the period and 29 NCRs were closed out during the period. 11 no open NCRs are greater than 6 months old.

BBS have undertaken a survey of the rails and concrete works in Princes Street to quantify the workmanship issues. a report is due for issue week commencing 26/03/12.

ENVIRONMENT

Environmental

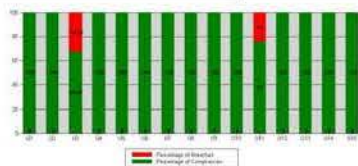
- BBS continue to have discussions with SEPA regarding the classification of soil being excavated on site.
- BBS used the Network Rail Safety Bus to carry out a number of environmental briefings in the period. The attendance to these briefings was extremely good and the intention is to run further briefings.
- Meeting held with John Lawson CEC Archaeological Services regarding ongoing works at Haymarket. Agreement was reached that a small portion of the Air Raid shelter could be removed in order to allow works to progress. Visit to inspect the Hearts memorial (currently in storage) to be arranged during period 1.

CoCP

- CoCP compliance for period 14 was recorded at 96%.
- 2 issues required action. These comprised:
 - Insufficient public information signs.
 - Poor housekeeping / site tidiness.

CoCP KEY

Q1: Hours of Work	Q8: Emergency Access
Q2: Notification	Q10: Parking
Q3: Notices	Q11: Litter and general housekeeping
Q4: Fencing and Hoarding	Q12: Dust
Q5: Noise	Q13: Smoking
Q6: Waste Management	Q14: Members of the Public
Q7: Waste Water and Run-Off	Q15: PPE and Behaviour
Q8: Water	

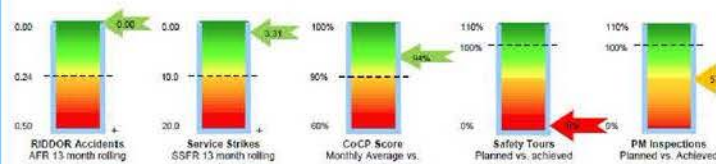
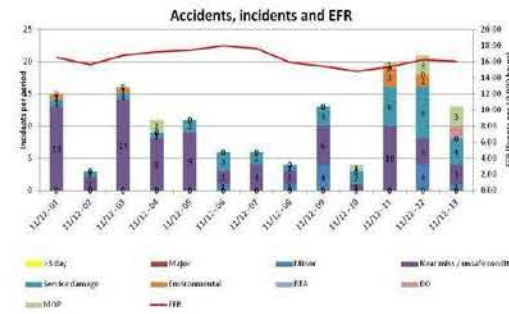


HEALTH & SAFETY

- There were 24 incidents reported during the period since the last dashboard. 6 were classified as serious / significant incidents. A summary is provided below, full details can be obtained on page 5 of the Progress Report.
- There were 2 RIDDOR reportable dangerous occurrences during the period. These related to the 11kV cable strike in South St Andrews Street and the medium pressure gas main strike at Edinburgh Airport.
- A visit by the Health and Safety Executive (HSE) was made to the project to investigate the 11kV incident. A copy of the incident report is to be forwarded to the inspector to confirm the underlying causes that were identified and the action plan to address the recommendations.
- The incident report submitted by Bilfinger Berger with regard to the 11kV cable strike at Gogar Farm Road in P12 has been reviewed in a meeting attended by City of Edinburgh Council, Turner & Townsend and Bilfinger Berger.
- The incident report for the 11kV cable strike has been submitted by McNicholas with regard to the. This report has been reviewed by Turner & Townsend.
- The gas incident has been investigated by BBS / Farrans and the circumstances discussed with Turner & Townsend. The report on the incident is being finalised.
- The rolling 14 Period AFR remains at 0.00, better than the benchmark KPI of 0.23 for the project.

Classification	Number	Major	Serious / significant	Minor	RIDDOR Reportable
Member of public	4	0	2	2	0
Service damage	9	0	3	6	2
Environmental	2	0	1	1	0
Major	0	0	0	0	0
Injury > 3day	0	0	0	0	0
Injury < 3 day	2	0	0	2	0
Dangerous occurrence	0	0	0	0	0
Road traffic accident	0	0	0	0	0
Near miss / unsafe condition	7	0	0	7	0
TOTAL	24	0	6	18	2

TREND

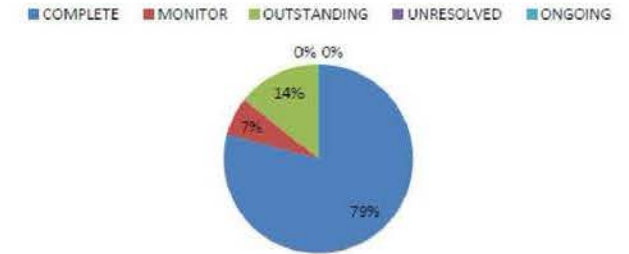


PROJECT INITIATIVES

Deliver the Tram Safety

- For the next period targeted inspections for safe excavation and vehicle movement is being planned. This will be followed by targeted inspections for vehicle movements across the sites.
- A period safety meeting will be established with BBS to monitor the corrective action developed by the package contractor to address the finding raised.
- Investigation has now commenced into initiatives to support the local community information has been passed to CEC communication team for discussions with the contractors.
- The development of the establishment of a Project Safety Strategy Group is progressing. A briefing note for the establishment of the group has been prepared, which includes details of potential guest speakers.

Depot Snags



CONSENTS

Combined Consents required	Total Required	Total On Hold	Total Outstanding	Total Closed
Third party	18	4	11	2
Technical informatives	6	1	5	1
Planning consents	38	15	17	6
Other approvals	12	0	12	0
Legal Agreements	15	0	10	5

SOFT ANALYSIS

SUCCESSES

- Targeted inspection of excavations completed.
- All stakeholders are cooperating well at the depot.
- Request of Opinion 18 has been agreed for derailment containment at Ocean Terminal bridges.
- Site monitoring KPIs are increasing.
- EMC briefings.

OPPORTUNITIES

- Increased monitoring of onsite activities. Project Management resources are will become part of integral assurance process.
- Improved technical assurance of tram/ Infrastructure interfaces.
- Safety seminars to be arranged for project manager.
- Establishment of Project Safety Strategy Group.
- Review of supervisors competencies project wide.

FAILURES

None Identified

THREATS

- Statutory bodies co-operation.
- Late issue of documentation by BBS.
- Potential gaps between contracted maintenance responsibilities
- Visibility of BBS design and assurance documentation.
- Lack of availability of GIS information from Scottish Water.
- Concerns have been raised that site safety is potentially being compromised by unrealistic delivery timescales.
- Continuing issues with regard to service strikes and compliance with statutory utility body procedures.

Produced by	Rob Leech & Shirley Collin	SECTION	ON STREET DASHBOARD REPORT		Employer	City of Edinburgh Council	
Approved by	Julian Weatherley	Issue By:	Turner & Townsend Project Management Limited, 9 Lochside Avenue, Edinburgh Park		Address	Waverley Court, Edinburgh, EH8 8BG	
Status	FINAL	Issue Date	26-03-2012	REPORTING PERIOD	27 th February to 26 th March 2012	Project:	Edinburgh Tram Network

PERIOD

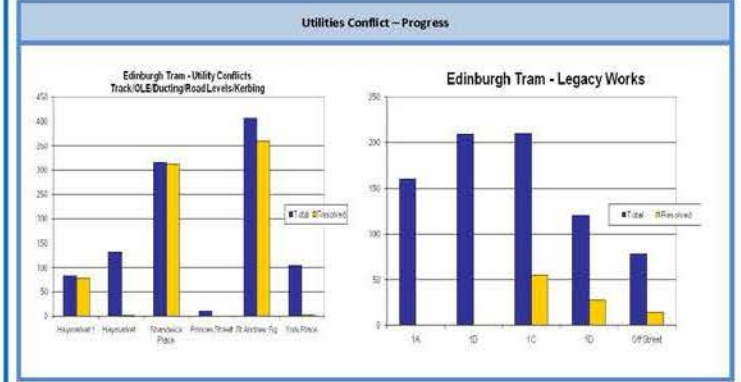
PROGRESS

- Majority of south St Andrew Street handed back to Infraco in line with programme
- Some work areas retained although this will not delay sectional completion of the Infraco Works.
- Turner & Townsend has had to take back remote areas of the St Andrew Square & Shandwick Place to deal with residual utilities issues. None of these interventions are will delay sectional completion of the Infraco Works.
- Turner & Townsend has taken back possession of the Haymarket 1 (H1) site during the period to facilitate drainage works.
- Dashboard for legacy issues has been finalised.
- PQQ for Leith Walk Legacy Works has been returned and evaluated.
- Main Works have been stalled in Haymarket 1 due to the re-design of the tram drainage.
- Works in Princes Street likely to be completed before July deadline.
- Submission made to CEC Planning for Princes Street OLEs.
- Design for works in Forth Ports and Lindsay Road area to make good previous Infraco and MUDFA works progressing well.
- Significant amount of work has been done in re-designing drainage on the project.

LOOK AHEAD

The following items will be progressing during the coming period:

- Utility works in Haymarket 2-5 will be in construction.
- Turner & Townsend will continue to support the drainage reconfiguration by proving drain runs and manhole locations and excavating chambers to allow Infraco to construct the permanent works.
- Turner & Townsend will also continue to react to utility discoveries in areas handed back to Infraco and will work with Infraco in planning any "type 2" conflict works not diverted prior to sites being handed back.
- Detailed planning of enabling works in York Place has now commenced in anticipation of traffic management measures being brought forward to October 2012 and this will continue in the period.
- Work will continue on dealing with legacy works and progressing with the tender for the legacy works north of York Place.
- Planning approvals for Dublin Street and Picardy Place will be finalised.
- Re-design of drainage will remain the key focus during the next period.
- Subject to a satisfactory outcome in relation to drainage modelling Infraco Works in H1 should be able to re-commence allowing the drainage to be completed and trackslab construction to commence
- In Shandwick Place piling for OLE bases will be completed during the period. Track slab construction may be delayed in the area depending on the re-design of the drainage.
- Notwithstanding the localised areas retained by Turner & Townsend in St Andrew Street Infraco works will commence on the outbound track. Other works on the remainder of St Andrew Street including trackslab construction may be delayed depending on the re-design of the drainage.



KEY ISSUES

- Infraco drainage connections and possible delays
- Scottish Water relationship generally
- Legacy works within tram worksites - Possible delays, categorisation being finalized
- Legacy works at North of York Place





CEC ACTIONS / DECISIONS

- Support in obtaining permissions at Dublin Street & Picardy Place
- Assistance in resolving Scottish Water manhole connections issue and finalising contractual position in a timely manner

SOFT ANALYSIS

<p>SUCCESSES</p> <ol style="list-style-type: none"> Working relationships with BBS remains good, particularly on site Speedy reaction to drainage issues 	<p>OPPORTUNITIES</p> <ol style="list-style-type: none"> Optimize revised traffic phasing Close out works at Forth Ports & Lindsay Road Look to accelerate some enabling works in York Place ahead of the October traffic management
<p>FAILURES</p> <ol style="list-style-type: none"> Carriageway vertical alignment in south St Andrew St SDS OLE design MUDFA design, as built, contract administration & supervision 	<p>THREATS</p> <ol style="list-style-type: none"> Infraco drainage connections Legacy works at Leith Walk Legacy works within tram worksites Scottish Water relationship Unknown utilities Approval of Dublin Street Steps Infraco delay to Rev 4 due to utilities Infraco non-conformance in Princes Street

Produced by	Shirley Mushet & Shirley Collin	SECTION	OFF STREET DASHBOARD REPORT		Employer	City of Edinburgh Council	
Approved by	Julian Weatherley	Issue By:	Turner & Townsend Project Management Limited, 9 Lochside Avenue, Edinburgh Park		Address	Waverley Court, Edinburgh, EH8 8BG	
Status	FINAL	Issue Date	26-03-2012	REPORTING PERIOD	27 th February to 26 th March 2012	Project:	Edinburgh Tram Network

PROGRESS IN PERIOD	PHOTOS	KEY ISSUES								
<p style="text-align: center;">PROGRESS IN PERIOD</p> <ol style="list-style-type: none"> Eastfield Avenue crossing construction Track continuing to be laid between Gogarburn Bridge and Ingliston Park and Ride Scottish Power commenced the High Voltage connection to the Ingliston Park and Ride substation Soil reinforcement of the Gogar landfill has commenced Progression of the Gyle Broadway crossing Earthworks continuing along Edinburgh Park Corridor Edinburgh Park station construction continuing Baird Drive soil reinforced wall continuing W3 wall construction has commenced W4 completed piling and wall formation continuing well Roseburn Street piling and pile cap construction complete S504 wall construction commenced Murrayfield tram stop design has been amended to address the movement in the walls Russell Road bridge abutment walls have been cast and this construction is ahead of programme Track from Haymarket Yards to Balbirnie being place 	 <p style="text-align: center;">Soil Reinforced Structure at Gogar Landfill</p>  <p style="text-align: center;">Secant Piles at the Airport</p>	<p style="text-align: center;">KEY ISSUES</p> <ol style="list-style-type: none"> Airport relationship has been affected by the gas main strike. ScotRail interface affected by a series of issues in a short timescale. Delay in signing the Ingliston Wayleave may impact the programme. Edinburgh Gateway sewer diversion requires to be instructed by Transport Scotland as it may have an impact on the temporary cross over of the existing sewer by the tram project. 								
<p style="text-align: center;">LOOK AHEAD</p> <p>The following items will be progressing during the coming period:</p> <ol style="list-style-type: none"> Continuation of the piling for the secant wall at the airport and parallel breaking down of the piles and commencement of the pile caps Commencement of the SGN/NIL diversion Continuation of the soil reinforcement at Gogar landfill A8 reopened to westbound traffic Continuation of Gyle Broadway and Edinburgh Park Corridor Bankhead Drive earthworks and drainage to commence Carrick Knowe track installation due to commence Water of Leith abutment and centre pier construction Continuation of construction for the Roseburn Structures and Murrayfield Tram Stop Cladding of the Haymarket Viaduct 	 <p style="text-align: center;">Ingliston Park and Ride</p>  <p style="text-align: center;">Balbirnie Track Laying</p>	<p style="text-align: center;">CEC ACTIONS / DECISIONS</p> <ol style="list-style-type: none"> Transport Scotland to issue instruction for the permanent Edinburgh Gateway sewer diversion so not to affect the temporary build-over. <p style="text-align: center;">SOFT ANALYSIS</p> <table border="1"> <thead> <tr> <th data-bbox="1538 981 1902 1005">SUCCESSSES</th> <th data-bbox="1907 981 2255 1005">OPPORTUNITIES</th> </tr> </thead> <tbody> <tr> <td data-bbox="1538 1008 1902 1211"> <ol style="list-style-type: none"> Agreement to SGN/NIL wording. A8 excavation complete. Good recovery on lost progress on the depot to airport section. There is currently a good working relationship with Network Rail. Off Street BBS and T&T relationship positive. </td> <td data-bbox="1907 1008 2255 1211"> <ol style="list-style-type: none"> Programme Analysis as part of the Rev 5 exercise for early running to the IPR and then the airport and look at recovery of the remainder of the Off Street section. Work with SGN to try and recover the Ingliston diversion programme. Early diversion of the Edinburgh Gateway sewer. </td> </tr> <tr> <th data-bbox="1538 1214 1902 1238">FAILURES</th> <th data-bbox="1907 1214 2255 1238">THREATS</th> </tr> <tr> <td data-bbox="1538 1241 1902 1444"> <ol style="list-style-type: none"> Murrayfield proposals not produced in line with the Murrayfield Rev 4 programme timelines. Wayleave agreement SGN/NIL having the potential to delay works. </td> <td data-bbox="1907 1241 2255 1444"> <ol style="list-style-type: none"> Further breach of the ScotRail protocol will lead to the stoppage of works. Airport relationship sensitive due to the gas main incident. </td> </tr> </tbody> </table>	SUCCESSSES	OPPORTUNITIES	<ol style="list-style-type: none"> Agreement to SGN/NIL wording. A8 excavation complete. Good recovery on lost progress on the depot to airport section. There is currently a good working relationship with Network Rail. Off Street BBS and T&T relationship positive. 	<ol style="list-style-type: none"> Programme Analysis as part of the Rev 5 exercise for early running to the IPR and then the airport and look at recovery of the remainder of the Off Street section. Work with SGN to try and recover the Ingliston diversion programme. Early diversion of the Edinburgh Gateway sewer. 	FAILURES	THREATS	<ol style="list-style-type: none"> Murrayfield proposals not produced in line with the Murrayfield Rev 4 programme timelines. Wayleave agreement SGN/NIL having the potential to delay works. 	<ol style="list-style-type: none"> Further breach of the ScotRail protocol will lead to the stoppage of works. Airport relationship sensitive due to the gas main incident.
SUCCESSSES	OPPORTUNITIES									
<ol style="list-style-type: none"> Agreement to SGN/NIL wording. A8 excavation complete. Good recovery on lost progress on the depot to airport section. There is currently a good working relationship with Network Rail. Off Street BBS and T&T relationship positive. 	<ol style="list-style-type: none"> Programme Analysis as part of the Rev 5 exercise for early running to the IPR and then the airport and look at recovery of the remainder of the Off Street section. Work with SGN to try and recover the Ingliston diversion programme. Early diversion of the Edinburgh Gateway sewer. 									
FAILURES	THREATS									
<ol style="list-style-type: none"> Murrayfield proposals not produced in line with the Murrayfield Rev 4 programme timelines. Wayleave agreement SGN/NIL having the potential to delay works. 	<ol style="list-style-type: none"> Further breach of the ScotRail protocol will lead to the stoppage of works. Airport relationship sensitive due to the gas main incident. 									

Produced by	Martyn Ayres & Shirley-Anne Collin	SECTION	TRAMS	Employer	City of Edinburgh Council
Approved by	Julian Weatherley	Issue By:	Turner & Townsend Project Management Limited, 9 Lochside Avenue, Edinburgh Park	Address	Waverley Court, Edinburgh, EH8 8BG
Status	FINAL	Issue Date	26-03-2012	REPORTING PERIOD	23 rd February to 26 th March 2012
				Project:	Edinburgh Tram Network

PROGRESS IN PERIOD

PROGRESS IN PERIOD

The following items were progressed during this period:

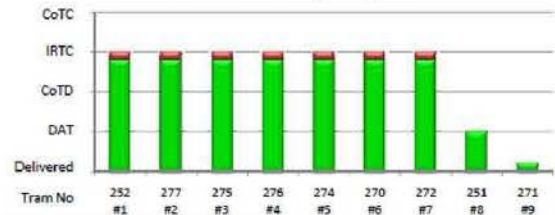
1. Tram Inspector Agreement accepted 'in principle' by all parties - submitted to all stakeholders for final review and signature
2. Tram commissioning continues to be completed in line with the commissioning plan.
3. Nine trams now delivered, with seven having undergone dynamic testing on the Mini-Test Track.
4. Delivery of trams is on-going, post Depot handover a month earlier than in the Programme.
5. Tram Certification process developed - this is to be discussed with CAF (meeting arranged - 28th February 2012)
6. Initial meeting held with CAF on 20th March to discuss testing and commissioning on the test track

LOOK AHEAD

The following items will be progressing during the coming period:

1. Tram Inspector Agreement finalised and signed-off
2. Tenth Tram expected 27th March 2012.
3. Meeting arrange for the 28th March to continue testing and commissioning development.

Tram Commissioning Progress



CoTC - Certificate of Tram Commissioning
 IRTC - Interim Routine Test Certificate (MTT)
 CoTD - Certificate of Tram Delivery
 DAT - Delivery Acceptance Test

Waiting Test Reports
 Tests Completed

PHOTOGRAPHS



Tram 251 at Gogar Depot



View of the Depot from the access bridge



Arial view of the trams at Gogar Depot

KEY ISSUES

KEY ISSUES

1. Lothian Buses have yet to take full operational responsibility for the Depot. Negotiations are on going with CEC.
2. Outstanding results from four Type Tests carried out at Wildenrath Test Track preventing the issue of the Interim Tram Commissioning Type Test Certificate. Completed Reports to be provided by CAF, for verification at the meeting on 28th March at Edinburgh Park.
3. Requirement for an updated Integrated Test Plan to be discussed with CAF, the completion of the outstanding commissioning tests has been discussed in detail, final agreement to be each on the 28th March 2012
4. Process for the collection of verification evidence for Milestone Payments to be agreed - formal submission of evidence recommended on going.

CEC ACTIONS / DECISIONS

N/A

SOFT ANALYSIS

SUCCESSSES

1. Dynamic Tram Commissioning being carried out with no major issues identified
2. Tram Inspector (Mott MacDonald) attending all Dynamic Tram commissioning at Gogar Depot
3. Relationship with Project Teams improved.
4. Maintenance Team in place now and learning on the job through commissioning.
1. Finalisation and sign-off of the Tram Inspector Agreement

OPPORTUNITIES

1. Start system testing and commissioning on completion of Off Street Section (Airport to Shandwick Place crossover) leading to earlier commencement of Revenue Service date (early partial service on Off Street Section and early service on full route)

FAILURES

None identified

THREATS

1. CAF testing documentation appears to be incomplete - discussion arranged
2. Relationship between BBS (primarily Siemens) and CAF needs to be strengthened on integration and coordination of testing.
3. Lack of validation of commissioning tests causing a delay to the issue of commissioning certification
4. Need to convert plan to handover responsibility of depot operations from ETL to Lothian Buses.

Produced by	Shirley Collin, Mike Mackenzie & Peter Smith	Function	COMMERCIAL		Employer	City of Edinburgh Council	
Approved by	Gary Easton	Issued By:	Turner & Townsend Project Management Limited 9 Lochside Avenue, Edinburgh Park		Address	Waverley Court, Edinburgh, EH8 8BG	
Status	FINAL	Issue date	26 March 2012	Reporting Period	27 February to 26 th March 2012	Project	Edinburgh Tram Network

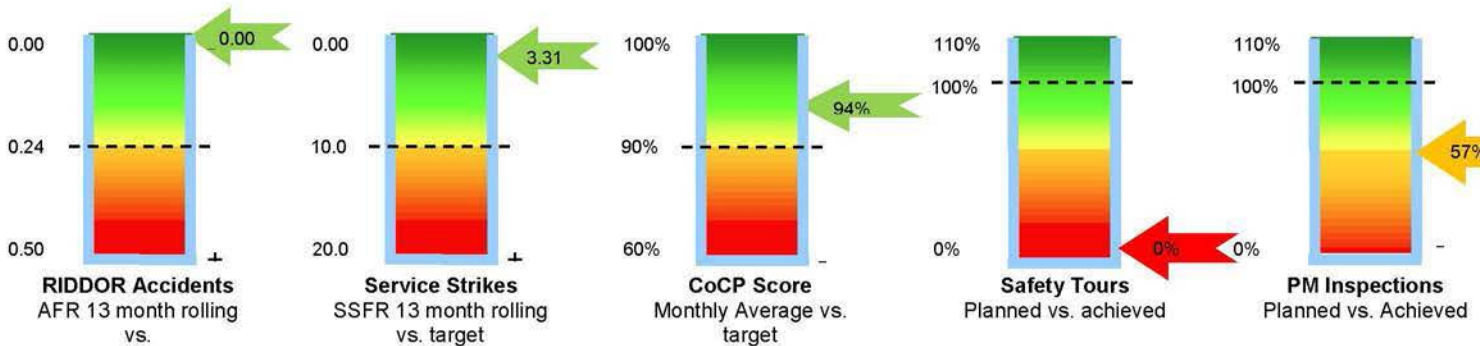
SUMMARY				VALUE ENGINEERING		CHANGE																																																																																																																																																																														
<table border="1"> <thead> <tr> <th>Reporting Date:</th> <th>27 Feb 12</th> <th>23 Mar 12</th> <th>Movement</th> </tr> </thead> <tbody> <tr> <td>Original Contract Amount</td> <td>479,660</td> <td>479,660</td> <td>0</td> </tr> <tr> <td>Add: Approved Changes</td> <td>1,104</td> <td>72</td> <td>-1,032</td> </tr> <tr> <td>Add: Changes in Progress</td> <td>3,593</td> <td>9,602</td> <td>6,009</td> </tr> <tr> <td>Add: Anticipated Changes</td> <td>15,227</td> <td>15,902</td> <td>675</td> </tr> <tr> <td>Less: Funding contributions</td> <td>-3,768</td> <td>-8,699</td> <td>-4,931</td> </tr> <tr> <td>Less: Opportunities to secure</td> <td>-7,310</td> <td>-7,310</td> <td>0</td> </tr> <tr> <td>TOTAL: Forecast cost</td> <td>488,506</td> <td>489,227</td> <td>721</td> </tr> <tr> <td>Original Budget</td> <td>467,407</td> <td>467,407</td> <td>0</td> </tr> <tr> <td>Variance</td> <td>21,099</td> <td>21,820</td> <td>721</td> </tr> <tr> <td>Original forecast risk allowance</td> <td>32,747</td> <td>32,747</td> <td>0</td> </tr> <tr> <td>Less: Variance (from above)</td> <td>-21,099</td> <td>-21,820</td> <td>-721</td> </tr> <tr> <td>Forecast balance of risk allowance</td> <td>11,648</td> <td>10,927</td> <td>721</td> </tr> </tbody> </table>				Reporting Date:	27 Feb 12	23 Mar 12	Movement	Original Contract Amount	479,660	479,660	0	Add: Approved Changes	1,104	72	-1,032	Add: Changes in Progress	3,593	9,602	6,009	Add: Anticipated Changes	15,227	15,902	675	Less: Funding contributions	-3,768	-8,699	-4,931	Less: Opportunities to secure	-7,310	-7,310	0	TOTAL: Forecast cost	488,506	489,227	721	Original Budget	467,407	467,407	0	Variance	21,099	21,820	721	Original forecast risk allowance	32,747	32,747	0	Less: Variance (from above)	-21,099	-21,820	-721	Forecast balance of risk allowance	11,648	10,927	721	<table border="1"> <thead> <tr> <th>Cost Engineering Instructions</th> <th>£M</th> </tr> </thead> <tbody> <tr> <td>Remove embargoes and revised TM</td> <td>6.46</td> </tr> <tr> <td>Setts (separate CEC budget)</td> <td>1.00</td> </tr> <tr> <td>De-scope public realm at St Andrew Sq</td> <td>0.70</td> </tr> <tr> <td>Contributions 3rd Party Agreements</td> <td>2.68</td> </tr> <tr> <td>De-scope works at Forth Ports</td> <td>2.44</td> </tr> <tr> <td>Omit Airport Tram Kiosk and Canopy</td> <td>0.15</td> </tr> <tr> <td>Temporary tram stop at York Place</td> <td>0.15</td> </tr> <tr> <td>Redeployment of Trams</td> <td>CEC</td> </tr> <tr> <td>Cancel track York Place to Newhaven</td> <td>1.10</td> </tr> <tr> <td>Omit Siemens works at Tower Place</td> <td>0.10</td> </tr> <tr> <td>Road re-construction depth</td> <td>0.70</td> </tr> <tr> <td>Design freeze north of York Place</td> <td>t.b.c</td> </tr> <tr> <td>Reduced requirement for storage</td> <td>CEC</td> </tr> <tr> <td>Lay off TM at Forth Ports/Leith Walk</td> <td>t.b.c</td> </tr> <tr> <td>Roseburn Viaduct Cladding</td> <td>0.30</td> </tr> <tr> <td>Opportunities secured</td> <td>8.62</td> </tr> <tr> <td>Opportunities to secure</td> <td>7.31</td> </tr> </tbody> </table>		Cost Engineering Instructions	£M	Remove embargoes and revised TM	6.46	Setts (separate CEC budget)	1.00	De-scope public realm at St Andrew Sq	0.70	Contributions 3rd Party Agreements	2.68	De-scope works at Forth Ports	2.44	Omit Airport Tram Kiosk and Canopy	0.15	Temporary tram stop at York Place	0.15	Redeployment of Trams	CEC	Cancel track York Place to Newhaven	1.10	Omit Siemens works at Tower Place	0.10	Road re-construction depth	0.70	Design freeze north of York Place	t.b.c	Reduced requirement for storage	CEC	Lay off TM at Forth Ports/Leith Walk	t.b.c	Roseburn Viaduct Cladding	0.30	Opportunities secured	8.62	Opportunities to secure	7.31	<table border="1"> <thead> <tr> <th colspan="3">BBS On-Street Works Estimate (Period end 3rd March) and Commercial Issues</th> </tr> <tr> <th>PMC</th> <th>Description</th> <th>(£M)</th> </tr> </thead> <tbody> <tr> <td colspan="3">On - Street</td> </tr> <tr> <td>15</td> <td>Utility conflicts - investigation</td> <td>0.02</td> </tr> <tr> <td>25, 72 & 87</td> <td>OLE foundations resulting from discovery of utilities</td> <td>0.50</td> </tr> <tr> <td>28</td> <td>Temporary accommodation for utilities contractor</td> <td>0.10</td> </tr> <tr> <td>29</td> <td>Road re-construction protocol (opportunity to reduce depth)</td> <td>0.00</td> </tr> <tr> <td>30</td> <td>Additional CBR/Plate testing - ground strength</td> <td>0.00</td> </tr> <tr> <td>32</td> <td>Utilities affecting site clearance - disconnect power to bus trackers</td> <td>-0.02</td> </tr> <tr> <td>35</td> <td>Utilities contractor affecting Infraco progress</td> <td>0.01</td> </tr> <tr> <td>36</td> <td>BT Fibre Optic affecting progress</td> <td>-0.08</td> </tr> <tr> <td>37</td> <td>Slit trench to validate utilities</td> <td>0.01</td> </tr> <tr> <td>38</td> <td>Move 3 OLE foundations (St Johns Church)</td> <td>0.01</td> </tr> <tr> <td>40</td> <td>Scottish Water diversion Princes St</td> <td>0.21</td> </tr> <tr> <td>43</td> <td>Christmas embargo - temporary infill Princes St</td> <td>0.22</td> </tr> <tr> <td>44</td> <td>BT diversion - Princes St (included PMC 040)</td> <td>Inc</td> </tr> <tr> <td>52</td> <td>Install Traffic Management early Shandwick and St Andrew sq</td> <td>0.13</td> </tr> <tr> <td>68</td> <td>Utilities affecting track drainage</td> <td>0.01</td> </tr> <tr> <td>69</td> <td>Geotextile liner to Clifton Terrace void</td> <td>0.01</td> </tr> <tr> <td>86</td> <td>SW approvals - drainage redesign and new deep manholes</td> <td>t.b.c</td> </tr> <tr> <td colspan="2">Total On-Street Works Estimate</td> <td>1.28</td> </tr> <tr> <td colspan="3">Off - Street</td> </tr> <tr> <td>t.b.c</td> <td>Payment for Utility diversions Off Street outwith BBS's scope</td> <td>0.34</td> </tr> <tr> <td>61</td> <td>Temporary footpath and drainage - Roseburn Viaduct</td> <td>0.30</td> </tr> <tr> <td>t.b.c.</td> <td>Low voltage supplies to Airport Tramstop cabinet</td> <td>0.03</td> </tr> <tr> <td colspan="3">General</td> </tr> <tr> <td></td> <td>Rev3A to Rev 4 programme - evidence of delay costs (BB only, Siemens t.b.c)</td> <td>0.60</td> </tr> <tr> <td colspan="2">TOTAL</td> <td>2.55</td> </tr> </tbody> </table>			BBS On-Street Works Estimate (Period end 3 rd March) and Commercial Issues			PMC	Description	(£M)	On - Street			15	Utility conflicts - investigation	0.02	25, 72 & 87	OLE foundations resulting from discovery of utilities	0.50	28	Temporary accommodation for utilities contractor	0.10	29	Road re-construction protocol (opportunity to reduce depth)	0.00	30	Additional CBR/Plate testing - ground strength	0.00	32	Utilities affecting site clearance - disconnect power to bus trackers	-0.02	35	Utilities contractor affecting Infraco progress	0.01	36	BT Fibre Optic affecting progress	-0.08	37	Slit trench to validate utilities	0.01	38	Move 3 OLE foundations (St Johns Church)	0.01	40	Scottish Water diversion Princes St	0.21	43	Christmas embargo - temporary infill Princes St	0.22	44	BT diversion - Princes St (included PMC 040)	Inc	52	Install Traffic Management early Shandwick and St Andrew sq	0.13	68	Utilities affecting track drainage	0.01	69	Geotextile liner to Clifton Terrace void	0.01	86	SW approvals - drainage redesign and new deep manholes	t.b.c	Total On-Street Works Estimate		1.28	Off - Street			t.b.c	Payment for Utility diversions Off Street outwith BBS's scope	0.34	61	Temporary footpath and drainage - Roseburn Viaduct	0.30	t.b.c.	Low voltage supplies to Airport Tramstop cabinet	0.03	General				Rev3A to Rev 4 programme - evidence of delay costs (BB only, Siemens t.b.c)	0.60	TOTAL		2.55
Reporting Date:	27 Feb 12	23 Mar 12	Movement																																																																																																																																																																																	
Original Contract Amount	479,660	479,660	0																																																																																																																																																																																	
Add: Approved Changes	1,104	72	-1,032																																																																																																																																																																																	
Add: Changes in Progress	3,593	9,602	6,009																																																																																																																																																																																	
Add: Anticipated Changes	15,227	15,902	675																																																																																																																																																																																	
Less: Funding contributions	-3,768	-8,699	-4,931																																																																																																																																																																																	
Less: Opportunities to secure	-7,310	-7,310	0																																																																																																																																																																																	
TOTAL: Forecast cost	488,506	489,227	721																																																																																																																																																																																	
Original Budget	467,407	467,407	0																																																																																																																																																																																	
Variance	21,099	21,820	721																																																																																																																																																																																	
Original forecast risk allowance	32,747	32,747	0																																																																																																																																																																																	
Less: Variance (from above)	-21,099	-21,820	-721																																																																																																																																																																																	
Forecast balance of risk allowance	11,648	10,927	721																																																																																																																																																																																	
Cost Engineering Instructions	£M																																																																																																																																																																																			
Remove embargoes and revised TM	6.46																																																																																																																																																																																			
Setts (separate CEC budget)	1.00																																																																																																																																																																																			
De-scope public realm at St Andrew Sq	0.70																																																																																																																																																																																			
Contributions 3rd Party Agreements	2.68																																																																																																																																																																																			
De-scope works at Forth Ports	2.44																																																																																																																																																																																			
Omit Airport Tram Kiosk and Canopy	0.15																																																																																																																																																																																			
Temporary tram stop at York Place	0.15																																																																																																																																																																																			
Redeployment of Trams	CEC																																																																																																																																																																																			
Cancel track York Place to Newhaven	1.10																																																																																																																																																																																			
Omit Siemens works at Tower Place	0.10																																																																																																																																																																																			
Road re-construction depth	0.70																																																																																																																																																																																			
Design freeze north of York Place	t.b.c																																																																																																																																																																																			
Reduced requirement for storage	CEC																																																																																																																																																																																			
Lay off TM at Forth Ports/Leith Walk	t.b.c																																																																																																																																																																																			
Roseburn Viaduct Cladding	0.30																																																																																																																																																																																			
Opportunities secured	8.62																																																																																																																																																																																			
Opportunities to secure	7.31																																																																																																																																																																																			
BBS On-Street Works Estimate (Period end 3 rd March) and Commercial Issues																																																																																																																																																																																				
PMC	Description	(£M)																																																																																																																																																																																		
On - Street																																																																																																																																																																																				
15	Utility conflicts - investigation	0.02																																																																																																																																																																																		
25, 72 & 87	OLE foundations resulting from discovery of utilities	0.50																																																																																																																																																																																		
28	Temporary accommodation for utilities contractor	0.10																																																																																																																																																																																		
29	Road re-construction protocol (opportunity to reduce depth)	0.00																																																																																																																																																																																		
30	Additional CBR/Plate testing - ground strength	0.00																																																																																																																																																																																		
32	Utilities affecting site clearance - disconnect power to bus trackers	-0.02																																																																																																																																																																																		
35	Utilities contractor affecting Infraco progress	0.01																																																																																																																																																																																		
36	BT Fibre Optic affecting progress	-0.08																																																																																																																																																																																		
37	Slit trench to validate utilities	0.01																																																																																																																																																																																		
38	Move 3 OLE foundations (St Johns Church)	0.01																																																																																																																																																																																		
40	Scottish Water diversion Princes St	0.21																																																																																																																																																																																		
43	Christmas embargo - temporary infill Princes St	0.22																																																																																																																																																																																		
44	BT diversion - Princes St (included PMC 040)	Inc																																																																																																																																																																																		
52	Install Traffic Management early Shandwick and St Andrew sq	0.13																																																																																																																																																																																		
68	Utilities affecting track drainage	0.01																																																																																																																																																																																		
69	Geotextile liner to Clifton Terrace void	0.01																																																																																																																																																																																		
86	SW approvals - drainage redesign and new deep manholes	t.b.c																																																																																																																																																																																		
Total On-Street Works Estimate		1.28																																																																																																																																																																																		
Off - Street																																																																																																																																																																																				
t.b.c	Payment for Utility diversions Off Street outwith BBS's scope	0.34																																																																																																																																																																																		
61	Temporary footpath and drainage - Roseburn Viaduct	0.30																																																																																																																																																																																		
t.b.c.	Low voltage supplies to Airport Tramstop cabinet	0.03																																																																																																																																																																																		
General																																																																																																																																																																																				
	Rev3A to Rev 4 programme - evidence of delay costs (BB only, Siemens t.b.c)	0.60																																																																																																																																																																																		
TOTAL		2.55																																																																																																																																																																																		
<p>RISK - Significant Movement in Period (Feb/Mar 12):</p> <table border="1"> <thead> <tr> <th>Risk ID</th> <th>Risk Description</th> <th>Old Level</th> <th>Movement</th> <th>New Level</th> <th>Comments</th> </tr> </thead> <tbody> <tr> <td>ED037</td> <td>Over run of possession</td> <td>AMBER</td> <td>CLOSED</td> <td>CLOSED</td> <td>Following review of NR risks, merged with R052 and covered in other Network rail risks</td> </tr> <tr> <td>ED042</td> <td>Engineering works destabilise or cause movement in the embankments and NR asset resulting in need for additional work</td> <td>GREEN</td> <td>CLOSED</td> <td>CLOSED</td> <td>Closed and Merged with R067</td> </tr> <tr> <td>ED053</td> <td>Unforeseen ground conditions require additional works, excavations, fill etc</td> <td>AMBER</td> <td>↓</td> <td>GREEN</td> <td>Decreased due to stage of ground work</td> </tr> <tr> <td>R052</td> <td>Delay to completion of project due to Network Rail cancellation of Possessions or BB/S overrun or inefficient use of possessions</td> <td>AMBER</td> <td>REWORD</td> <td>AMBER</td> <td>Reworded to include closed NR risks. Possession catch all</td> </tr> <tr> <td>R067</td> <td>Suspension of works by NR</td> <td>GREEN</td> <td>↑</td> <td>AMBER</td> <td>Following review of NR risks, merged with ED042 T&T: raised to Amber due to Scot rail depot issues and Balgreen ballast migration BB/S: Agreed</td> </tr> <tr> <td>ED077</td> <td>Basements in York place (and possibly West Maitland Street) conflict with current road layout.</td> <td>RED</td> <td>REWORD</td> <td>RED</td> <td>Alignment and potential interface with existing stepped footpath and basement requires resolution</td> </tr> <tr> <td>ED023</td> <td>Curtailment of or in efficient use of possessions</td> <td>AMBER</td> <td>CLOSED</td> <td>CLOSED</td> <td>Included in reworded R052</td> </tr> <tr> <td>ED021</td> <td>Lack of disruptive possession availability to complete works</td> <td>GREEN</td> <td>CLOSED</td> <td>CLOSED</td> <td>No disruptive possessions required</td> </tr> <tr> <td>ED037</td> <td>BB/S Over Run of Possessions</td> <td>GREEN</td> <td>CLOSED</td> <td>CLOSED</td> <td>Included in reworded R052</td> </tr> </tbody> </table>									Risk ID	Risk Description	Old Level	Movement	New Level	Comments	ED037	Over run of possession	AMBER	CLOSED	CLOSED	Following review of NR risks, merged with R052 and covered in other Network rail risks	ED042	Engineering works destabilise or cause movement in the embankments and NR asset resulting in need for additional work	GREEN	CLOSED	CLOSED	Closed and Merged with R067	ED053	Unforeseen ground conditions require additional works, excavations, fill etc	AMBER	↓	GREEN	Decreased due to stage of ground work	R052	Delay to completion of project due to Network Rail cancellation of Possessions or BB/S overrun or inefficient use of possessions	AMBER	REWORD	AMBER	Reworded to include closed NR risks. Possession catch all	R067	Suspension of works by NR	GREEN	↑	AMBER	Following review of NR risks, merged with ED042 T&T: raised to Amber due to Scot rail depot issues and Balgreen ballast migration BB/S: Agreed	ED077	Basements in York place (and possibly West Maitland Street) conflict with current road layout.	RED	REWORD	RED	Alignment and potential interface with existing stepped footpath and basement requires resolution	ED023	Curtailment of or in efficient use of possessions	AMBER	CLOSED	CLOSED	Included in reworded R052	ED021	Lack of disruptive possession availability to complete works	GREEN	CLOSED	CLOSED	No disruptive possessions required	ED037	BB/S Over Run of Possessions	GREEN	CLOSED	CLOSED	Included in reworded R052																																																																																																																
Risk ID	Risk Description	Old Level	Movement	New Level	Comments																																																																																																																																																																															
ED037	Over run of possession	AMBER	CLOSED	CLOSED	Following review of NR risks, merged with R052 and covered in other Network rail risks																																																																																																																																																																															
ED042	Engineering works destabilise or cause movement in the embankments and NR asset resulting in need for additional work	GREEN	CLOSED	CLOSED	Closed and Merged with R067																																																																																																																																																																															
ED053	Unforeseen ground conditions require additional works, excavations, fill etc	AMBER	↓	GREEN	Decreased due to stage of ground work																																																																																																																																																																															
R052	Delay to completion of project due to Network Rail cancellation of Possessions or BB/S overrun or inefficient use of possessions	AMBER	REWORD	AMBER	Reworded to include closed NR risks. Possession catch all																																																																																																																																																																															
R067	Suspension of works by NR	GREEN	↑	AMBER	Following review of NR risks, merged with ED042 T&T: raised to Amber due to Scot rail depot issues and Balgreen ballast migration BB/S: Agreed																																																																																																																																																																															
ED077	Basements in York place (and possibly West Maitland Street) conflict with current road layout.	RED	REWORD	RED	Alignment and potential interface with existing stepped footpath and basement requires resolution																																																																																																																																																																															
ED023	Curtailment of or in efficient use of possessions	AMBER	CLOSED	CLOSED	Included in reworded R052																																																																																																																																																																															
ED021	Lack of disruptive possession availability to complete works	GREEN	CLOSED	CLOSED	No disruptive possessions required																																																																																																																																																																															
ED037	BB/S Over Run of Possessions	GREEN	CLOSED	CLOSED	Included in reworded R052																																																																																																																																																																															
<ol style="list-style-type: none"> 1. Prelims saving governed by assessment of actual time saving compared to 22 weeks identified in the Rev 4C programme. Final assessment of actual cost saving to be assessed at the end of the project. BBS have expressed a different view and believe there is an entitlement to the shared incentive. 2. York Place Tramstop design subject to scope/specification review to secure potential cost saving / optimise scope (carriageway design, pedestrian crossings and equipment etc) 3. Road reconstruction depth - drawings issued to confirm design levels/process for all sections of carriageway 																																																																																																																																																																																				
<ol style="list-style-type: none"> 1. Drainage - Infraco consider that Scottish Water have changed the approvals process and clarification has been sought regarding the basis of the approvals and the PAV contract clause. It is accepted that utilities do/will interfere with the drainage tracks. 2. Utility diversions Off - Street: Infraco consider SGN diversion is out of scope and a compromise is required since additional costs have also been incurred for other diversions. 3. LV supplies to Tramstop Cabinets - Infraco considers that as these were excluded from the price submitted at mediation, however it is not a Settlement Agreement exclusion. 4. Rev3A to Rev 4 programme delay 2nd September to 3rd of October - further evidence required to demonstrate cost incurred, Infraco consider that Independent Certifiers opinion authorises costs submitted in full i.e. £4.5M 																																																																																																																																																																																				

Appendix 2 – Health, Safety & Environment

Deliver the Tram Safely / Deliver a safe Tram

HS&E ACCIDENTS and INCIDENTS SUMMARY

Total	Total Hours	>3 day	Major	Injury	NM/Unsafe Condition	Service Damage	ENV	RTA	MOP	AFR	SFR
Period	60,076	0	0	1	3	4	0	0	3	0.00	6.66
13 period rolling	891,581	0	0	11	78	35	7	0	10	0.00	3.93
INFRACO											
Period	50,362	0	0	1	3	1	0	0	3	0.00	1.99
13 period rolling	713,231	0	0	11	54	19	6	0	8	0.00	2.66
OTHER TRAM											
Period	2,429	0	0	0	0	3	0	0	0	0.00	123.53
13 period rolling	29,065	0	0	0	23	16	0	0	2	0.00	55.05



EXECUTIVE SUMMARY

- There were 2no serious / significant incidents which were classified as reportable dangerous occurrences since the issue of the last DtTS Report . These related to:
 - 11kV cable strike at South St Andrew Street (contractor McNicholas).
 - Gas main strike at Edinburgh Airport (contractor Farrans).
- There were 2no serious / significant incidents which were classified as Member of Public incidents since the issue of the last DtTS Report . One involved a person being caught by a section of barrier in Princes Street which toppled over, and the second involved a person falling on a temporary walkway in St Andrew Square.
- There were 2no other serious / significant incidents which were classified as 1no service strike on an 11kV cable and 1no environmental relating to movement of materials at Baird Drive.
- There were 18 other incidents occurred since the issue of the last DtTS Report (2no Member of Public Incidents, 6no service damage, 1no environmental, 2 no minor injuries and 7no near misses.) See Appendix A for details.
- The rolling 14 Period AFR remains at 0.00, better than the benchmark KPI of 0.24 for the project.
- CoCP compliance was recorded at 94% during Period 12
- 72% of planned PM joint inspections have been carried out during Period 12.
- 100% of planned safety tours were carried out during Period 12.

HS&E INSPECTIONS SUMMARY (a summary of significant inspection findings can be found in appendix B)

Project Running Totals	HS&E Tours (Directors)	HS&E PM Inspection
Number planned	1	7
Number achieved	0	4

HSQ&E KEY ACHIEVEMENTS

- The rolling 13 Period AFR remains at 0.00, better than the benchmark KPI of 0.23 for the project.

Key Issues – Points to Note

- A visit by the Health and Safety Executive was made to the project to investigate the 11kV incident. A copy of the incident report is to be forwarded to the inspector to confirm the underlying causes that were identified and the action plan to address the recommendations.
- The incident report submitted by Bilfinger Berger with regard to the 11kV cable strike at Gogar Farm Road in P12 has been reviewed in a meeting attended by City of Edinburgh Council, Turner & Townsend and Bilfinger Berger.
- The incident report for the 11kV cable strike has been submitted by McNicholas with regard to the. This report has been reviewed by Turner & Townsend.
- The gas incident has been investigated by BBS / Farrans and the circumstances discussed with Turner & Townsend. The report on the incident is being finalised.
- An event has taken place with BBS, McNicholas and focussing on foreman / supervisor responsibilities on the 07 / 08 March.
- Concerns were raised again by McNicholas that site safety is potentially being compromised by unrealistic delivery timescales. This is being investigated by Turner & Townsend H&S Team.
- Work has commenced on the next stage of Targeted Inspections. These will focus on excavation / temporary works and vehicle movements. The results of these will be reported in the next DtTS Report.
- City of Edinburgh Council are refurbishing a shop in Shandwick Place as a public information centre and office. Turner & Townsend have provided information to City of Edinburgh Council regarding the application of the CDM Regulations and specifically CDM Client duties.

ENVIRONMENTAL SUMMARY

List any significant environmental events, initiatives, breaches etc

1. BBS continue to have discussions with SEPA regarding the classification of soil being excavated on site.
2. BBS used the Network Rail Safety Bus to carry out a number of environmental briefings in the period. The attendance to these briefing was extremely good and the intention is to run further briefings.
3. Meeting held with John Lawson CEC Archaeological Services regarding ongoing works at Haymarket. Agreement was reached that a small portion of the Air Raid shelter could be removed in order to allow works to progress. Visit to inspect the Hearts memorial (currently in storage) to be arranged during period 1.

BEST PRACTICE

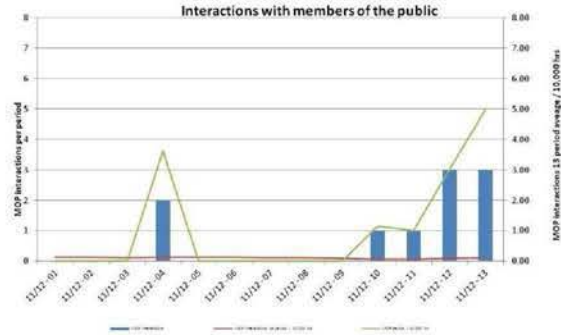
List any significant quality events, initiatives, breaches etc

- The Network Rail Safety Bus visited site to provide information regarding the implementation of the Work Package Plan process, and what Network Rail would be looking for in their review process.
- The Turner & Townsend Project Delivery Safety Meeting is being held monthly and provides a review of previous performance and the identification of future issues of note.
- The establishment of a Project Safety Delivery Group is being progressed, with a strategy paper being developed and potential speakers identified.

MEMBER OF PUBLIC INTERACTION SUMMARY

List any significant interactions with members of the public, including RTA's, alleged incidents

There were 2 reported MoP incidents during Period 12. One involved a woman falling on the temporary pedestrian walkway at Haymarket, and the second involved a person snagging a jacket on a heras fence panel.
(See Appendix A for detail)

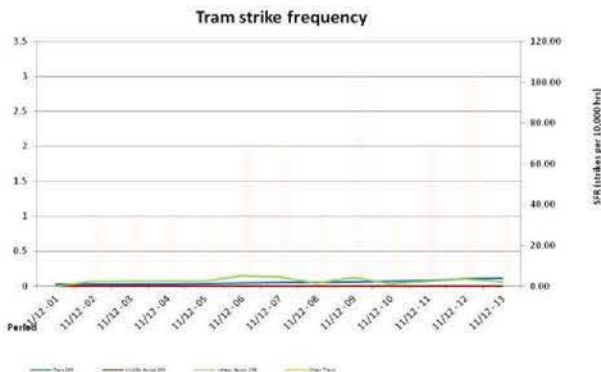
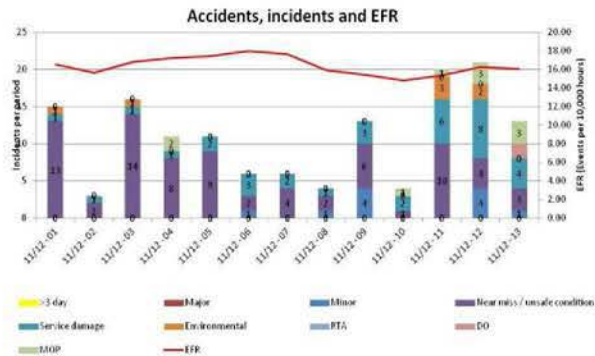


CDM Compliance

List any significant quality events, initiatives, breaches etc

- The role of duty holders regarding the Scottish Power works that are being undertaken outwith the LOD are being clarified by Turner & Townsend.

GRAPHS



APPENDIX A

There were 24 incidents in total since the issue of the last DtTS report. Of these 6 were classified as serious / significant and details are provided below:-

Significant Incidents

AllIR Ref:	AllIR 1612	Contractor:	Farrans		
Location:	Gogar farm Road				
Project:	Infraco	Date & Time:	22/02/12 – 16:30		
Sub Contractor:		Contractor Reference:			
Project Manager:	Shirley Mushet	Is the accident / incident Serious / Significant or Major?	Yes X	No	
Description:	Damage to a HV cable. Farrans reported Scottish Power advised of disruption of supplies to thousand plus domestic households.				
Action taken by Contractor:	Scottish Power called to site – power restored approx 20:00hrs.				
Action taken by Project Team (if required):	CEC notified of incident and action taken to address the issue. Incident report to be reviewed following submission by BBS.				

AllIR Ref:	1626	Contractor:	McNicholas		
Location:	South St Andrew Street				
Project:	Utilities works	Date & Time:	09:00hrs 07/03/2012		
Sub Contractor:		Contractor Reference:			
Project Manager:	Mark Redgard	Is the accident / incident Serious / Significant or Major?	Yes X	No	
Description:	Damage to a live 11 kV cable strike in an open excavation by an operative using a stihl saw who was attempting to cut the cable. Power disruption to Balmoral Hotel, General Register House and St Andrews House + customers along Carlton Rd (123 customers affected). This incident was reported as a Dangerous Occurrence under the RIDDOR Regulations.				
Action taken by Contractor:	Operative suffered flash burns and was taken to hospital by McNicholas transport and discharged following observation. McNicholas held on site interviews held with personnel in conjunction with SP Energy Networks. Power supplies restored to customers after approximately 1 hour.				
Action taken by Project Team (if required):	CEC notified of incident and action taken to address the issue. Incident report to be reviewed following submission by BBS.				

Project Report – Period 14

AllIR Ref:	1630	Contractor:	BBS		
Location:	Tram Stop area, Burnside Road, Edinburgh Airport.				
Project:	Trams – off-street	Date & Time:	11.40hrs 10/03/2012		
Sub Contractor:	Farrans/Celmisa	Contractor Reference:			
Project Manager:	Cath Leech	Is the accident / incident Serious / Significant or Major?	Yes X	No	
Description:	<p>315mm diameter gas main damaged by bucket of 20t tracked excavator. Damaged believed to have occurred while the excavator was tracking from the upper level working platform to the intermediate platform, resulting in the ditching bucket damaging the pipe and causing a release of gas.</p> <p>This incident was reported as a Dangerous Occurrence under the RIDDOR Regulations.</p>				
Action taken by Contractor:	<p>SGN and Edinburgh Airport notified of incident.</p> <p>SGN attended site and installed a temporary collar repair PM 10/03/2012. Area fenced off by SGN prior to leaving site. Permanent repair to be arranged w/c 12/03/2012.</p> <p>Airport Fire Duty Manager also attended site while repair was carried out.</p> <p>BBS/Farrans to carry out incident investigation Monday 12/03/2012 and issue report.</p>				
Action taken by Project Team (if required):	<p>Level 2 On-call and CEC notified of incident and action taken to address the issue.</p> <p>Incident report to be reviewed following submission by BBS.</p>				

AllIR Ref:	1620	Contractor:	BBS		
Location:	Baird Drive				
Project:	Infraco	Date & Time:	08/02/12		
Sub Contractor:		Contractor Reference:			
Project Manager:	Tom Cotter	Is the accident / incident Serious / Significant or Major?	Yes	No X	
Description:	<p>CEC were made aware on the 23rd Feb 2012 of a SEPA visit that took place on the 8th Feb 2012, via a BBS internal report. SEPA visited site subsequent to receiving a number of complaints regarding waste/soil movement on site. SEPA inspected soil at Baird Drive and requested test results to be forwarded to them. Test results were forwarded to them on the 9th Feb. BBS had interpreted these results to be inert; SEPA interpreted them to be Hazardous. Further discussions between the contractor and SEPA are taking place. SEPA referred to the issue as an academic/chemistry issue. At the time of this report (1st march 2012) SEPA have not expressed concerns and have not taken samples.</p> <p>The Daily Record has been made aware of the issue and is intending to print a story on the matter.</p>				
Action taken by Contractor:	<p>The contractor has had ongoing discussion on the matter with SEPA but believe the issue has arisen as a result of a disgruntled company who were hoping to work on the project.</p>				
Action taken by Project Team (if required):	<p>Several meetings have been held with BBS and discussion has taken place with SEPA at present there is no legal breach to report. However due to the involvement of the Daily Record and the continued involvement with SEPA this matter is being record as a potential reputational threat. The matter will continue to be closely reviewed, with all parties being kept in the loop. To date no story has appeared in the Daily Record.</p>				

Project Report – Period 14

AIRR Ref:	AIRR 1615	Contractor:	Crummock		
Location:	Princes Street & The Mound				
Project:	Infraco	Date & Time:	24/02/12 – 12:04		
Sub Contractor:		Contractor Reference:			
Project Manager:	Kevin MacDonald	Is the accident / incident Serious / Significant or Major?	Yes X	No	
Description:	A section of AB barrier/fencing outside the Gallery blew over, a member of public was caught as the barrier toppled.				
Action taken by Contractor:	Assistance provided to the member of public.				
Action taken by Project Team (if required):	N/A				

AIRR Ref:	1624	Contractor:	Crummock		
Location:	St Andrew Square				
Project:	Infraco	Date & Time:	01/03/12 19:30		
Sub Contractor:		Contractor Reference:			
Project Manager:	Kevin MacDonald	Is the accident / incident Serious / Significant or Major?	Yes X	No	
Description:	Member of Public fell on the temporary path (bruising to knee and arm), created because of tram works. The fall was along the temporary walkway westwards away from Harvey Nichols.				
Action taken by Contractor:					
Action taken by Project Team (if required):					

APPENDIX A (Continued)

Other Incidents

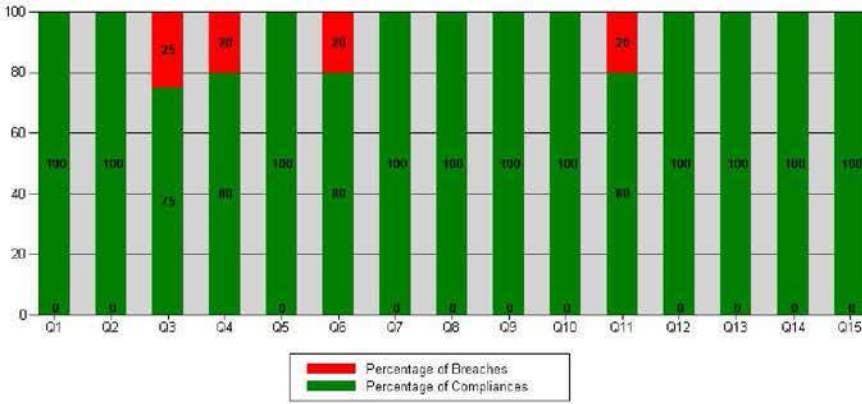
Date	Location	Details of Incidents	Contractor	Classification
24/02/2012	Shandwick Street & Canning Street	Damage to fibre optic cable serving DLA Piper Collins House.	McNicholas	Service damage
29/02/2012	South St Andrew Street	90mm PE pipe to hydrant at South St Andrew Street (outside Vodaphone & McDonalds) struck.	McNicholas	Service damage
08/02/2012	South St Andrews Street	Masonry [stone] removed from above void during works. Void thought to possibly be a Scottish Water sewer.	McNicholas	Service damage
14/03/2012	Junction of Clifton Terrace & Grosvenor Street	Damage occurred to the crown of a sewer (opening approx 6 inch round) when breaking out material above the sewer.	McNicholas	Service damage
16/03/2012	Gogar Farm Road	Damage to a 25mm dia water main	Farrans	Service damage
16/03/2012	Haymarket	Dismantling of MH1201 undertaken without Scottish Water approval.	McNicholas	Service damage
05/03/2012	Section 7	Vehicles parked in the Asset Team Offices car park as well as the CCRC walkway canopy and the taxi rank shelter have been subject to concrete / cement splashes.	Farrans	Member of the public
12/03/2012	Princes St outside Art Gallery	MOP tripped on paving on south side footpath outside art gallery and fell striking her left temple on the ground. She received a cut to the side of her head and was given first aid at the scene by a nurse (MOP)	-	Member of the public
22/02/2012	Ingliston Park & Ride	Diesel spill from generator set.	Siemens	Environmental
05/03/2012	Section 7	Site worker was hit in the face following release of concrete materials under pressure from pile caisson	Farrans	Minor injury
15/02/2012	Section 7a	Site worker tripped in trench and cut his arm on some steel mesh.	Farrans	Minor injury
20/02/2012	Site compound 5C	Site worker suffered seizure in site compound when leaving work.	Coffey	Near miss
22/02/2012	Section 2a	The Hiab provided for unloading railway sleepers was not the specification as included in the WPP as it did not have a slew restrictor facility and was not operating in a failsafe manner adjacent to the railway corridor.	Bam Rail	Near miss
15/02/2012	Haymarket Yards	Air hose became disconnected from a breaker whilst charged with compressed air.	Grahams	Near miss
02/03/2012	South St Andrew Street	Scaffolding batton fell from adjacent construction site into McNicholas site	McNicholas	Near miss
06/03/2012	Fredrick St & Castle St	CEC Control phoned stating that a number of frames had been blown over in the high wind and that tarpaulin also required to be secured at Fredrick Street & Castle Street	Crummock	Near miss
08/03/2012	ScotRail Depot	Breach of Protocol with ScotRail – telehandler blocking the access road. Network Rail requested work cease in the area until mitigation is agreed.	Expanded	Near miss

Project Report – Period 14

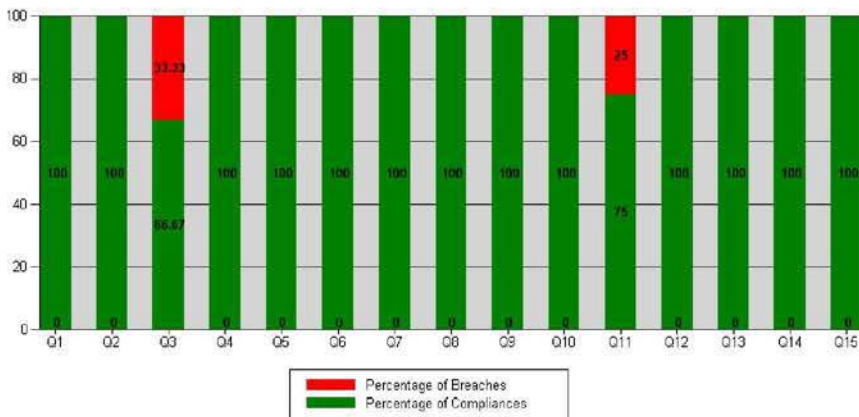
Date	Location	Details of Incidents	Contractor	Classification
08/03/2012	St Andrew Square	Battery within 14T excavator failed with a loud bang. Possible cause was shorting out of terminals due to chains being stored in the compartment.	Crummock	Near miss

APPENDIX B – COCP INSPECTIONS

Period 12 (previous period)



Period 13



Q1. Hours of Work
Q2. Notification
Q3. Notices
Q4. Fencing and Hoarding
Q5. Noise
Q6. Waste Management
Q7. Waste Water and Run-Off
Q8. Water
Q9. Emergency Access
Q10. Parking
Q11. Litter and general housekeeping
Q12. Dust
Q13. Smoking
Q14. Members of the Public
Q15. PPE and Behaviours

Project Report – Period 14

Period 13

Summary of issues and action taken

No	Date of Inspection	Location	Contractor	Question Number	Issue detail	Action taken or required to be taken by contractor	Date to rectify or rectified
1	23/2/12	Broomhouse Dr	BBS/NRS	3	Insufficient public information signs	NRS to obtain signs from BBS and fix.	To be closed by 02/03/12
2	23/2/12	Broomhouse Dr	BBS/NRS	11	Poor housekeeping / site tidiness	NRS cleaned site up.	Closed 23/02/12

1.0 Executive Summary

- All outstanding SVS audit findings are now being progressed to closure.
- Independent Competent Person (ICP) – 1 open Request for Opinion (RFO) and 1 open Advice of Non Compliance (ANC), RFO 022 closed during period 14.
- A number of Requirements Management workshops have now taken place – Verification and Validation method now agreed for 46% of the requirements.
- Submissions relating to Section A are currently under review by Technical Support Service (TSS), further request for formal response sent to TSS 16/3/2012.
- **Signalling & Traffic** - Reversing crossovers report for Leith Walk, York Place and Shandwick Place received from SDS. CEC have forwarded comments to SDS for consideration
- **OLE Building Fixings** - All locations have now been agreed and consultations have taken place with the property owners, currently awaiting their formal agreement due 16th April 2012.
- **NCR's** - 36 NCRs were raised during the period and 29 NCRs were closed out during the period.

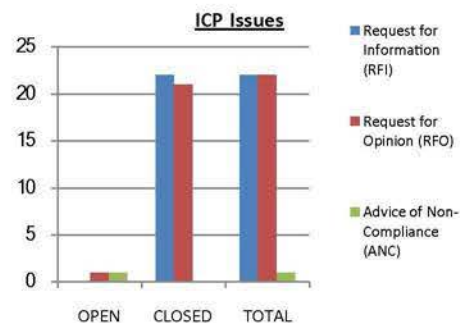
2.0 Safety Verification Scheme (SVS)

System Assurance

- All outstanding SVS audit findings are being progressed to closure.
- Next SVS audit (Maintenance SMS) scheduled to take place 19/4/2012
- SV reports **tie-SVS-REP-11-03** for Junction 91. CKE to issue addendum to report in order to progress issue to closure
- Evidence File - all evidence except for Section 6 Gogar has been transferred to the new SharePoint site.
- All Section A handover information was re issued to TSS on 16th March 2012 with a formal documented review requested. This information was previously issued to TSS in Dec 2011 and Jan 2012.
- A number of requirements management workshops have now taken place with good progress being made towards agreeing the Verification and Validation method for each requirement. Process is now 46% complete.

ICP Issues

- ICP liaison meeting held 21 March 2012
- RFO 021 Being progressed to closure during period 1 /2012
- RFO-022 re Emergency Isolation closure expected 21/2/2012



3.0 BBS Design Construction and T&C Assurance

Electromagnetic Compatibility (EMC)

- No EMC issues to report this period

Trackform

- A survey has been undertaken of the rail and concrete levels along Princes Street to quantify the differences in levels across the trackform. A report is due to be issued week commencing 26th March.

OLE Building Fixings

- All locations have now been agreed and consultations have taken place with the property owners, currently awaiting their formal agreement.

Signalling and Traffic signals

- Reversing crossovers at Leith Walk, York Place and Shandwick Place – CEC have forwarded a response to SDS for consideration.
- Point controller cabinet & layout foundation have been reviewed and agreed with CEC.
- Meetings held to agree preferred option for communication connections between UTC, Junctions and the control Room with fail over. Integrated solution discussed which will look at the most cost effective data provision for CCTV and Emergency fall back provision at Annandale Street as well. Meeting has been held with BT, CEC and BBS to agree connections, formal proposal now expected from BBS.

Depot Equipment

- Re Test of Lifting Jacks following modifications (for integration of the crane) took place February 2012.

SCADA and Comms

- SCADA Site Acceptance Test took place February 2012.

Project Report – Period 14

4.0 Operator/Maintainer Safety Management System (inc. T&C)

- Nine vehicles have now been delivered to the depot.
- The operator has updated and reissued their Quality and Testing and Commissioning Plans
- A meeting with HMRI is scheduled for Thursday 22nd March 2012.
- An operations Safety Management Group has been established.
- Mini test track operations continue although issues with radio reception caused temporary suspension of operations
- Liaison with project partners continues to close out road safety auditors' comments on Gogar Castle crossing and expedite provision of traction power switching from Control.
- SCADA Site Acceptance Tests were supported
- Fire safety training took place as did fire service familiarisation visits and school talks during period 13.

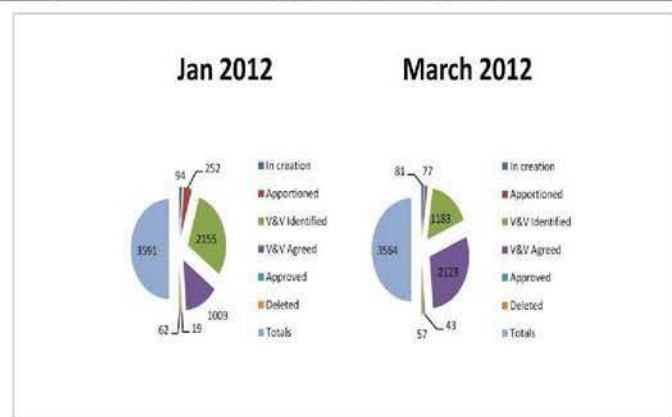
5.0 Metrics

- Currently progressing two metrics inspection; QM73 – reviewing the risk of electrocution/electric hazard at the depot. It is expected that this metrics inspection can be closed during the next period
- QM78 – reviewing the risks associated with machinery, namely crushing, trapping, moving parts and extreme temperatures at the depot. This inspection is now being progressed to closure.

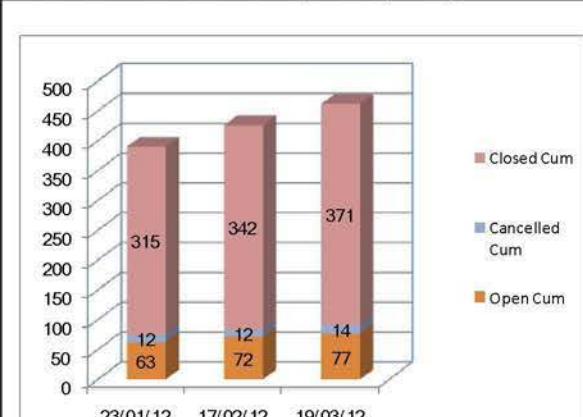
6.0 NCR's

- Total No of NCRs raised is 462.
- 36 NCRs were raised during the period and 29 NCRs were closed out during the period.
- 11 no open NCRs are greater than 6 months old.

Requirements Management Progress



Non Conformance Reports (NCR)



7.0 Deliver a Safe Tram – Required Action

- TSS to provide comments on Section A Handover documentation and comments to be reviewed by T&T prior to the end of period 14.
- Metrics inspections QM73 and QM 78 to be progressed to closure during period 14.
- Junction 91 report – addendum to be issued
- Next PSCC meeting to be held 11th April 2012.

Appendix 3 – Cost Report and Contingency Analysis

Section 1 - Project Summary

	Budget Information			Committed			Forecast					Third Party Contributions		Variance		Actuals	
	A	B	C=A+B	D	E	F=D+E	G	H	I	J	K=F+G+H+I+J	L	M=K-L	N=M-C	O=M/C-1	P	Q
	Original Budget	Budget Variation	Current Budget	Original Contract Value	Approved Contract Changes	Current Contract Value	Changes in Progress	Anticipated Change	Opportunities	Risk / Mitigated	Anticipated Final Cost	Estimated Contribution Value	Anticipated Final Project Cost	Budget Variance (Value)	Budget Variance (%)	COWD to Date	Outstanding Amount
Edinburgh Tram Programme	500,154	0	500,154	479,660	72	479,732	9,602	15,902	-7,310	10,927	508,853	-8,699	500,154	0	0%	327,733	151,999
1 Infraco - Off Street	360,060	-2,693	357,367	362,501	-2,693	359,808	9,854	325	0	0	369,987	-7,319	362,668	5,301	1%	260,493	99,315
2 Infraco - On Street	38,817	960	39,777	47,384	960	48,344	-252	6,047	-7,310	0	46,829	-1,380	45,449	5,672	14%	6,928	41,416
3 Infraco - Other	3,218	0	3,218	3,218	0	3,218	0	0	0	0	3,218	0	3,218	0	0%	662	2,556
4 Utilities (Post Mediation)	2,912	1,800	4,712	2,912	1,800	4,712	0	9,530	0	0	14,242		14,242	9,530	202%	3,479	1,233
5 Tram vehicles	62,400	5	62,405	63,645	5	63,650	0		0	0	63,650		63,650	1,245	2%	56,171	7,479
6 Project Management (refer to CEC Report)		0	0			0					0		0	0			
7 Preparing for Operations (refer to CEC Report)		0	0			0					0		0	0			
8 Specified Risk Allowance	32,747	-72	32,675	0	0	0	0			10,927	10,927		10,927	-21,748	-67%		0

Comments:
Report excludes Enabling work packages reported under T19 and utilities reported under T18
Contributions include amounts relevant to reported budgets only. Any further contributions are reported by CEC.

Risk:
The specified risk allowance is adjusted to match the forecast with the budget. This will be updated once a full QSRA and QCRA is completed

Actions
QCRA and QSRA required to inform the amended risk allowance

CEC01942255_0056

Infraco Cost Report Section 1 - Commercial Summary

	Budget Information			Committed			Forecast					Third Party Contributions		Variance		Actuals	
	A	B	C = A + B	D	E	F = D + E	G	H	I	J	K = F + G + H + I + J	L	M = K - L	N = M - C	O = M / C - 1	P	Q
	Original Budget	Budget Variation	Current Budget	Original Contract Value	Approved Contract Changes	Current Contract Value	Changes in Progress	Anticipated Change	Opportunities	Risk / Provision	Anticipated Final Cost	Estimated Contribution Value	Anticipated Final Project Cost	Budget Variance (Value)	Budget Variance (%)	COWD to Date	Outstanding Amount
Infraco Contract	402,095	-1,733	400,362	413,103	-1,733	411,370	9,602	6,372	-7,310	0	420,034	-8,699	411,335	10,973	4.91%	268,030	143,340
Off Steet	360,060	-2,693	357,367	362,501	-2,693	359,808	9,854	325	0	0	369,987	-7,319	362,668	5,301	3.53%	260,507	99,301
00 Preliminaries and Other Items	150,408	318	150,726	150,409	318	150,727	4,541	0			155,268	0	155,268	4,542	3.01%	106,296	44,431
01 Newhaven Road to Haymarket	85,368	-2,657	82,711	87,738	-2,657	85,081	180	0			85,261	-318	84,943	2,232	3.08%	86,379	-1,298
02 Haymarket Corridor	8,692	-8	8,684	8,692	-8	8,684	121	0			8,805	-121	8,684	0	1.39%	5,114	3,570
05 Roseburn Junction to Gogar	80,035	-188	79,847	80,105	-188	79,917	4,925	300			85,142	-5,840	79,302	-545	6.63%	35,677	44,240
06 Depot	19,979	139	20,118	19,979	139	20,118	51	25			20,194	0	20,194	76	0.38%	18,508	1,610
07 Gogar to Edinburgh Airport	15,578	-297	15,281	15,578	-297	15,281	36	0			15,317	-1,040	14,277	-1,004	0.24%	8,533	6,748
On Street	38,817	960	39,777	47,384	960	48,344	-252	6,047	-7,310	0	46,829	-1,380	45,449	5,672	17.73%	6,861	41,483
00 Preliminaries and Other Items	21,837	86	21,923	21,837	86	21,923	42	0			21,965	0	21,965	42	0.19%	4,520	17,403
01 Newhaven Road to Haymarket	16,980	874	17,854	25,547	874	26,421	-294	6,047	-7,310		24,864	-1,380	23,484	5,630	39.26%	2,341	24,080
Other	3,218	0	3,218	3,218	0	3,218	0	0	0	0	3,218	0	3,218	0	0.00%	662	2,556
00 Maintenance & Mobilisation	2,205	0	2,205	2,205	0	2,205	0	0			2,205	0	2,205	0	0.00%	662	1,543
00 Spare Parts	1,013	0	1,013	1,013	0	1,013	0	0			1,013	0	1,013	0	0.00%	0	1,013

Comments:
Excludes £3.2m phase 1b payment (refer to budget T19.C)

Risk
Refer to Risk register for risks identified against infraco programme
All risk is held at programme level. This section of the cost report makes no allowance for risk.
Refer to the outputs of the QCRA/QSRA for further information on risk.

Actions

Edinburgh Trams
City of Edinburgh Council



Reporting Period: 11-13 - Rev 1 - 23/03/2012

Page 2 of 17

Infracost Report Section 2A - Approved Change - Clause 80

TNC No.	Description	Forecast Amount	Previous Period	Change from Previous Period	Notes	Section Code	Change Code
501	Hawthornevale Cycle Link - Change the design to widen the footway alongside the south side of Lindsay Road	20,021	20,021	0		01	01
502	Amend the design of Ocean Drive to reinstate the footpath to the north of Ocean Drive	10,231	10,231	0		01	01
503	OLE temporary portals at depot access bridge to allow finalisation without Edinburgh Gateway	67,646	67,646	0	Edinburgh Gateway funding	05	01
504	Review of the banned right turn into Blenheim Place as part of the design for Section 1C2 roads	46,247	46,247	0		01	01
505	York Place Terminal Point - Production of a feasibility report, initial feasibility design for option ii), run time modelling etc	228,653	228,653	0		01	01
506	Design for providing a new cycleway from the Mound to Princes Street	9,437	9,437	0		01	01
506.1	Design for providing a new cycleway from the Mound to Princes Street	1,669	1,669	0		01	01
507	Provide a clarification report and completion of the St. Andrew's Square Public Realm design	133,075	133,075	0	Included within contributions	01	01
508	Obtain EAL approval for the highways design drawings at Eastfield Avenue tram crossing	10,025	10,025	0		07	01
509	Design of Cathedral Lane Substation	233,596	233,596	0		01	01
511	Storm Water Connection from Gogar Lodge to the landowners new septic tank	5,750	5,750	0		05	08
512	Re-design of Ocean Terminal Bypass Road	53,685	53,685	0		01	01
513	Revised design to minimise utility diversions / conflicts - used for slit trenching and trial holes	156,870	156,870	0		01	08
514	Utility Mapping	92,756	92,756	0	Time chargeable costs. L&M Surveys and Class One. Complete	01	08
517	Additional BT Ducts at Depot and Mini Test Track	2,996	2,996	0		06	08
520	Valve chamber access and alteration works to 800mm water main at the Depot	105,326	105,326	0		06	08
526	Airport to Gyle - Tram Delivery Temporary Works	6,878	6,878	0		07	08
529	Design Gogar Castle Access Road tram crossing and approaches	31,308	31,308	0		05	08
530	Amend the design of the Depot Road turning head as per RDC191. Option 2	30,458	30,458	0		06	08
531	Edinburgh Gateway - Advance Temporary Works design	9,349	9,349	0		05	08

Edinburgh Trams
City of Edinburgh Council



Reporting Period: 11-13 - Rev 1 - 23/03/2012

Page 3 of 17

Infraco Cost Report Section 2A - Approved Change - Clause 80

TNC No.	Description	Forecast Amount	Previous Period	Change from Previous Period	Notes	Section Code	Change Code
536	System Wide - Tramstop Cabinets - reduction in 10 years maintenance liability	0	0	0	No saving to contract	01	08
538.1	Depot - Tramwash Continuous Mode - Requirement for additional hand lances washers	0	0	0	Change rejected - included within contract	06	08
540	Section 7 - Plot 304 - Omit Landscaping works	-201,120	-201,120	0		07	08
544	Extension to Edinburgh Park Office to accommodate CEC / Transport Scotland	159,900	159,900	0		00	08
553	SDS to provide the services of Matt Fell until end March 2012	69,131	69,131	0		00	01
558.1	Site Wide - Provision of a CAD Technician	1,693	1,693	0		00	08
559	Detailed Design of York Place	56,438	56,438	0	tnc issued - awaiting BBS estimate	01	08
561	Omit all works at the Forth Ports area	-2,443,000	-2,443,000	0	Work deleted from scope.	01	08
562	On Street Generally - OLE Design Changes for On Street Section (PMC 045) - SIEMENS DESIGN WORKS	20,000	20,000	0	All design costs to be grouped under tnc 562 (BBS PMC 045)	01	08
563	On Street - Amend pile caps from square / rectangular to circular	5,000	5,000	0	All design costs to be grouped under tnc 562 (BBS PMC 045)	01	08
564	On Street Generally - Worksite Modelling - TNC & TCO (531) WITHDRAWN 12.1.12	10,000	10,000	0		01	08
565	Advanced design works for Edinburgh Gateway Minimum Option	2,650	2,650	0		05	08
565.1	Advanced design works for Edinburgh Gateway Minimum Option	3,350	3,350	0		05	08
565.2	Advanced design works for Edinburgh Gateway Minimum Option	0	0	0	Issued for clarification only. No cost impact	05	08
566	On Street Generally - Ducting Design Changes Due to Utilities Conflicts	10,000	10,000	0		00	08
567	On Street Generally - Drainage Design Changes Due to Utilities Conflicts	10,000	10,000	0		00	08
568	On Street Generally - Trackform Design Changes Due to Utilities Conflicts	10,000	10,000	0		00	08
569	Additional Running Costs associated with the extension to the Edinburgh Park offices	79,200	79,200	0		00	08
572	Cathedral Lane Substation - Retaining Wall Design	5,000	5,000	0		01	08
574	Haymarket Station - Delete viaduct cladding	-10,000	-10,000	0		02	08

Edinburgh Trams
City of Edinburgh Council



Reporting Period: 11-13 - Rev 1 - 23/03/2012

Page 4 of 17

Infraco Cost Report Section 2A - Approved Change - Clause 80

TNC No.	Description	Forecast Amount	Previous Period	Change from Previous Period	Notes	Section Code	Change Code
576	Depot - Reinstatement to 250mm Water main Remedial Works	36,788	60,000	-23,212		07	04
577	Haymarket Viaduct - Deletion of Sub Station Retaining Wall and Plinth	1,580	-10,000	11,580		02	08
578	SI Provisional Sum Allowance	-57,984	-57,984	0		01	08
580	Cancellation of trackwork materials York Place to Newhaven	-1,100,000	-1,100,000	0	Change resulting from value engineering exercise	01	08
581	Omit Siemens work to Tower Place and Victoria Dock bridges	-100,000	-100,000	0	Change resulting from value engineering exercise	01	08
582	Delete proposed cladding installation costs on Roseburn Viaduct Structures	-308,004	-308,004	0	Change resulting from value engineering exercise	05	08
585	Descoping of Service Vehicle	-21,565	-21,565	0		00	08
589	Descoping airport tramstop kiosk and canopy	-150,000	-150,000	0		07	08
597	Section 1D - Omit disconnection of Bus Tracker	-14,928	0	-14,928		01	08
602	Omit purchase of poles for PIDs North of York Place	-23,740	0	-23,740		01	08
Total		-2,693,633	-2,643,333	-50,300			

CEC01942255_0061

Edinburgh Trams
City of Edinburgh Council



Reporting Period: 11-13 - Rev 1 - 23/03/2012

Page 6 of 17

Infracost Report Section 3A - Change in Progress - Clause 80

TNC No.	Description	Forecast Amount	Previous Period	Change from Previous Period	Notes	Section Code	Change Code
516	Additional Water main requirement at Depot and Mini Test Track	51,282	51,282	0		06	08
524	Airport to Gyle - NIL Design Finalisation (also includes Construction)	-30,000	30,000	0		07	01
525.1	Airport to Gyle - Site Access for Remedial Works	0	50,000	-50,000	all costs asociated with this change allocated to TNC 576	07	08
527	Ingliston - Reimbursement of Costs paid directly to SGN for the diversion of approximately 120m of 10" steel IP gas main to accommodate the new Edinburgh Tram at Ingliston	0	0	0	Saving from Infracost, not included during the period as cost not shown in utility budget	07	04
534	SP Insurance Ducts - Install Insurance ducts at various locations	5,637	50,000	-44,363	Liability for change still to be agreed	07	08
539	System Wide - Delay in signing - impact on commencement and completion	4,541,161	4,541,161	0	Meeting scheduled to review cost incurred at delay commencemnt	00	02
541	Princes Street - City Chamber - Annandale Street Communication Links. Usage of CEC available BT-Lines to avoid provision of direct FO link from Princes Street to City Chambers	50,000	50,000	0	Allowance for ducting	01	08
550	Shandwick Place OLE & Landscape Design Revision	0	0	0	Costs included in anticipated change section	01	08
555	Haymarket - OLE 196B design revision to avoid main sewer	10,000	10,000	0		01	08
556	Track Work Materials York Place to Newhaven - Price Fixing for Rheda City C and D	0	0	0	Included in VE register	01	12
557	Haymarket 1 - OLE Base Relocations (Design mods)	55,000	55,000	0	All design costs to be grouped under tnc 562 (BBS PMC 045)	01	08
571	Hope Street Junction Design	5,000	5,000	0		01	08
573	Roseburn Delta - Non DDA Compliant Footpath	0	0	0	TNC covers design only. Costs associated with this change included in the anticipated change section	05	08
575	Haymarket Station - Take Down Haymarket Station Viaduct Staircase and Parapet	121,315	40,000	81,315	Verbal update - NR have indicated that they will remove the staircase and parapet in Haymarket contract. Current cost report allowance offset by contribution (cost neutral).	02	08
586	St Andrew Square - tie in detail	30,000	30,000	0	Change resulting from value engineering exercise	01	08
587	Revise design for amendments to setts areas and specification	30,000	30,000	0	Subject to separate CEC budget?	01	08
591	Diversion of Scottish Power Cable at Haymarket Viaduct	50,000	50,000	0	NR contribution	05	08
592	Haymarket Yards - Realign kerbs at Car Park Entrance	0	0	0	Currently on hold pending A. Sim review.	05	08

CEC01942255_0063

Infraco Cost Report Section 3A - Change in Progress - Clause 80

TNC No.	Description	Forecast Amount	Previous Period	Change from Previous Period	Notes	Section Code	Change Code
593	Secondary Phase 1a - Cessation of Design Work North of York Place	0	0	0	Saving opportunity being investigated in relation to future ownership of design etc prior to finalising value.	01	08
594	Edinburgh Gateway slope option. Awaiting construction estimate	4,850,000	0	4,850,000		05	08
595	Haymarket Viaduct - Deletion of fitting out of Crew Relief Facility and adding back wall to front face	0	0	0	Assume credit from NR (yet to be established)	05	08
599	Floating track slab	0	0	0	Refer to anticipated change for costs	01	08
601	Clarification on length of shelter to RBS tram stop (8m)	25,000	0	25,000	Liability for change still to be clarified - basis of contract price unclear	05	08
603	Bus Tracker Interface Specification	0	0	0		01	08
Total		9,854,394	4,992,443	4,861,952			

Infraco Cost Report Section 3B - Change in Progress - Schedule 45

TNC No.	Description	In Progress	Certified	Total Forecast	Previous Period	Change from Previous Period	Notes	Section Code	Change Code
513.1	Revised design to minimise utility diversions / conflicts - used for slit trenching and trial holes	0	17,210	17,210	17,210	0		01	08
521	Haymarket - Temporary Accommodation	0	1,543	1,543	1,543	0		01	08
522	Haymarket 1 - Road Reconstruction	0	0	0	0	0	Included in VE register	01	08
523	Haymarket 1 - Additional CBR / Plate Testing	0	0	0	0	0	Included within on street priority works (contract milestones)	01	08
528	Haymarket 1 - Slit trench excavation to validate utilities	0	6,565	6,565	6,565	0	Included within on street priority works (contract milestones)	01	08
532	Princes Street - Temporary traffic management design - WITHDRAWN	0	0	0	0	0	Further information required	01	10
533	Princes Street - 500mm Water Main Diversion	0	0	0	0	0	Costs contained within 535	01	08
535	Princes Street - 500mm Water Main Diversion - rev 3 dwg	0	252,986	252,986	252,986	0		01	08
537	Haymarket 1 - Additional visit of Tar planer to facilitate slewing of BT ducts - WITHDRAWN	0	0	0	0	0	Withdrawn	01	08
543	Haymarket H1 - Utilities affecting the construction of OHLE foundations	33,935	263,998	297,934	275,600	22,334	Only covers section H1. H2 to YP included in item 7 of Anticipated Change.	01	08
545	Site Wide - Power to bus trackers affecting the ability to remove site clearance items	20,000	0	20,000	20,000	0	McNicholas to remove. Contra charge BBS; allowance included for BBS attendance	00	08
546	Site Wide - Increased number of drainage boxes including installation	21,482	0	21,482	21,482	0		00	08
547	Haymarket H1 - Third Party (McNicholas) affecting ability to progress the works	882	2,466	3,348	2,466	882		00	08
548	Haymarket H1 - BT Fibre Optic Service requires diverting	0	83,053	83,053	83,053	0		00	08
549	Princes Street - Amend the design of the St. Johns Church OLE bases	0	12,284	12,284	12,284	0	Opportunity to deduct original scope to be pursued once acceptance of revised pole locations is achieved.	01	08
551	Princes Street - 2011 Christmas Embargo - Temporary Surfacing of Track Infills	0	203,511	203,511	279,496	-75,985		01	08
552	Princes Street - BT diversion @ junction of Princes Street and South St. David Street	0	0	0	0	0	Costs included within TNC 535	01	08
554	St Andrew Square & Shandwick Place - Traffic Management Requirements	0	0	0	0	0	Refer to Revised issue of TNC	01	10
554.1	St Andrew Square & Shandwick Place - Traffic Management Requirements	101,817	107,450	209,267	209,267	0		01	08

CEC01942255_0065

Edinburgh Trams
City of Edinburgh Council



Reporting Period: 11-13 - Rev 1 - 23/03/2012

Page 9 of 17

Infraco Cost Report Section 3B - Change in Progress - Schedule 45

TNC No.	Description	In Progress	Certified	Total Forecast	Previous Period	Change from Previous Period	Notes	Section Code	Change Code
560	St. Andrew Square - Omit £0.7m of repairs to road surface finishing	-700,000	0	-700,000	-700,000	0		01	08
570	Omit the Removal of Trees in Shandwick Place	-9,066	0	-9,066	-9,066	0		01	08
579	Removal of embargo and revised traffic management	0	0	0	0	0	Change resulting from value engineering exercise	01	07
583	Ordering setts for on street works	0	0	0	0	0	Assume any cost is funded by CEC	01	08
583.1	On Street Generally - Ordering setts for on street works	0	0	0	0	0		01	08
584	Road Reconstruction specification	0	0	0	0	0	Change resulting from value engineering exercise	01	08
588	Stafford St Return of Parking Spaces	0	0	0	0	0		01	08
590	New cycleway from The Mound into Princes Street	70,000	0	70,000	70,000	0		01	08
596	Section 1D - Utilities clashing with manhole 1D/NO4/03	13,277	6,723	20,000	0	20,000		01	08
598	Section 1D - Incorporate geotextile liner into Clifton Terrace void in accordance with requirements from Archaeologist	1,740	1,760	3,500	0	3,500		01	08
600	Shandwick place - OLE bases affecting utilities (Piling)	135,155	0	135,155	0	135,155		01	08
604	St Andrew Sq - OLE bases affecting utilities (Piling)	59,275	0	59,275	0	59,275		01	08
Total		-251,504	959,550	708,046	542,885	165,161			

CEC01942255_0066

Infracost Report Section 4 - Anticipated Change

TNC No.	Description	Forecast Amount	Previous Period	Change from Previous Period	Notes	Temp Code	Sched.	Section Code	Change Code
1	Pricing Assumptions - 6.4.2.1 Floating Track Slab	980,000	980,000	0	Verbal advice from Siemens and Bilfinger Berger of cost of providing floating slab at all locations identified. Potential opportunity to reduce if marginal locations are omitted. Subject to final report from BBS.		On	01	08
2	Pricing Assumptions - 6.4.2.3 York Place Terminal Point	944,000	944,000	0	Excludes design costs (in change section of report) and sheet piling work to strengthen basement (included in risk allowance).		On	01	08
3	Pricing Assumptions - 6.4.2.4 Cathedral Lane Substation	600,000	600,000	0	This budget allowance is for the extra over cost included in the contract for construction of the new tram substation only. There is no allowance for any works in constructing Henderson Global's substation. Design work is included in TNC 509		On	01	08
4	Pricing Assumptions - 6.4.2.6 Dublin Street	50,000	50,000	0	Excludes piling if required.		On	01	08
5	Pricing Assumptions - 6.4.2.7 Cycleway at Mound	0	0	0	Allowance for alterations to pavement at junction of Princes St and the Mound. Refer to TNC 590		On	01	08
6	Track Lowering - bridging trackform over utilities in St Andrew Square	500,000	500,000	0			On	01	08
7	Piled OLE base in lieu of utility diversion	360,000	590,000	-230,000	Total of 49 piles. Awaiting on street estimates from BBS to confirm value. Original estimate value £750k. Reduced for piles completed and included within the On Street change in progress section.	03	On	01	08
10	Settlement Agreement exclusions not included elsewhere	404,378	404,378	0	Refer to Schedule E, items 7,8,10,11,12,14. 6 removed - now included in change in progress		On	01	08
12	H1 delay costs associated with utilities	847,000	616,000	231,000	Allowance for 11 weeks delay. Subject to QSRA delay periods and cost risk assessment.	03	On	01	02
13	Delayed commencement to St Andrew Square (from 7/2/12)	636,000	212,000	424,000	Allowance for 12 weeks delay @£53k/wk. Subject to QSRA delay periods and cost risk assessment.	03	On	01	02
14	Roseburn Delta - non DDA footpath	300,000	300,000	0	No design required. Temporary footpath alignment to be agreed on site. Potential modifications to surface water drainage resulting from revised earthworks and Scottish Water approvals.	16	Off	05	08

Infracost Report Section 4 - Anticipated Change

TNC No.	Description	Forecast Amount	Previous Period	Change from Previous Period	Notes	Temp Code	Sched.	Section Code	Change Code
15	MUDFA Reinstatement - Hope Street / Lothian Road	30,000	30,000	0	CEC may undertake this work		On	01	08
16	Ongoing traffic management at Lindsay Road	90,000	60,000	30,000	Additional TM cost in excess of contract agreement - 6 months allowed at £15k per month		On	01	08
18	BBS PMC 67 and 68. Delay to on street works as a result of Scottish Water withholding consent to discharge into existing manholes.	0	0	0	Potential for delay. Options to mitigate currently being reviewed. Insufficient information to cost at present.		On	01	02
19	LV supply to Airport Tramstop and Kiosk	0	30,000	-30,000	BAA arranging supply, credit required from Infracost (estimated value £30k).		Off	07	08
20	Further design changes to OLE resulting from utilities (York Place)	200,000	200,000	0			On	01	08
21	Sub station switching - Provision of competent resource to carry undertake sub-station switching and equipment monitoring. Allowed for 20 weeks	25,000	25,000	0			Off	06	08
22	Additional Siemens supervision as a result of accelerated programme rev 4C	155,277	155,277	0	Incorporated into rev 4c programme improvement. Actual savings / costs to be determined.		On	01	08
23	Drainage redesign and amendments to numbers / depths of manholes, carrier drains / drainage connections.	250,000		250,000	Design £100k; deeper manholes / drainage £100k; BBS standing time / disruption £50k. Note McNicholas undertaking part of this work, therefore reallocation to utilities estimate is required. New drainage design reduces number of connections and drainage tracks, therefore full impact of omits and additions to be determined following conclusion of design.		On	01	08
Total		6,371,655	5,696,655	675,000					

Edinburgh Trams
City of Edinburgh Council

Reporting Period: 11-13 - Rev 1 - 23/03/2012

Infraco Cost Report Section 5 - Opportunities

Ref No	Description	Approved Changes	Changes in Progress	Anticipated Changes	Contributions	Secured	To be secured	Total Opportunity	Value per CS report Jan 2012	Notes
01	Remove embargoes and revised TM	0	0		0	0	-6,460	-6,460	-6,460	Subject to completion of sections in advance of contract dates (22 week time saving assumed in the Rev 4C programme)
02	Edinburgh Gateway	0	0		-4,850	-4,850		-4,850		Awaiting instruction from Transport Scotland
03	Setts (separate CEC budget)	0	0		-1,000	-1,000		-1,000	-1,000	Funded by separate CEC budget (added to contributions register)
04	De-scope public realm at St Andrew Sq	0	-700		0	-700		-700	-700	Instructed
05	Contributions 3rd Party Agreements	0	0		-2,849	-2,849		-2,849	-2,500	Refer to contributions register
06	De-scope works at Forth Ports	-2,443	0		0	-2,443		-2,443	-2,450	Instructed
07	Omit Airport Tram Kiosk and Canopy	-150	0		0	-150		-150	-150	Approved, replacement materials t.b.c
08	Temporary tram stop at York Place	0	0		0	0	-150	-150	-150	Design optimisation
09	Redeployment of Trams	0	0		0	0		0	-5,000	Included in CEC budget code
10	Cancel track York Place to Newhaven	-1,100	0		0	-1,100		-1,100	-1,100	Instructed
11	Omit Siemens works at Tower Place	-100	0		0	-100		-100	-100	Instructed
12	Turner & Townsend / CEC resources	0	0		0	0		0	0	Ongoing
13	Shared recovery vehicle	0	0		0	0		0	0	Not taken forward
14	Road re-construction depth	0	0		0	0	-700	-700	-700	Principles instructed, saving subject to site conditions
15	Design freeze north of York Place	0	0		0	0		0	-250	Infraco design costs expended
16	Reduced requirement for storage	0	0		0	0		0	-1,000	Included in CEC budget code
17	Lay off TM at Forth Ports/Leith Walk	0	0		0	0		0	-180	TM not included in Infraco budget provision
18	Roseburn Viaduct Cladding	-308	0		0	-308		-308	-300	Instructed
Total		-4,101	-700	0	-8,699	-13,500	-7,310	-20,810	-22,040	

Reporting Period: 11-13 - Rev 1 - 23/03/2012

Infraco Cost Report Section 5 - Opportunities

Ref No	Description	Approved Changes	Changes in Progress	Anticipated Changes	Contributions	Secured	To be secured	Total Opportunity	Value per CS report Jan 2012	Notes
--------	-------------	------------------	---------------------	---------------------	---------------	---------	---------------	-------------------	------------------------------	-------

CEC01942255_0070

Infracost Report Section 6 - Credits & Contributions

Ref No	Description	Included in Contract Sum	Approved Changes	Changes in Progress	Anticipated Changes	Total Forecast	Previous Period	Change from Previous	Contribution Received	Notes	Section Code	Change Code
01	Edinburgh Gateway Feasibility	860,000	82,995	0		940,000	940,000	0	528,000	£1.2m in total. Remainder of the costs included in CEC sections of the project budget.	05	08
02	New Ingliston Future Proof measures	540,000	0	0		540,000	540,000	0		This contribution will be offset by a land cost reported within the relevant section of the CEC cost report	07	08
03	Henderson Global - Cathedral Lane substation DESIGN	12,953	233,596	0		246,549	246,549	0		Full extent of agreement with Henderson Global to be established. Allowance assumes all design costs associated with future substation will be borne by Henderson Global.	01	08
04	RBS Tramstop	500,000	0	0		500,000	500,000	0		Allowance included subject to final agreement with RBS	07	08
05	St Andrew Square Public Realm design		133,075	0		133,075	133,075	0	133,000	As per agreed change value. Assumed to be recovered from separate budget	01	08
06	Forth Ports		0	0		0	0	0		Forth Ports work removed from scope - no further contribution from Forth Ports assumed	01	08
07	CEC Miscellaneous. Mainly George Street CEC costs (£298k)	318,213	0	0		318,213	318,213	0	318,213	CEC finance have confirmed that a credit has been received in the amount shown. The extent of the workscope associated with this credit is not clear.	01	08
08	Network Rail - Haymarket station refurbishment	0	0	121,315		121,315	40,000	81,315		Allowance to offset change values for work carried out by BBS on Haymarket Viaduct to support Network Rails Haymarket Station refurbishment.	02	08
09	Contribution from CEC for public realm work (granite setts) at St Andrews Square	1,000,000	0	0		1,000,000	1,000,000	0		No change in scope allowed for - setts funded by CEC	01	08
10	Network Rail - Scottish Power Cable diversion - Haymarket Station (TNC 591)		0	50,000		50,000	50,000	0			05	08
11	Edinburgh Gateway Construction		0	4,850,000		4,850,000		4,850,000			05	08
Total		3,231,166	449,666	5,021,315	0	8,699,152	3,767,837	4,931,315	979,213			

Infraco Cost Report Section 7 - Change Summary

Change Code	Description	Approved Change	Change in Progress	Anticipated Change	Contributions	Total
01	Scope Change	-1,821	5,248	445		3,872
02	PAVs (Utilities, etc)	77	-187	4,194		4,084
03	Miscellaneous Client Risk Items	10	0	0		10
04	Time Delay	0	4,541	1,483		6,024
05	Project Contributions	0	0	0	-8,699	-8,699
Total		-1,734	9,602	6,122	-8,699	5,291

Notes:

Some CE's have costs which relate to more than one change code. In such instances they have been allocated to the predominant reason.

Edinburgh Trams
City of Edinburgh Council



Reporting Period: 11-13 - Rev 1 - 23/03/2012

Page 16 of 17

Infraco Cost Report Section 8 - Period Movement

Ref No.	Description	Approved Off	Approved On	In Progress Off	In Progress On	Total
514	Utility Mapping	92,756		-92,756	0	0
525.1	Airport to Gyle - Site Access for Remedial Works	0		-50,000	0	-50,000
534	SP Insurance Ducts - Install Insurance ducts at various locations	0		-44,363	0	-44,363
543	Haymarket H1 - Utilities affecting the construction of OHLE foundations	0		0	22,334	22,334
547	Haymarket H1 - Third Party (McNicholas) affecting ability to progress the works	0		0	882	882
551	Princes Street - 2011 Christmas Embargo - Temporary Surfacing of Track Infills	0		0	-75,985	-75,985
575	Haymarket Station - Take Down Haymarket Station Viaduct Staircase and Parapet	0		81,315	0	81,315
576	Depot - Reinstatement to 250mm Water main Remedial Works	-23,212		0	0	-23,212
577	Haymarket Viaduct - Deletion of Sub Station Retaining Wall and Plinth	11,580		0	0	11,580
578	SI Provisional Sum Allowance	-57,984		57,984	0	0
580	Cancellation of trackwork materials York Place to Newhaven	-1,100,000		1,100,000	0	0
581	Omit Siemens work to Tower Place and Victoria Dock bridges	-100,000		100,000	0	0
589	Descoping airport tramstop kiosk and canopy	-150,000		150,000	0	0
594	Edinburgh Gateway slope option. Awaiting construction estimate	0		4,850,000	0	4,850,000

CEC01942255_0073

Edinburgh Trams
City of Edinburgh Council



Reporting Period: 11-13 - Rev 1 - 23/03/2012

Page 17 of 17

Infraco Cost Report Section 8 - Period Movement

Ref No.	Description	Approved Off	Approved On	In Progress Off	In Progress On	Total
596	Section 1D - Utilities clashing with manhole 1D/NO4/03	0		0	20,000	20,000
597	Section 1D - Omit disconnection of Bus Tracker	-14,928		0	0	-14,928
598	Section 1D - Incorporate geotextile liner into Clifton Terrace void in accordance with requirements from Archaeologist	0		0	3,500	3,500
600	Shandwick place - OLE bases affecting utilities (Piling)	0		0	135,155	135,155
601	Clarification on length of shelter to RBS tram stop (8m)	0		25,000	0	25,000
602	Omit purchase of poles for PIDs North of York Place	-23,740		0	0	-23,740
604	St Andrew Sq - OLE bases affecting utilities (Piling)	0		0	59,275	59,275
Total		-1,365,528	0	6,177,179	165,161	4,976,812

Anticipated Change			-30,000	705,000	675,000
--------------------	--	--	---------	---------	---------

Opportunities					0
---------------	--	--	--	--	---

Credits & Contributions			-4,931,315	0	-4,931,315
-------------------------	--	--	------------	---	------------

Movement		-1,365,528	0	1,215,865	870,161	720,497
----------	--	------------	---	-----------	---------	---------

CEC01942255_0074

Utilities Cost Report: Section 1 - Utilities Summary

	Budget Information			Committed			Forecast					Third Party Contributions		Variance		Actuals	
	A	B	C = A + B	D	E	F = D + E	G	H	I	J	K = F + G + H + I + J	L	M = K - L	N = M - C	O = M / C - 1	P	Q
	Original Budget	Budget Variation	Current Budget	Original Contract Value	Approved Contract Changes	Current Contract Value	Changes in Progress	Anticipated Change	Opportunities	Risk / Provision	Anticipated Final Cost	Estimated Contribution Value	Anticipated Final Project Cost	Budget Variance (Value)	Budget Variance (%)	Cost of Work Done	Outstanding Amount
Post Settlement Utilities	2,912	1,800	4,712	2,912	1,800	4,712	0	9,530	0	0	14,242	0	14,242	9,530	202.2%	3,479	1,233
McNicholas	1,812	2,380	4,192	1,812	2,380	4,192	0	5,411	0	0	9,603	0	9,603	5,411	129.1%	2,982	1,210
01 Conflicts	1,812	766	2,578	1,812	766	2,578		3,035			5,613		5,613	3,035	117.7%	2,410	168
02 Legacy Works		600	600		600	600		-600			0		0	-600	-100.0%	0	600
03 Standby Team		0	0		0	0		625			625		625	625		0	0
04 Management Team		400	400		400	400		1,127			1,527		1,527	1,127	281.8%	292	108
05 Design Team		600	600		600	600		1,156			1,756		1,756	1,156	192.7%	260	340
06 Accomodation		14	14		14	14		68			82		82	68	485.7%	20	-6
Statutory Utility Companies	0	520	520	0	520	520	0	3,019	0	0	3,539	0	3,539	3,019	580.6%	497	23
01 Scottish Power		90	90		90	90		316			406		406	316	351.1%	65	25
02 Scottish Gas Networks		60	60		60	60		188			248		248	188	313.3%	13	47
03 Scottish Water		50	50		50	50		1,378			1,428		1,428	1,378	2756.0%	304	-254
04 Virgin Media		150	150		150	150		153			303		303	153	102.0%	61	89
05 Verizon		20	20		20	20		0			20		20	0	0.0%	0	20
06 Cable & Wireless		50	50		50	50		139			189		189	139	278.0%	20	30
07 Fibrenet		0	0		0	0		250			250		250	250		0	0
08 BT		100	100		100	100		595			695		695	595	595.0%	34	66
00 Legacy Works	1,100	-1,100	0	1,100	-1,100	0		1,100			1,100		1,100	1,100		0	0

Comments:

Conflict resolution forecast to complete based on conflict database.
Legacy works forecast based on original budget. Full scope of this work is currently being established.

Risk

Refer to Risk register for risks identified against McNicholas programme
All risk is held at programme level. This section of the cost report makes no allowance for risk.
Refer to the outputs of the QCRA/QSRA for further information on

Actions

Full forecast of legacy scope of works to be carried out once scope is properly defined.

Utilities Cost Report: Section 2 - Utilities Budget

Change Number	Description	Budget Main Section Ref	Budget Sub Section Ref	Budget Main Section	Budget Sub Section	Value
UNC-001	Utility resolution up to 31 March 2012	1	01	McNicholas	Conflicts	-1,912,000
UNC-001	Utility resolution up to 31 March 2012	3		Legacy Works		-1,100,000
UNC-001	Utility resolution up to 31 March 2012	1	01	McNicholas	Conflicts	2,678,000
UNC-001	Utility resolution up to 31 March 2012	1	02	McNicholas	Legacy Works	600,000
UNC-001	Utility resolution up to 31 March 2012	1	03	McNicholas	Standby Team	
UNC-001	Utility resolution up to 31 March 2012	1	04	McNicholas	Management Team	400,000
UNC-001	Utility resolution up to 31 March 2012	1	05	McNicholas	Design Team	600,000
UNC-001	Utility resolution up to 31 March 2012	1	06	McNicholas	Accomodation	14,000
UNC-001	Utility resolution up to 31 March 2012	2	01	Statutory Utilities	Scottish Power	90,000
UNC-001	Utility resolution up to 31 March 2012	2	02	Statutory Utilities	Scottish Gas Networks	60,000
UNC-001	Utility resolution up to 31 March 2012	2	03	Statutory Utilities	Scottish Water	50,000
UNC-001	Utility resolution up to 31 March 2012	2	04	Statutory Utilities	Virgin Media	150,000
UNC-001	Utility resolution up to 31 March 2012	2	05	Statutory Utilities	Verizon	20,000
UNC-001	Utility resolution up to 31 March 2012	2	06	Statutory Utilities	Cable & Wireless	50,000
UNC-001	Utility resolution up to 31 March 2012	2	07	Statutory Utilities	Fibrenet	0
UNC-001	Utility resolution up to 31 March 2012	2	08	Statutory Utilities	BT	100,000
Total						1,800,000

Utilities Cost Report: Section 3 - Conflict Resolution

Conflict Type	Conflicts Resolved	Conflicts Mitigated	Forecast to Complete	Forecast to Mitigate	Total Conflicts	Outstanding Conflict Cost	Cost per Conflict	Comments
Totals								
Priority 1								
Track Construction	418	2	88	0	508	847,000	9,625	
Tram Ducting	52	1	22	0	75	286,000	13,000	
Tram Ducting Chamber	0	0	1	0	1	13,000	13,000	
Road Level conflict	54	0	20	0	74	274,000	13,700	
Overhead Line Base	215	0	74	0	289	222,000	3,000	
Priority 2								
Traffic Signal Pole	0	116	106	0	222	424,000	4,000	
Street Lighting Column	0	10	66	0	76	264,000	4,000	
Road Sign Base	0	236	114	0	350	342,000	3,000	
Kerb	1	0	6	0	7	78,000	13,000	
Drain	0	0	27	0	27	216,000	8,000	
Drainage Gully Pot	0	36	79	0	115	237,000	3,000	
Unknown	3	4	0	0	7	0		
Forecast to Complete	743	405	603	0	1751	3,203,000	5,312	
Costs to Date						2,221,743	3,243	Cost per conflict includes accrued cost
Accrual						187,893		
Total Forecast						5,612,636	4,170	
York Place								
Priority 1								
Track Construction	1	0	18	0	19	162,000	9,000	
Tram Ducting	0	0	17	0	17	221,000	13,000	
Tram Ducting Chamber	0	0	1	0	1	13,000	13,000	
Road Level conflict	0	0	0	0	0	0		
Overhead Line Base	0	0	22	0	22	66,000	3,000	
Priority 2								
Traffic Signal Pole	0	0	0	0	0	0		
Street Lighting Column	0	0	0	0	0	0		
Road Sign Base	0	0	5	0	5	15,000	3,000	
Kerb	0	0	6	0	6	78,000	13,000	
Drain	0	0	2	0	2	16,000	8,000	
Drainage Gully Pot	0	0	4	0	4	12,000	3,000	
Unknown	0	0	0	0	0	0		

Edinburgh Trams
City of Edinburgh Council



Reporting Period: 11-13 - Rev 1 - 23/03/2012

Page 4 of 6

Utilities Cost Report: Section 3 - Conflict Resolution

Conflict Type	Conflicts Resolved	Conflicts Mitigated	Forecast to Complete	Forecast to Mitigate	Total Conflicts	Outstanding Conflict Cost	Cost per Conflict	Comments
Forecast to Complete	1	0	75	0	76	583,000	7,773	
St Andrews Square								
Priority 1								
Track Construction	209	2	30	0	241	325,000	10,833	
Tram Ducting	9	0	0	0	9	0		
Tram Ducting Chamber	0	0	0	0	0	0		
Road Level conflict	54	0	20	0	74	274,000	13,700	
Overhead Line Base	76	0	6	0	82	18,000	3,000	
Priority 2								
Traffic Signal Pole	0	0	25	0	25	100,000	4,000	
Street Lighting Column	0	0	10	0	10	40,000	4,000	
Road Sign Base	0	0	37	0	37	111,000	3,000	
Kerb	0	0	0	0	0	0		
Drain	0	0	6	0	6	48,000	8,000	
Drainage Gully Pot	0	0	15	0	15	45,000	3,000	
Unknown	2	0	0	0	2	0		
Forecast to Complete	350	2	149	0	501	961,000	6,450	
Princes Street								
Priority 1								
Track Construction	0	0	0	0	0	0		
Tram Ducting	0	0	0	0	0	0		
Tram Ducting Chamber	0	0	0	0	0	0		
Road Level conflict	0	0	0	0	0	0		
Overhead Line Base	0	0	11	0	11	33,000	3,000	
Priority 2								
Traffic Signal Pole	0	0	1	0	1	4,000	4,000	
Street Lighting Column	0	0	3	0	3	12,000	4,000	
Road Sign Base	0	0	0	0	0	0		
Kerb	0	0	0	0	0	0		
Drain	0	0	0	0	0	0		
Drainage Gully Pot	0	0	0	0	0	0		
Unknown	0	0	0	0	0	0		
Forecast to Complete	0	0	15	0	15	49,000	3,267	

CEC01942255_0079

Edinburgh Trams
City of Edinburgh Council



Reporting Period: 11-13 - Rev 1 - 23/03/2012

Page 5 of 6

Utilities Cost Report: Section 3 - Conflict Resolution

Conflict Type	Conflicts Resolved	Conflicts Mitigated	Forecast to Complete	Forecast to Mitigate	Total Conflicts	Outstanding Conflict Cost	Cost per Conflict	Comments
Shandwick Place								
Priority 1								
Track Construction	191	0	4	0	195	36,000	9,000	
Tram Ducting	43	0	0	0	43	0		
Tram Ducting Chamber	0	0	0	0	0	0		
Road Level conflict	0	0	0	0	0	0		
Overhead Line Base	76	0	1	0	77	3,000	3,000	
Priority 2								
Traffic Signal Pole	0	0	5	0	5	20,000	4,000	
Street Lighting Column	0	0	11	0	11	44,000	4,000	
Road Sign Base	0	0	21	0	21	63,000	3,000	
Kerb	1	0	0	0	1	0		
Drain	0	0	6	0	6	48,000	8,000	
Drainage Gully Pot	0	0	17	0	17	51,000	3,000	
Unknown	1	0	0	0	1	0		
Forecast to Complete	312	0	65	0	377	265,000	4,077	
Haymarket								
Priority 1								
Track Construction	14	0	24	0	38	216,000	9,000	
Tram Ducting	0	0	5	0	5	65,000	13,000	
Tram Ducting Chamber	0	0	0	0	0	0		
Road Level conflict	0	0	0	0	0	0		
Overhead Line Base	63	0	32	0	95	96,000	3,000	
Priority 2								
Traffic Signal Pole	0	0	21	0	21	84,000	4,000	
Street Lighting Column	0	0	17	0	17	68,000	4,000	
Road Sign Base	0	0	26	0	26	78,000	3,000	
Kerb	0	0	0	0	0	0		
Drain	0	0	11	0	11	88,000	8,000	
Drainage Gully Pot	0	0	13	0	13	39,000	3,000	
Unknown	0	0	0	0	0	0		
Forecast to Complete	77	0	149	0	226	734,000	4,926	

CEC01942255_0080

Edinburgh Trams
City of Edinburgh Council



Reporting Period: 11-13 - Rev 1 - 23/03/2012

Page 6 of 6

Utilities Cost Report: Section 3 - Conflict Resolution

Conflict Type	Conflicts Resolved	Conflicts Mitigated	Forecast to Complete	Forecast to Mitigate	Total Conflicts	Outstanding Conflict Cost	Cost per Conflict	Comments
Uncategorized								
Priority 1								
Track Construction	3	0	12	0	15	108,000	9,000	
Tram Ducting	0	1	0	0	1	0		
Tram Ducting Chamber	0	0	0	0	0	0		
Road Level conflict	0	0	0	0	0	0		
Overhead Line Base	0	0	2	0	2	6,000	3,000	
Priority 2								
Traffic Signal Pole	0	116	54	0	170	216,000	4,000	
Street Lighting Column	0	10	25	0	35	100,000	4,000	
Road Sign Base	0	236	25	0	261	75,000	3,000	
Kerb	0	0	0	0	0	0		
Drain	0	0	2	0	2	16,000	8,000	
Drainage Gully Pot	0	36	30	0	66	90,000	3,000	
Unknown	0	4	0	0	4	0		
Forecast to Complete	3	403	150	0	556	611,000	4,073	

CEC01942255_0081

Appendix 4 – Change Log

TNC No.	PHC No.	Location	Description	Reason for Change	On Street / Off Street	Change Category	Change Owner	Change Category	Budget Cost for Risk and Personal Change	Date Estimate Due	Date Estimate Received	Approved By	Date Issued to CEC	Time Implications	Estimate Change Value (Contractor)	Estimate Change Value (Design)	Date	Approved by CEC/T&T	Date TCO Issued	Comments
501	001	502	Howthornside Cycle Link	Change the design to reduce the footway, alongside the south side of Under Road	Hespanic Post Mediation Change	On Street	AUS/GAS	CR	N/A	15/08/2011	15/08/2011	CEC	19/10/2011		£20,000.51	£20,000.51	20/10/2011	CEC	24/10/2011	Previously PWTTC 001
502	002	500	Queen Drive Footway	Amend the design of Queen Drive to remove the footpath to the north of Queen Drive	Hespanic Post Mediation Change	On Street	AUS/GAS	CR	N/A	15/08/2011	15/08/2011	T&T	26/10/2011		£10,238.87	£10,238.87	26/10/2011	T&T	26/10/2011	Previously PWTTC 002
503	003	513	Deport Access Bridge	Amend the design to include the OLE at the Depot Access Bridge to enable the bridge to be used for the OLE at the Depot Access Bridge	Hespanic Post Mediation Change	Off Street	AUS/GAS	CR	N/A	04/08/2011	04/08/2011	CEC	24/11/2011		£67,646.03	£67,646.03	30/11/2011	CEC	30/11/2011	Previously PWTTC 003
504	004	506	Bertram Place	Review of the blocked right turn into Bertram Place aspect of the design for section LC2 roads	Hespanic Post Mediation Change	On Street	AUS/GAS	CR	N/A	05/08/2011	05/08/2011	CEC	19/10/2011		£44,247.09	£44,247.09	24/10/2011	CEC	24/10/2011	Previously PWTTC 004
505	005	513	Tron Park Terminal Point	Production of a feasibility report, initial feasibility design for option A1, continuation of the design	Hespanic Post Mediation Change	On Street	AUS/GAS	CR	N/A	19/10/2011	19/10/2011	CEC	24/11/2011		£228,652.80	£228,652.80	25/11/2011	CEC	25/11/2011	Previously PWTTC 005
506	006	503	The Mound	Design for providing a new cycleway from the Mound to Prince Street	Hespanic Post Mediation Change	On Street	AUS/GAS	CR	N/A	05/08/2011	05/08/2011	CEC	20/10/2011		£4,149.93	£4,149.93	24/10/2011	CEC	24/10/2011	Previously PWTTC 006
506.1	006	503	The Mound	Design for providing a new cycleway from the Mound to Prince Street	Hespanic Post Mediation Change	On Street	IAW	CR	N/A	30/01/2012	30/01/2012	CEC	03/02/2012		£1,668.71	£1,668.71	03/02/2012	CEC	03/02/2012	Additional 14103.033
507	007	504	St Andrew Square	Provide a clarification report and completion of the St. Andrew Square Public Realm design	Hespanic Post Mediation Change	On Street	AUS/GAS	CR	N/A	23/08/2011	23/08/2011	CEC	20/10/2011		£133,075.48	£133,075.48	24/10/2011	CEC	24/10/2011	Previously PWTTC 007 - ICD 504 Rev A issued 15/12/11. RL-UPDATE REQUIRED.
508	013	507	Eastfield Avenue	Obtain T&T approval for the highway design drawings at Eastfield	Hespanic Post Mediation Change	Off Street	AUS/GAS	DVC	N/A	04/08/2011	04/08/2011	CEC	19/10/2011		£10,025.09	£10,025.09	24/10/2011	CEC	24/10/2011	Previously PWTTC 008 - Increased to proceed in TNC letter but awaiting CEC approval to start TCO.
509	008	519	Cathedral Lane Substation	Design of Cathedral Lane Substation	Hespanic Post Mediation Change	On Street	AUS/GAS	CR	N/A	02/08/2011	02/08/2011	CEC	15/12/2011		£233,586.67	£233,586.67	15/12/2011	CEC	15/12/2011	Previously PWTTC 009 - Increased to proceed in TNC letter but awaiting CEC approval to start TCO.
510	011	Murrayfield	Murrayfield	Murrayfield Accommodation Works	Change without an	Off Street	AUS/GAS	CR	N/A	14/11/2011	14/11/2011	T&T	21/11/2011		£5,790.46	£5,790.46	21/11/2011	T&T	21/11/2011	Previously PWTTC 011
511	010	511	Gege Lane	Storm Water Connection from Gege Lodge to the underground drainage system	Hespanic Post Mediation Change	On Street	AUS/GAS	CR	N/A	26/08/2011	26/08/2011	CEC	19/10/2011		£53,685.15	£53,685.15	24/10/2011	CEC	24/10/2011	Previously PWTTC 012 - ICD 505 Rev A issued 14/02/12. Signed TCO returned by BBS 20/02/12
512	012	505	Queen Terminal	Revised design to remove utility diversions / conflicts - used for all trenching and trial holes	Hespanic Post Mediation Change	On Street	RL	DVC	£400,000.00	09/11/11	09/11/11	CEC	24/12/2011		£43,547.07	£43,547.07	24/12/2011	CEC	24/12/2011	Previously PWTTC 013 - Estimate Dated 13 and 14/12/2011. Previously PWTTC 013 - Estimate Dated 13 and 14/12/2011. Being reviewed for A&B and C&D. ICD 506 issued 20/02/12 for design works (on a A&B, C & D)
513	015	526	Various	Revised design to minimise utility diversions / conflicts - used for all trenching and trial holes	Hespanic Post Mediation Change	On Street	RL	DVC	N/A	N/A	N/A	CEC	15/12/2011		N/A	N/A	N/A	CEC	20/02/2012	N/A I&E is now a PAV being actioned under Schedule Part 15 ICD 506A issued 20/02/12 for design works
513.1	015	526	Various	Revised design to minimise utility diversions / conflicts - used for all trenching and trial holes	Hespanic Post Mediation Change	On Street	RL	DVC	N/A	N/A	N/A	CEC	15/12/2011		N/A	N/A	N/A	CEC	20/02/2012	N/A I&E is now a PAV being actioned under Schedule Part 15 ICD 506A issued 20/02/12 for design works
514	016	554	Various	Utility Mapping	Hespanic Post Mediation Change	On Street	AUS/GAS	CR	N/A	22/02/2011	22/02/2011	CEC	27/02/2011		£5,796.67	£5,796.67	27/02/2011	CEC	27/02/2011	Previously PWTTC 014 - Increased to proceed in TNC letter
515	014	Edinburgh Gateway	Edinburgh Gateway	Edinburgh Gateway T&T Cable Protection	Hespanic Post Mediation Change	Off Street	AUS/GAS	CR	N/A	10/08/2011	10/08/2011	CEC	27/02/2011		£1,212.00	£1,212.00	27/02/2011	CEC	27/02/2011	Previously PWTTC 015 - Increased to proceed in TNC letter
516	017	Deport & Minn Test Track	Deport & Minn Test Track	Additional Watermain requirement at Depot and Minn Test Track	Hespanic Post Mediation Change	Off Street	AUS/GAS	CR	N/A	09/09/2011	09/09/2011	CEC	09/12/2011		£51,201.72	£51,201.72	09/12/2011	CEC	09/12/2011	Previously PWTTC 016 - Increased to proceed in TNC letter
517	018	559	Deport & Minn Test Track	Additional BT Cables at Depot and Minn Test Track	Hespanic Post Mediation Change	Off Street	AUS/GAS	CR	N/A	09/09/2011	09/09/2011	T&T	07/10/2011		£1,300.66	£1,300.66	07/10/2011	T&T	07/10/2011	Previously PWTTC 017 - Increased to proceed in TNC letter
518	019	The Mound	The Mound	Design and installation of a new roadway through the Mound / Hespanic Street Junction - SEE TNC 508 (WITHDRAWN)	Hespanic Post Mediation Change	On Street	RL	DVC	N/A	09/09/2011	09/09/2011	CEC	20/02/2012		£105,796.20	£105,796.20	20/02/2012	CEC	20/02/2012	Previously PWTTC 018 - Withdrawn (Duplicate 508)
519	020	553	Tron Park Depot	Design of a temporary crane stop in Tron Park (WITHDRAWN)	Hespanic Post Mediation Change	Off Street	AUS/GAS	CR	N/A	19/05/2011	19/05/2011	CEC	16/02/2012		£105,796.20	£105,796.20	16/02/2012	CEC	16/02/2012	Previously PWTTC 019 - Withdrawn (Duplicate 508)
520	009	553	Depot	Value chain access and alteration works to 600mm water main at the Depot	Hespanic Post Mediation Change	Off Street	AUS/GAS	CR	N/A	19/05/2011	19/05/2011	CEC	20/02/2012		£105,796.20	£105,796.20	20/02/2012	CEC	20/02/2012	Previously PWTTC 020 - Increased to proceed in TNC letter
521	028	Haymarket 1	Haymarket 1	Removals Accommodation	Hespanic Post Mediation Change	On Street	Schedule 45	RL	£2,876.25	07/10/2011	07/10/2011	T&T	07/10/2011		£4,912.00	£4,912.00	07/10/2011	T&T	07/10/2011	Previously PWTTC 021 - Increased to proceed in TNC letter
522	029	Haymarket 1	Haymarket 1	Removals Reconstruction	Hespanic Post Mediation Change	On Street	Schedule 45	RL	£3,398.11	07/10/2011	07/10/2011	T&T	07/10/2011		£4,912.00	£4,912.00	07/10/2011	T&T	07/10/2011	Previously PWTTC 022 - Increased to proceed in TNC letter
523	030	Haymarket 1	Haymarket 1	Additional C&D / P&K Testing	Hespanic Post Mediation Change	On Street	Schedule 45	SL	£10,000.00	07/10/2011	07/10/2011	CEC	07/10/2011		£10,000.00	£10,000.00	07/10/2011	CEC	07/10/2011	Previously PWTTC 023 - Increased to proceed in TNC letter
524	019	Accroyde Gate	Accroyde Gate	N&E Design Installation (also includes Construction)	Hespanic Post Mediation Change	Off Street	AUS/GAS	CR	£30,000.00	30/09/2011	30/09/2011	CEC	20/02/2012		N/A	N/A	20/02/2012	CEC	20/02/2012	Previously PWTTC 024 - Increased to proceed in TNC letter
525	020	Accroyde Gate	Accroyde Gate	Site Access for Remedial Works	Hespanic Post Mediation Change	Off Street	AUS/GAS	CR	£30,000.00	30/09/2011	30/09/2011	CEC	20/02/2012		N/A	N/A	20/02/2012	CEC	20/02/2012	Previously PWTTC 025 - Increased to proceed in TNC letter
526	027	518	Accroyde Gate	From Dalry to Accroyde Gate	Hespanic Post Mediation Change	Off Street	AUS/GAS	CR	£30,000.00	07/10/2011	07/10/2011	T&T	07/10/2011		£6,946.24	£6,946.24	07/10/2011	T&T	07/10/2011	Previously PWTTC 026 - Increased to proceed in TNC letter
527	028	Accroyde Gate	Accroyde Gate	Removals of Contaminated Soil for the diversion of the water main at the Depot	Hespanic Post Mediation Change	Off Street	AUS/GAS	CR	£10,000.00	07/10/2011	07/10/2011	T&T	07/10/2011		£10,000.00	£10,000.00	07/10/2011	T&T	07/10/2011	Previously PWTTC 027 - Increased to proceed in TNC letter
528	037	Haymarket 1	Haymarket 1	Removals Reconstruction	Hespanic Post Mediation Change	On Street	Schedule 45	RL	£1,546.00	15/11/2011	15/11/2011	T&T	15/11/2011		£1,546.00	£1,546.00	15/11/2011	T&T	15/11/2011	Previously PWTTC 028 - Increased to proceed in TNC letter
529	022	524	Section G: Depot Access Road	Design of Cable Access Road from existing approaches	Hespanic Post Mediation Change	Off Street	AUS/GAS	CR	£10,000.00	26/10/2011	26/10/2011	CEC	16/12/2011		£22,796.57	£22,796.57	16/12/2011	CEC	16/12/2011	Previously PWTTC 029 - Increased to proceed in TNC letter
530	023	525	Section G: Depot Access Road	Amend the design of the Depot Road turning head as per RDC39L Section 2	Hespanic Post Mediation Change	Off Street	AUS/GAS	CR	£10,000.00	27/10/2011	27/10/2011	CEC	16/12/2011		£10,000.00	£10,000.00	16/12/2011	CEC	16/12/2011	Previously PWTTC 030 - Increased to proceed in TNC letter
531	014	532	Edinburgh Gateway	Advance temporary works design	Hespanic Post Mediation Change	Off Street	AUS/GAS	CR	£10,000.00	27/10/2011	27/10/2011	CEC	16/12/2011		£10,000.00	£10,000.00	16/12/2011	CEC	16/12/2011	Previously PWTTC 031 - Increased to proceed in TNC letter
532	040	Princes Street	Princes Street	Temporary traffic management design - WITHDRAWN	Hespanic Post Mediation Change	Off Street	AUS/GAS	CR	£10,000.00	27/10/2011	27/10/2011	CEC	16/12/2011		£10,000.00	£10,000.00	16/12/2011	CEC	16/12/2011	Previously PWTTC 032 - Increased to proceed in TNC letter
533	041	556	Princes Street	500mm Water Main diversion and design - WITHDRAWN	Hespanic Post Mediation Change	Off Street	AUS/GAS	CR	£10,000.00	31/10/2011	31/10/2011	CEC	16/12/2011		£10,000.00	£10,000.00	16/12/2011	CEC	16/12/2011	Previously PWTTC 033 - Increased to proceed in TNC letter
534	041	556	Princes Street	Final insurance works at intersection and in form and size as specified	Hespanic Post Mediation Change	Off Street	AUS/GAS	CR	£10,000.00	31/10/2011	31/10/2011	CEC	16/12/2011		£10,000.00	£10,000.00	16/12/2011	CEC	16/12/2011	Previously PWTTC 034 - Increased to proceed in TNC letter
535	040	Princes Street	Princes Street	Removals of Contaminated Soil for the diversion of the water main at the Depot	Hespanic Post Mediation Change	Off Street	AUS/GAS	CR	£10,000.00	07/10/2011	07/10/2011	T&T	07/10/2011		£10,000.00	£10,000.00	07/10/2011	T&T	07/10/2011	Previously PWTTC 035 - Increased to proceed in TNC letter
536	049	517	Sydney Wharf	From top Cable to 10 years in service liability	Hespanic Post Mediation Change	Off Street	AUS/GAS	CR	£10,000.00	09/11/2011	09/11/2011	CEC	08/12/2011		£10,000.00	£10,000.00	08/12/2011	CEC	08/12/2011	Previously PWTTC 036 - Increased to proceed in TNC letter
537	049	517	Sydney Wharf	From top Cable to 10 years in service liability	Hespanic Post Mediation Change	Off Street	AUS/GAS	CR	£10,000.00	09/11/2011	09/11/2011	CEC	08/12/2011		£10,000.00	£10,000.00	08/12/2011	CEC	08/12/2011	Previously PWTTC 037 - Increased to proceed in TNC letter
538	048	520	Depot	Additional site of the plan to facilitate drawing of BT ducts - WITHDRAWN	Hespanic Post Mediation Change	Off Street	AUS/GAS	CR	£10,000.00	26/11/2011	26/11/2011	CEC	08/12/2011		£10,000.00	£10,000.00	08/12/2011	CEC	08/12/2011	Previously PWTTC 038 - Increased to proceed in TNC letter
539	048	520	Depot	Tram wash continuous mode may leave a sm all residual areas to be cleaned	Hespanic Post Mediation Change	Off Street	AUS/GAS	CR	£10,000.00	26/11/2011	26/11/2011	CEC	08/12/2011		£10,000.00	£10,000.00	08/12/2011	CEC	08/12/2011	Previously PWTTC 039 - Increased to proceed in TNC letter
540	048	520	Depot	Tram wash continuous mode may leave a sm all residual areas to be cleaned	Hespanic Post Mediation Change	Off Street	AUS/GAS	CR	£10,000.00	26/11/2011	26/11/2011	CEC	08/12/2011		£10,000.00	£10,000.00	08/12/2011	CEC	08/12/2011	Previously PWTTC 040 - Increased to proceed in TNC letter
541	021	Princes Street	Princes Street	Change in Requirements for landscaping works	Hespanic Post Mediation Change	On Street	AUS/GAS	CR	£10,000.00	28/10/2011	28/10/2011	CEC	28/10/2011		£47,350.00	£47,350.00	28/10/2011	CEC	28/10/2011	Previously PWTTC 041 - Increased to proceed in TNC letter
542	024	GEF Post Board	GEF Post Board	Design of new Cable Path - WITHDRAWN	Hespanic Post Mediation Change	On Street	MO	PAV	£40,000.00	14/11/2011	14/11/2011	CEC	14/11/2011		£40,000.00	£40,000.00	14/11/2011	CEC	14/11/2011	Previously PWTTC 042 - Increased to proceed in TNC letter
543	025	Haymarket H1	Haymarket H1	Utilities informing the construction of O&LE foundations	Hespanic Post Mediation Change	On Street	MO	PAV	£40,000.00	14/11/2011	14/11/2011	CEC	14/11/2011		£40,000.00	£40,000.00	14/11/2011	CEC	14/11/2011	Previously PWTTC 043 - Increased to proceed in TNC letter
544	031	512</																		

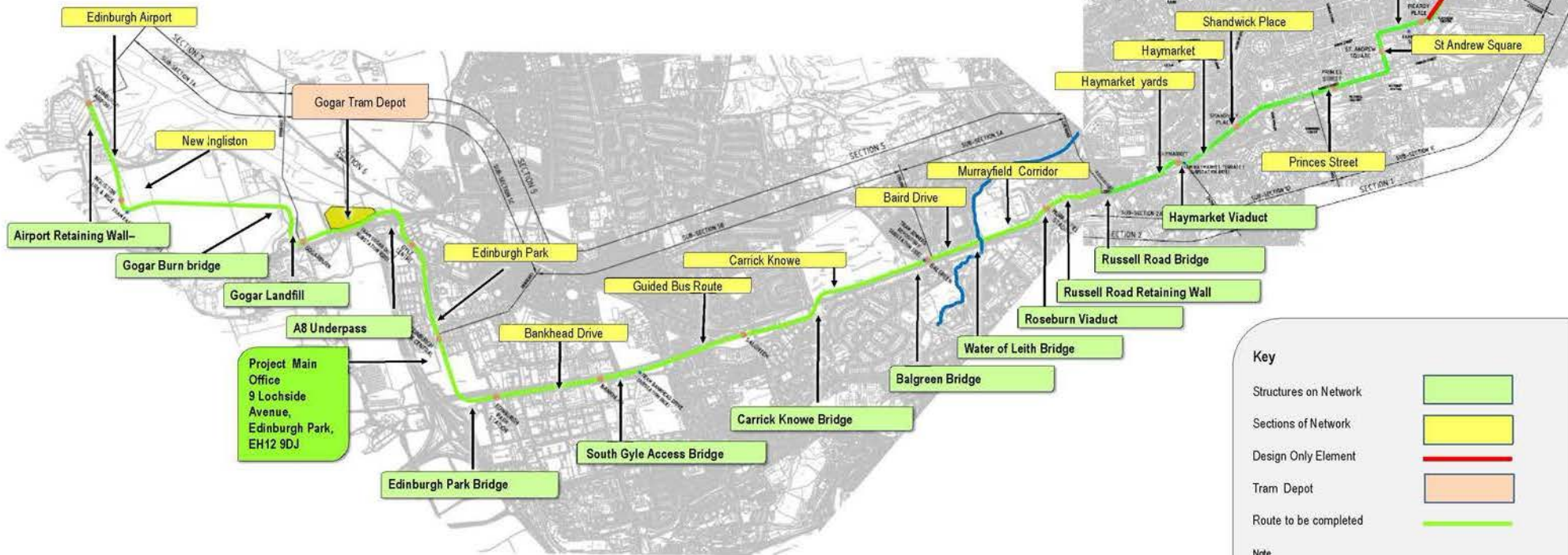
TMC No.	PAC No.	ICD No.	Location	Description	Reason for Change	On Street / Off Street	Change Instruction	TAZ Change	Change DCU/CR/GR	Budget Cost for Risk and Potential Changes	Date TNC Lived	Letter Ref	Date Estimate Due	Date Estimate Released	Estimate Change Value (Deficit)	Estimate Change Value (Construction)	Time Implications	Date Used to CE	Approved by CEZ/TAT	Date Approved or Rejected	Approved Cost for Contract Changes	Date/ECO Issued	Comments	
549	045	510	Princes Street	Amend the design of the St. Johns Church CLE boxes	To avoid conflict with services	On Street	Change B0	S	U/C	€6,000.00	21/11/2011	RF CDR 7860	15/12/2011	TST	€0.00	€0.00		N/A	TST	21/11/2011	€0.00	21/11/2011	PL/AV - ESTIMATE NOW RECD 27.2.12, AGREE & RAISE TO	
550	045	514	Shandwick Place	Shandwick CLE & Landscaping Design Revision	A number of utility conflicts that can be addressed by additional utility work	On Street	Change B0	S	U/C	€10,000.00	23/11/2011	RF CDR 8025	19/12/2011	TST	€0.00	€0.00		N/A	TST	23/11/2011	€0.00	23/11/2011	PL/AV - ESTIMATE NOW RECD 27.2.12, AGREE & RAISE TO	
551	049	N/A	Princes Street	2011 Christmas Embargo - Temporary Surfacing of Track 14/15	To allow Princes Street to be opened to pedestrians	On Street	N/A	MM	PAV	€300,000.00	N/A	N/A	N/A		€0.00	€0.00		N/A					Pricing Assumption Variation	
552	048	N/A	Princes Street	BT diversion at junction of Princes Street and South St, Closed Street		On Street	N/A	MM	PAV	€40,000.00					€0.00	€0.00		02/02/2012	CEC	03/02/2012	€0.00	03/02/2012	Pricing Assumption Variation	
553	048	516	Site Wide	SDS to provide the services of Market Parade and March 2012	To assist in the utility design	On Street	Change B0	S	U/C	€75,000.00	30/11/2011	RF CDR 7869	26/12/2011		€0.00	€0.00			CEC	03/02/2012	€0.00	03/02/2012		
554	052		St Andrew Square & Shandwick Place	Traffic Management Requirements	To facilitate early access	On Street	Schedule 45	RL	D/C	N/A	12/12/2011	RF CDR 7998	N/A		€0.00	€0.00			CEC	09/12/2011	N/A	09/12/2011	TNC Working Amended	
554E1	052		St Andrew Square & Shandwick Place	Traffic Management Requirements	To facilitate early access	On Street	Schedule 45	RL	D/C	€180,000.00	12/01/2012	RF CDR 8066	N/A		€0.00	€0.00			CEC	09/12/2011	N/A	09/12/2011		
555	045	523	Haymarket	CLE 15B Base Revision to avoid road wear	To avoid conflict with street	On Street	N/A	S	U/C	N/A	13/12/2011	RF CDR 8017	N/A		€0.00	€0.00			CEC	14/12/2011		14/12/2011	Confirmation of instruction given by Colin Smith and issued by letter to BES	
556	045	524	Haymarket 1	CLE Base Relocations	There is currently no budget allowance to fund this	On Street	Change B0	MM	U/C	€40,000.00	13/12/2011	RF CDR 8016	06/01/2012		€0.00	€0.00			TST	13/12/2011		13/12/2011	Confirmation of instruction given by Colin Smith and issued by letter to BES	
557	045	521	Haymarket 1	CLE Base Relocations	Utility Change	On Street	Change B0	MM	U/C	€40,000.00	13/12/2011	RF CDR 8016	06/01/2012		€0.00	€0.00			TST	13/12/2011		13/12/2011	Confirmation of instruction given by Colin Smith and issued by letter to BES	
558	051	527	Site Wide	Provision of a C&U Technician	To progress VE proposals in relation to pavement re- construction	On Street	Change B0	RL	U/C	€2,000.00	13/12/2011	RF CDR 8015	06/01/2012		€0.00	€0.00			TST	13/12/2011		13/12/2011	Confirmation of instruction given by Colin Smith and issued by letter to BES	
558.1	051	522.1	Site Wide	Provision of a C&U Technician	To progress VE proposals in relation to pavement re- construction	On Street	Change B0	RL	U/C	€2,000.00	13/12/2011	RF CDR 8015	06/01/2012		€0.00	€0.00			TST	13/12/2011		13/12/2011	Confirmation of instruction given by Colin Smith and issued by letter to BES	
559	053	545	York Place	Devised Design of York Place Terminal	Terminal point excluded from the settlement	On Street	Change B0	RL	GR	€56,438.11	15/11/2011	RF CDR 8093	10/01/2012		€0.00	€0.00			CEC	09/02/2012		09/02/2012	IS0509 3.2.12 AS IN EXCEED 56,438.11	
560	050	N/A	On Street Generally	CEC 10.3.15 - Temporary Street Works Signage	Works cost required as part of this agreement	On Street	Schedule 45	GR	U/C	€300,000.00	15/11/2011	RF CDR 8137	N/A		€0.00	€0.00			CEC	09/02/2012		09/02/2012	IS0509 3.2.12 AS IN EXCEED 56,438.11	
561	050	528	South Bridge	CEC 10.3.15 - Temporary Street Works Signage	Works cost required as part of this agreement	On Street	Schedule 45	GR	U/C	€2,443,000.00	21/11/2011	RF CDR 8092	16/01/2012		€0.00	€0.00			CEC	09/02/2012		09/02/2012	IS0509 3.2.12 AS IN EXCEED 56,438.11	
562	045	530	On Street Generally	CLE Design Changes for On Street - Section 9 (M&S) - SEAMONS DESIGN WORKS	To accommodate a relocation of CLE boxes due to the position of existing services	On Street	Change B0	GR	D/C	€20,000.00	05/01/2012	RF CDR 8062	31/01/2012		€0.00	€0.00			CEC	20/12/2011		20/12/2011	PL/AV - ESTIMATE NOW RECD 27.2.12, AGREE & RAISE TO	
563	045	534	On Street Generally	Circular P&C Cops	It reduces the size of the pile cap and by default the load impact upon utilities, however it makes for a more difficult installation for the contractor. The pile cap can be done without a requirement for an existing design etc.	On Street	Change B0	S	D/C	€5,000.00	21/12/2011	RF CDR 8084	16/01/2012		€0.00	€0.00			TST	09/01/2012		09/01/2012	PL/AV - ESTIMATE NOW RECD 27.2.12, AGREE & RAISE TO	
564	055	N/A	On Street Generally	Works to Mobilise - TNC & TCO (S1) WITHDRAWN 12.1.12	Revised by Andy Conway of CEC	On Street	N/A	RL	CR	€10,000.00	21/12/2011	RF CDR 8045	16/01/2012		€0.00	€0.00			TST	21/12/2011		21/12/2011	Pricing Assumption Variation	
565	054	533	Edinburgh Gateway	Advanced design works for Edinburgh Gateway Minimum Option	Works required by Transport Scotland to assess and protect the current proposals for Edinburgh Gateway for both the Edinburgh Trams project and Edinburgh Gateway proposals	On Street	Change B0	AS	CR	€2,650.00	21/12/2011	RF CDR 8048	16/01/2012		€0.00	€0.00			TST	12/01/2012		12/01/2012	Works required and cost approved by Transport Scotland	
95.1	054	533.1	Edinburgh Gateway	Advanced design works for Edinburgh Gateway Minimum Option	Works required by Transport Scotland to assess and protect the current proposals for Edinburgh Gateway for both the Edinburgh Trams project and Edinburgh Gateway proposals	On Street	Change B0	AS	CR	€2,650.00	21/12/2011	RF CDR 8048	16/01/2012		€0.00	€0.00			TST	12/01/2012		12/01/2012	Works required and cost approved by Transport Scotland	
95.2	054	533.2	Edinburgh Gateway	Advanced design works for Edinburgh Gateway Minimum Option	Works required by Transport Scotland to assess and protect the current proposals for Edinburgh Gateway for both the Edinburgh Trams project and Edinburgh Gateway proposals	On Street	Change B0	AS	CR	€2,650.00	21/12/2011	RF CDR 8048	16/01/2012		€0.00	€0.00			TST	12/01/2012		12/01/2012	Works required and cost approved by Transport Scotland	
566	046	535	On Street Generally	Advanced design works for Edinburgh Gateway Minimum Option	Extension of above to cover additional design work on additional rails	On Street	Change B0	RL	D/C	€10,000.00	12/01/2012	RF CDR 8062	N/A		€0.00	€0.00			TST	11/01/2012		11/01/2012		
567	050	536	On Street Generally	Advanced design works for Edinburgh Gateway Minimum Option	To prevent delay by providing a solution for potential utility conflicts in advance	On Street	Change B0	RL	D/C	€10,000.00	12/01/2012	RF CDR 8061	N/A		€0.00	€0.00			TST	11/01/2012		11/01/2012		
568	047	537	On Street Generally	Design changes back to the tramline condition	To prevent delay by providing a solution for potential utility conflicts in advance	On Street	Change B0	RL	D/C	€10,000.00	12/01/2012	RF CDR 8060	N/A		€0.00	€0.00			TST	11/01/2012		11/01/2012		
569	057	538	Edinburgh Park	Additional Burning Costs associated with the extension to the Edinburgh Park office	To provide services for the office extension	On Street	Change B0	CS	CR	€79,200.00	11/01/2012	RF CDR 8064	N/A		€0.00	€0.00			CS	31/01/2011		31/01/2011	Approved by Colin Smith	
570	058	N/A	Shandwick Place	Over the Removal of Trees in Shandwick Place	It is considered more expedient for the contractor to remove trees in advance of the work being carried out. The trees are being cut out similar to the work carried out on the other side of the street.	On Street	Schedule 45	RL	D/C	€3,100.00	12/01/2012	RF CDR 8065	N/A		€0.00	€0.00			TST					WV - HUNTING TANKED WITH GETTING AGREEMENT FOR WORK
571	064		Hopetoun Street	Hopetoun Street Junction Design	Site investigation shows an unperformed retaining wall adjacent to the site	On Street	Change B0	RL	CR	€5,000.00	19/01/2012	RF CDR 8092	13/02/2012		€0.00	€0.00			TST	19/01/2012		19/01/2012	PL/CEC TO UNDERTAKE DESIGN & CONSTRUCTION	
572	061		Hopetoun	Non-Compliant Footpaths (ROCEB) (CECA)	CEC requirement to replace alternative surface	On Street	Change B0	SM	CR	N/A	19/01/2012	RF CDR 8090	14/02/2012		€0.00	€0.00			CEC	09/02/2012		09/02/2012	SM - DISCUSS SCOPES WITH BES	
574	063	542	Haymarket Station	Utility works including	To extend cable to the Haymarket Station	On Street	Change B0	SM	D/C	€10,000.00	13/01/2012	RF CDR 8091	14/02/2012		€0.00	€0.00			TST	19/01/2012		19/01/2012	CEC issued under 60.15	
575	060		Haymarket Station	Table Down Haymarket Station Visual Structure and Parking	To extend cable to the Haymarket Station	On Street	Change B0	SM	D/C	€10,000.00	13/01/2012	RF CDR 8092	14/02/2012		€0.00	€0.00			TST	19/01/2012		19/01/2012	WV - ESTIMATE RECD FROM BES 9TH MARCH, IN SUM OF £ 31,814.91 INCLUDING MARK UPS, RM FORWARDED TO NETWORK RAIL FOR COMMENT	
576	026	543	Haymarket to Gifford	Review related to 220mm Watermain Remedial Works	To review the finalised work following remedial works undertaken by Clack & Co	On Street	Change B0	SM	D/C	€40,000.00	24/01/2012	RF CDR 8085	17/02/2012		€0.00	€0.00			CEC	27/01/2012		27/01/2012	APPLY FOR TNC TO BES 1. CORE TO AGREEMENT & RAISE TCO	
577	065	544	Haymarket Viaduct	Definition of Sub Station Retaining Wall and Plinth	To extend cable to the Haymarket Station	On Street	Change B0	SM	D/C	€10,000.00	26/01/2012	RF CDR 8098	21/02/2012		€0.00	€0.00			TST	27/01/2012		27/01/2012	ESTIMATE RECD FROM BES 9TH MARCH 2012, WV TO GET AGREEMENT & RAISE TCO	
578	066	546	Site Wide	30 Provisional Sun Allowance	To remove unperformed provisional runs from the contract at value	On Street	Change B0	MM	D/C	€57,944.00					€0.00	€0.00			CEC	09/02/2012		09/02/2012	LETTER 19/10/12	
579	074	547	On Street Generally	Removal of 10m high and replaced traffic sign	Value engineering initiative	On Street	Change B0	MM	D/C	€1,100,000.00					€0.00	€0.00			CEC	09/02/2012		09/02/2012		
580	074	547	On Street Generally	Removal of 10m high and replaced traffic sign	Value engineering initiative	On Street	Change B0	MM	D/C	€1,100,000.00					€0.00	€0.00			CEC	09/02/2012		09/02/2012		
581	075	548	Section 1A	Construction of track work on the West Bank of the River	Value engineering initiative	On Street	Change B0	MM	D/C	€1,100,000.00					€0.00	€0.00			CEC	09/02/2012		09/02/2012		
582	081	549	Section 2A	Construction of track work on the West Bank of the River	Value engineering initiative	On Street	Change B0	MM	D/C	€1,100,000.00					€0.00	€0.00			CEC	09/02/2012		09/02/2012		
583	077	N/A	On Street Generally	Construction of track work on the West Bank of the River	Value engineering initiative	On Street	Schedule 45	MM	CR	€10,000.00	09/02/2012	RF CDR 8128	N/A		€0.00	€0.00			CEC	09/02/2012		09/02/2012	Withdrawn	
583.1	077	N/A	On Street Generally	Construction of track work on the West Bank of the River	Value engineering initiative	On Street	Schedule 45	MM	CR	€10,000.00	09/02/2012	RF CDR 8128	N/A		€0.00	€0.00			CEC	09/02/2012		09/02/2012	Withdrawn	
584	077	N/A	On Street Generally	Construction of track work on the West Bank of the River	Value engineering initiative	On Street	Schedule 45	MM	CR	€10,000.00	09/02/2012	RF CDR 8128	N/A		€0.00	€0.00			CEC	09/02/2012		09/02/2012	Withdrawn	
585	082	550	Site Wide	Re-use of existing materials	Value engineering initiative	On Street	Schedule 45	MM	CR	€21,565.00	15/09/2012	RF CDR 8131	Schedule 45		€0.00	€0.00			CEC	16/02/2012		16/02/2012	Proposed to BES 13/03/2012, G. Moberly of T&I preparing contract	
586	075	551	On Street Generally	Construction of track work on the West Bank of the River	Value engineering initiative	On Street	Change B0	MM	D/C	€21,565.00	15/09/2012	RF CDR 8131	Schedule 45		€0.00	€0.00			CEC	16/02/2012		16/02/2012	Signed TCO returned by BES 9/3/12	
587	71	557	On Street Generally	St Andrew Square - Value Engineering Design Changes	Value engineering initiative	On Street	Change B0	MM	D/C	€1,100,000.00	13/09/2012	RF CDR 8139	06/03/2012		€0.00	€0.00			CEC	12/09/2012		12/09/2012	Change Change for M&S	
587.1	71	557.1	On Street Generally	St Andrew Square - Value Engineering Design Changes	Value engineering initiative	On Street	Change B0	MM	D/C	€1,100,000.00	13/09/2012	RF CDR 8139	06/03/2012		€0.00	€0.00			CEC	12/09/2012		12/09/2012	Revised TNC and TCO 355 issued to BES 11/03/12, WV to check on TNC return, work with RL on agreement of design fee, and issue TCO	
588	78	N/A	On Street Generally	St Andrew Square - Value Engineering Design Changes	Value engineering initiative	On Street	Change B0	MM	D/C	€1,100,000.00	13/09/2012	RF CDR 8139	06/03/2012		€0.00	€0.00			CEC	20/02/2012		20/02/2012	Proposed value change confirmed by BES (email) TCO 355 PASSED ON 16/03/12, WV TO CHECK ON TNC RETURN, WORK WITH RL ON AGREEMENT OF DESIGN FEE, AND ISSUE TCO	
589	83	552	Approach	Construction of track work on the West Bank of the River	Value engineering initiative	On Street	Change B0	MM	D/C	€1,100,000.00	20/02/2012	RF CDR 8166	20/03/2012		€0.00	€0.00			CEC	27/02/2012		27/02/2012	Proposed value change confirmed by BES (email) TCO 355 PASSED ON 16/03/12, WV TO CHECK ON TNC RETURN, WORK WITH RL ON AGREEMENT OF DESIGN FEE, AND ISSUE TCO	
590	075	N/A	The Mound	New cycleway from The Mound into Princes Street	Value engineering initiative																			

Appendix 5 – Risk Register

ID	Task	Description	Owner	Status	Start Date	End Date	Milestone	Task Summary				Task Details				Notes	Risk	Priority
								Phase	Sub-Phase	Start	End	Start	End	Start	End			
10001	Project Kick-off	Define project goals and objectives	John Doe	Complete	2023-01-01	2023-01-05	Project Kick-off	Phase 1	Sub-Phase 1.1	2023-01-01	2023-01-05	2023-01-05	2023-01-05	Project Kick-off meeting held, all stakeholders aligned on project goals.	Low	High		
10002	Requirements Gathering	Identify and document project requirements	Jane Smith	In Progress	2023-01-10	2023-01-20	Requirements Gathering	Phase 2	Sub-Phase 2.1	2023-01-10	2023-01-20	2023-01-15	2023-01-20	Requirements document draft in progress, pending stakeholder review.	Medium	Medium		
10003	System Design	Develop system architecture and design	Mike Johnson	On Hold	2023-01-25	2023-02-10	System Design	Phase 3	Sub-Phase 3.1	2023-01-25	2023-02-10	2023-02-05	2023-02-10	System design work paused due to budget concerns.	High	Low		
10004	Development	Develop and test software components	Sarah Lee	On Hold	2023-02-15	2023-03-05	Development	Phase 4	Sub-Phase 4.1	2023-02-15	2023-03-05	2023-03-01	2023-03-05	Development work paused due to resource allocation.	High	Low		
10005	Deployment	Deploy the system to production environment	David Kim	On Hold	2023-03-10	2023-03-20	Deployment	Phase 5	Sub-Phase 5.1	2023-03-10	2023-03-20	2023-03-15	2023-03-20	Deployment work paused due to security audit requirements.	High	Low		
10006	Project Review	Conduct a final review of the project and lessons learned	John Doe	Complete	2023-03-25	2023-03-30	Project Review	Phase 6	Sub-Phase 6.1	2023-03-25	2023-03-30	2023-03-28	2023-03-30	Final project review completed, lessons learned documented.	Low	High		

Appendix 6 – Route Map

Edinburgh Tram Network – Route Map & Key Locations



CEC01942255_0091

Appendix 7 – Acronyms

ACRONYMS

ACCB	Accommodation and Boundary Works
AiP	Approval in Principle
ANC	Advice of Non Compliance
APPP	Prior Approvals – Detail Design
APPR	Approvals
APPT	Technical Approvals – Detail Design
ARCH	Architecture
AUXI	Auxilliary Power
BAA	British Airports Authority
BBS	Bilfinger Berger Siemens
BLDS	Buildings
BRDG	Bridges
BSC	Bilfinger Berger / Siemens / CAF - previous consortium
CAF	Tram Provider - (Construcciones y Auxiliar de Ferrocarriles)
CAR	Corrective Action Request
CAR	Water Environment (Controlled Activities) Regulations 2011
CDM	Construction (Design and Management) Regulations 2007
CEC	City of Edinburgh Council
CECS	CEC Services
CfS	Case for Safety
CHAR	Charette Changes
COCP	Code of Construction Practice
COMM	Commissioning
CVI	Confirmation of Verbal Instruction
DAS	Design Assurance Statement
DASB	Design – As Built
DaST	Deliver a Safe Tram
DDAP	Detailed Design Assurance Plan
DEMO	Demolition
DEPO	Depot
DKE	Dynamic Kinetic Envelope
DoC	Declaration of Conformity
DRAN	Drainage
DtTS	Deliver the Tram Safely
E&M	Electrical & Mechanical
EAL	Edinburgh Airport Limited
EART	Earthworks / Embankments
ELEC	Electricity
EMC	Electromagnetic Compatability
ENVI	Environmental
ER's	Employers Requirements
ESM	Engineering Safety Management
FAT	Factory Acceptance Test
FATs	Factory Acceptance Tests
GASS	Gas
GEOT	Geotechnical
HAZID	Hazard Identification Study
HAZOP	Hazard and Operability Study
HIGH	Highways
HIRA	Hazard Identification and Risk Assessment
HMRI	Railway Inspectorate
HS	Historic Scotland
HSE	Health and Safety Executive
HV	High Voltage
ICCO	Independent Certifiers Change Order
ICP	Independent Competent Person

IDC	Inter Disciplinary Check
IDR	Inter Disciplinary Review
Infraco	Infrastructure contract
ISA	Independent Safety Assessor
ISRP	Infrastructure Safety Review Panel
ITP	Inspection and Test Plan
JNCS	Junctions
KPI	Key Performance Indicator
LAND	Landscaping
LIGH	Lighting
LOLER	Lifting Operations and Lifting Equipment Regulations 1998
MANA	Management
MECH	Mechanical
MILE	Milestones
MISC	Miscellaneous
MODL	Modelling
MUDFA	Multi-Utility Diversions Framework Agreement
MUDFA	Multi Utility Diversions Framework Agreement
MULT	Multi-Discipline
NCR	Non Conformance Report
NR	Network Rail
NWR	Network Rail
O&M	Operation and Maintenance
OCC	Operational Control Centre
OCIP	Owner Controlled Insurance Policy
OCL	Overhead Catenary Line
OLE	Overhead Line Equipment
ORA	Operational Risk Assessment
ORR	Office of Rail Regulation
ORS	Operational Radio System
OTHW	Other Works
PHA	Preliminary Hazard Analysis
PLAT	Platforms
PM	Planned Maintenance
POWR	Power (Traction)
PSCC	Project Safety Certification Committee
QCRA	Quantified Cost Risk Analysis
QRA	Quantified Risk Analysis
QSRA -	Quantative Schedule Risk Analysis
RAIB	Rail Accident Investigation Branch
RAM	Reliability Availability Maintainability
REL	Railway Electrification
RFI	Request for Information
RFO	Request for Opinion
RIDDOR	Reporting of Injuries, Diseases and Dangerous Occurences Regulations 1995
ROGS	The Railway and other Guided Transport System (Safety) Regulations 2006
RSA	Road Safety Audit
RSAR	Road Safety Audit Report
S&T	Signalling and Telecoms
SAC	Safety Application Condition
SAT	System Acceptance Test
SATs	Site Acceptance tests
SCADA	Supervisory Control and Data Acquisition
SDS	System Design Services
SEPA	Scottish Environmental Protection Agency
SEWR	Sewerage
SFAIRP	So Far As Is Reasonably Practicable
SGN	Scotland Gas Networks
SI	Site Instruction
SIGN	Signalling
SIT	System Integration Test
SMS	Safety Management System
SNH	Scottish Natural Heritage
SP	Scottish Power
STAK	Stakeholder
STRL	Street Lighting
STRU	Structures / Retaining Structures
SUBM	Submissions
SUBS	Sub-Stations
SURV	Surveys

SW	Scottish Water
T&T	Turner & Townsend
TCO	Tie Change Order
TM	Traffic Management
TNC	Tie Notice of Change
TS	Transport Scotland
TSS	Technical Support Services
UCO	Utilities Change Order
UNC	Utilities Notice of Change