Turner & Townsend



Julian Weatherley Director

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

t: +44 (0)131

e: julian.weatherley@turntown.co.uk

w: turnerandtownsend.com

Edinburgh Tram Project Full Progress Report No. 12 19th August to 15th September 2012 FINAL

E

CONFIDENTIAL - LEGALLY PRIVILEGED AND FOI(S)A EXEMPT

September 2012

Progress Report No. 12 - 19th August to 15th September 2012

FINAL

CONTENTS

1	Executive Summary	3
2	Health, Safety & Environment	6
3	Programme	12
4	Risk	17
5	Commercial	20
6	On Street - Enabling Works & Utility Legacy Works	28
7	On Street - Main Works	31
8	Off Street Works	33
9	Trams	37
10	Assurance	39

Appendix 1 - Dashboards

Appendix 2 - Health, Safety & Environment and Consents Tracker

Appendix 3 - Cost Report

Appendix 4 - Change Log

Appendix 5 - Risk Register

Appendix 6 - On Street Schematic

Appendix 7 - Organisation Chart

Appendix 8 - Route Map

Appendix 9 - Acronyms

Appendix 10 - Draft Rev 4c 22 Programme Saving - Advice Note

Rev	Originator	Approved	Date
0	Shirley-Anne Collin	Julian Weatherley	21-09-2012
1	Shirley-Anne Collin	Julian Weatherley	01-10-2012
2	Shirley-Anne Collin	Julian Weatherley	05-10-2012

© Turner & Townsend. All rights reserved October 12. This document is expressly provided to and solely for the use of City of Edinburgh Council and must not be quoted from, referred to, used by or distributed to any other party without the prior consent of Turner & Townsend 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 19th of August to 15th September 2012. It incorporates progress reported within Infraco and CAF Progress Reports No. 5-5 to the 18th of August 2012 and the 30th of September 2012 respectively.

There were nine health & safety incidents recorded during the period, none of which have been identified as Serious / Significant.

Infraco have produced a risk assessment in relation to soil removed from Baird Drive. This is currently under review by SEPA.

No erosion of the 22 week time bank took place during the period with eleven weeks remaining to date. Turner & Townsend currently estimate that a further erosion of up to four weeks will result from the need to keep the bus station operational during the York Place works. Infraco have indicated that they consider this additional erosion will take the total erosion beyond 22 weeks, however this has yet to be substantiated.

Sectional completion dates (excluding risk and opportunity) for Section B, C and D are forecast for the 5th of March 2013, 3rd of February 2014 and the 4th of May 2014 respectively. These forecasts exclude any delay relating to the need to keep the York Place bus station open. The critical path has now switched to run through Section 5C (Edinburgh Gateway).

Turner & Townsend have issued proposed wording to Infraco, identifying exclusions to the definition of Section B. These include the exclusion of fare collection equipment.

Turner & Townsend has presented to CEC potential programme value engineering opportunities. It had previously been intended that this exercise would support discussions with Infraco in relation to the production of a Rev6 programme. Following clarification of Infraco's position, CEC and Turner & Townsend have agreed not to pursue the production by Infraco of a revised contract programme. Emphasis will remain on the agreement of responsibility for changes to time bank erosion in relation to historical progress. A client side "Planners Forum" will be established to agree forecasts relating to future programme activities. The VE opportunities identified will inform this forum.

The removal of the "half plug" on Princes Street was achieved on programme on the 14^{th} September 2012. This should enable the commencement of Phase 2 of the York Place enabling works on the 21^{st} of September.

A number of Scottish Water legacy issues remain which cannot be addressed without significant reconstruction works. Some of these may only be resolved through wider commercial discussions with Scottish Water. Resolution of these items is being pursued by Turner & Townsend and CEC. Scottish Water behavioural issues continue to frustrate the resolution of matters on site.

McNicholas have commenced works to address Type 2 conflicts. The forecast cost of completion of these items is currently in excess of previous estimates and the budget allowance. Turner & Townsend are working with McNicholas to affect further efficiencies in relation to the scope and execution of these works. For the purposes of cost reporting Turner & Townsend has made an adjustment to the base estimate included in Anticipated Change and the risk estimate covers

Progress Report No. 12 - 19th August to 15th September 2012

FINAL

the balance. It should be noted that there is no further allowance beyond this to cover uncertainty and unforeseen work.

Infraco are now in possession of all On Street areas from Haymarket to Lothian road and from Princes Street to North St Andrew Street. Works in Shandwick place are progressing ahead of the Rev5 programme.

Landscaping works in Shandwick Place have been de-scoped from Infraco. CEC has requested that Turner & Townsend tender these works as a separate contract.

Whilst good progress is being made throughout the Off Street areas, some slippage has occurred against the critical float paths of Edinburgh Gateway and Murrayfield corridor. This has resulted in seven days slippage of the project Section C and D dates.

Discussions are ongoing between CEC and the airport in relation to the resolution of issues at Eastfield Avenue Crossing.

Infraco's latest attempts to remedy water ingress snags at the depot have failed. Proposals have been sought by Turner & Townsend.

Twenty one trams have now been delivered to the Gogar depot with nineteen having completed routine testing and commissioning.

Following an increase by Almex in their price for the project fare collection system, CEC have requested that procurement be re-considered to include Parkeon. Turner & Townsend have advised that Parkeon are in a better position to supply the Integrated Fare Collection system to Edinburgh Trams to the required functionality and within the required timescale, based on a preliminary analysis of latest submissions. However, Re-scoring of the latest submissions by both suppliers remains outstanding and Turner & Townsend have further advised that CEC seek advice in relation to the public procurement process going forward.

The commercial issues that have been progressed during the period include an increase to the cost report for Infraco's sub-consultant designer's management fee. Following a meeting with CEC/Infraco, Infraco have been asked to provide justification for the contractual entitlement.

A difference of opinion has arisen in relation to overhead and prelims in the case where the work is changed and the original specification is part omitted and a new specification has been added. Infraco has submitted a proposal which results in a higher overhead and prelims recovery than the contract provides for. This has been queried and work is ongoing to obtain a resolution. The Independent Certifier has issued an opinion on the matter. A template for calculation is to be agreed as a basis for the calculation of applications. The Independent Certifier is meeting separately with Infraco and Turner & Townsend to assist in reaching agreement. There would be an adverse impact of c. £300K to £400K if Infraco's interpretation were to be accepted.

The issue of the change order for the saving associated with the programme reduction of 22 weeks reported previously has not been resolved. Turner &Townsend remain of the view that there is no entitlement to a payment for £6.45m under the contract and interpret the intent of the parties at the time of concluding the VE arrangements in February 2012 was that payments should be calculated against actual time and prelims saved.

Progress Report No. 12 – 19th August to 15th September 2012 FINAL

Turner & Townsend have provided an advice note to CEC which confirms Turner & Townsend's view that there is no clear entitlement to a standard contract change order for £6.45m. The advice note advises of the potential consequences of not issuing a change order for £6.45m and the scenarios which may transpire, recognising that Infraco have verbally indicated to Turner & Townsend that they intend to pursue a dispute and withdraw cooperation in the event that such an instruction is not forthcoming. CEC may wish to consider a negotiated settlement which reduces the risk of lack of cooperation going forward and achieves CEC's overall project objectives. A number of scenarios have been set out to inform CEC's decision. Turner & Townsend's full Advice Note is contained within Appendix 10 of this report.

Prior to the preparation of the advice note, Turner & Townsend recommended that legal advice should be sought by CEC in respect of Infraco's entitlement to a change. It is understood that this advice has been received by CEC, however Turner & Townsend have not had sight of this documentation.

CEC have advised that a Memorandum of Understanding is being prepared which re-affirms cooperation of the parties and working arrangements to the end of the project.

2 Health, Safety & Environment

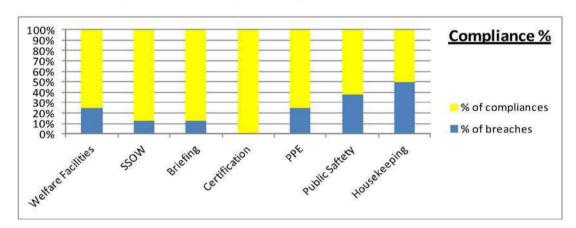
During the last period Turner & Townsend have been working to implement a number of initiatives regarding Health and Safety on the project. These have comprised:

- Project briefings have been held to cover Occupational Health and Safety on site to drive improvement across the project; this has been supported by McNicholas, Crummock and Bilfinger Berger – Siemens.
- An Occupational Health Specialist from the H&SE visited the project on Tuesday 25th
 September. 2012. This was a fact finding exercise connected with a National HSE initiative.
 BBS have advised that no issues were identified relating to the Principle Contractor
 Management of Occupational Health.
- Following a review of potential candidates for a Health & Safety Inspector, Turner & Townsend have made a recommendation to CEC to appoint Iain Glenn. A decision on the way forward is awaited from CEC.
- Undertaking targeted monitoring. With a continued emphasis on housekeeping on sites where there is joint occupancy by contractors.

2.1 Management of Health & Safety

Joint monitoring between Turner & Townsend and the Principal Contractors has continued to progress well during this period.

The results of this periods monitoring of leading indicators is identified below



Assuming approval is granted to appoint a Health & Safety Inspector (See Section 2, above) greater emphasis will be placed on the monitoring and implementation of the actions identified by the contractors / project team to drive an improvement in Health and Safety standards across the project.

FINAL

Bilfinger Berger – Siemens held their monthly Occupational Health & Safety Meeting on the 4th of September which was attended by Turner & Townsend. Agenda items for the meeting focused on occupational health issues and included:

A presentation by Bilfinger Berger on "What is Occupation III Health" which addressed:

- Skin diseases
- Hand arm vibration syndrome
- Noise induced hearing loss
- Musculoskeletal disorders (back problems)
- Occupational lung disease
- Asbestos related diseases
- Short videos to highlight specific occupation health issues.
- Presentations by contractors. These presentations highlighted specific occupational health issues that the presenters had actually suffered from e.g. hand arm vibration and skin ailments due to exposure to wet concrete.
 - Good welfare provision on site presented by Expanded.
 - Occupational Health presented by Land & Build
- Healthy Working Lives Update Health Surveillance in Practice
- An update regarding the visit by the Health and Safety Executive scheduled for the 25th of September as part of their project to assess the implementation of occupational health on construction projects.
- Results of the trend analysis for August:
 - PPE Wrong choice or not wearing
 - Fencing
 - Housekeeping
- CoCP results / Monitoring Leading Indicators Turner & Townsend presented a review of the results of the CoCP inspections that had been undertaken in P5. Turner & Townsend presented the chart identifying the monitoring of the leading indicators and explained the process by which the results of the joint inspections identified as leading indicators were highlighted and issues / trends monitored.
- Specific issues covered under any other business:
 - Keys left in machines.

FINAL

- Ownership- Don't walk past?
- Deliveries- insure they are planned and someone is on site to sign and accept.
- Unprotected openings
- Emptying bins

2.2 Incident reporting

During the last period there were nine health & safety incidents on the Edinburgh Tram Project none of which were identified as serious / significant. The incidents comprised one incident involving members of the public, six incidents involving service damage, one road traffic accident and one near miss.

- The six incidents which involved service damage comprised one to a Scottish Water sewer and manhole, two to buried comms cables, one LV power cable and two to traffic signalling cables. Investigation reports are being reviewed with the relevant contactors to identity key learning points.
- The incident with the member of the public included a pedestrian slipping on a temporary walkway. Additional surfacing has been re-applied to walkway.
- One incident regarding Scottish Water assets at the Murrayfield underpass has resulted in an incident investigation being carried out by Bilfinger Berger. A joint meeting between Bilfinger Berger and Turner & Townsend which resulted in the incident report being revised. BBS are currently developing an action plan for implementation to be agreed with Scottish Water.

Incident Table:

Incidents reported within this period:

Date	Location	Detail	Contractor	Classification
23/08/2012	Princes Street	Damage to traffic signal cable	Crummock	Service damage
24/08/2012	Princes Street	Damage to traffic signal cable	Crummock	Service damage
27/08/2012	St Andrew Square	Member of Public slipped on walkway and injured knee. Treated by paramedics.	Crummock	Member of public
27/08/2012	Hope Street / Queensferry Street	Damage to 2 BT cables	McNicholas	Service damage
27/08/2012	Lothian Road / Shandwick Place	Damage to fibre optic cable.	McNicholas	Service damage
30/08/2012	St Andrew Square	Damage to a LV cable.	McNicholas	Service damage
07/09/2012	Roseburn Street	Lorry caught the forks of a stationary telehandler and broke wing mirror.	Grahams	Road traffic accident
31/08/2012	Murrayfield underpass	Use of sewer prior to passing air test, change in method of work ref over pumping, deconstruction of Scottish Water manhole without ATC in place.	Grahams	Service damage
11/09/2012	South St Andrew Street	Section of RB2000 site fencing was blown over outside RBS.	McNicholas	Near miss

2.3 Incident Progress

- Two incidents were reported which related to cyclists. Incidents involving cyclist safety close to tram rails are subject to an ongoing review undertaken by The City of Edinburgh Council and are not included in the Incident Table below as they are monitored by a separate Council work stream.
- Reports have been exchanged between Turner & Townsend and Scottish Water in relation to the Grosvenor Street Sewer collapse. The responsibility for the collapse of the sewer is still not been agreed.
- An incident review meeting has been held between Turner & Townsend, City of Edinburgh Council and McNicholas to review the incident report regarding the overturning of the mini excavator which has also resulted in a revision to the incident report. McNicholas have implemented revised management controls to reinforce the supervision on site and to improve the planning and supply of construction plant to carry out the utility works.

2.4 Safety Initiatives

A further review of housekeeping on the sites has been the focus of review during this period. The results are included in graphic form as Leading Indicators within the Deliver the Tram Safely Report which is included within the Health & Safety Dashboard (See Appendix 1).

The following safety initiatives will be targeted in the next period:

- Management of lifting operations.
- Vehicle movements in and around work sites.

The Positive Intervention process has now been implemented by Bilfinger Berger and their contractors. There has been positive highlighting of 131 unsafe conditions since its commencement in June 2012. It is proving to be of benefit in that day to day issues are being identified and are being closed out in real time on site.

2.5 CDM Regulations

The Construction Phase Plan developed by McNicholas has been reviewed to confirm that the revised management arrangements that have been developed following the incident investigation relating to the overturned excavator have been included and responsibilities allocated.

2.6 Environmental

There were no environmental incidents reported during this period.

An 'Air Raid' shelter was identified during works at the east end of York Place. This is thought to be part of the old tram structure. John Lawson (CEC Archaeological Services) and a representative from Guard visited site and agreed that a photographic record; to be produced by the site team would be adequate. As this find is just outside the work area it will not have any impact on the project works.

The Conan Doyle Monument has now been reinstated by The City of Edinburgh Council. Further work is required by CEC to clean the stonework and fit the front plaque.





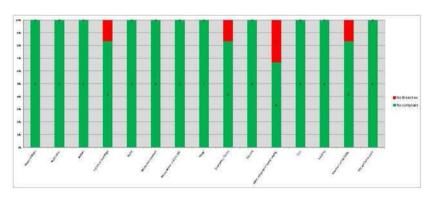
FINAL

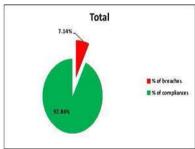
An environmental inspection was carried out with McNicholas on the 5th September 2012. The inspection covered all McNicholas worksites. No major issues where identified. It was noted that there are now a number of wheelie bins in place at the York Lane compound for the storage of special waste prior to removal as controlled waste. When necessary McNicholas will use additional storage space at the old Leith Bus Depot, the waste will be held until there is enough to make a load. A number of site operatives were spoken to during the inspection, with regards to address the issues of litter on site.

2.7 CoCP

CoCP compliance was recorded at 93% during the Period. The results of the CoCP monitoring have been passed to The City of Edinburgh Council Communication Team to be uploaded to the project web site. Details of the breaches are included within the Deliver the Tram Safely report included within Appendix 2.

% Compliance





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

3 Programme

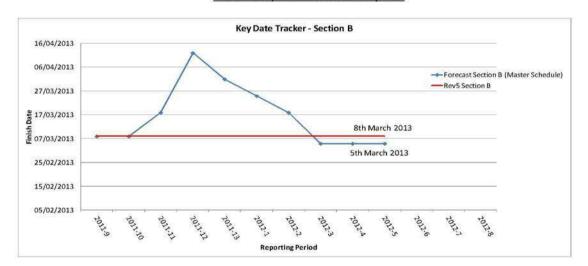
3.1 Programme Reporting

As the project steadily switches from civils to E&M works, it is anticipated that the current contract programme (Rev5) will become increasingly un-representative of intended progress on site and anticipated future works. This will be further exacerbated as Infraco re-sequence On Street works to take advantage of the benefits brought about by the VE arrangements implemented in February 2012. Following Infraco's advice that they do not intend to issue a further revision of the contract programme, Turner & Townsend have held discussions with CEC around the establishment of a client side "Planner's Forum". This forum would be charged with maintaining the Master Schedule as representative of true progress and which forecasts a best estimate of the project Section Completion dates.

3.2 Summary

This period, the stated programme performance has been below recent levels. This is due to a deficit in actual versus planned progress along key float paths (para 3.3), along with a requirement to restructure the Master Schedule to include changes to scope, not currently shown in BBS' Rev5 (para 3.5.2). The net result is that the Section C & D dates have slipped 7 calendar days to the 3rd of February 2014 and the 4th of May 2014 respectively. However, these milestones continue to remain earlier than the contractual dates as a result of previous Cost Engineering initiatives implemented in early 2012 and the implementation of the York Place Radical Programme.

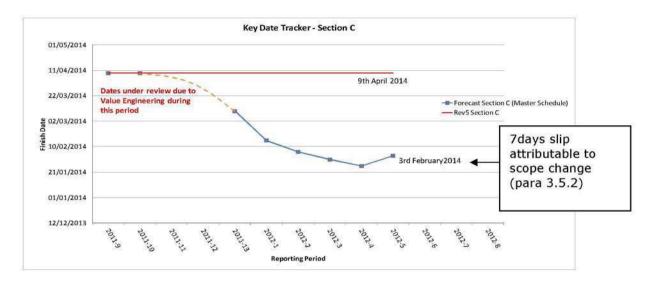
The charts below track the forecast dates (from the Master Schedule) for the Sectional Completion milestones against the contractual dates and their movement throughout the project lifecycle to date.



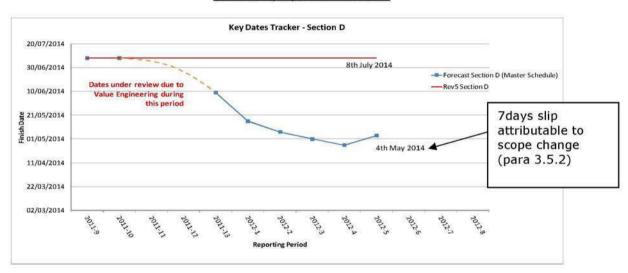
Section B; Test Track Complete

Section C; All Construction Complete (including T1 & T2 testing)

FINAL



Section D; Open for Revenue



3.3 Progress this Period

Progress reported this period has seen a marked divide between the On Street and Off Street sections. On street there has been good progress across all sites. In the case of off street, progress in some sections has also been good; however along the key float paths progress has not been as positive. Whilst this has not directly attributed to the movement of the Section C & D dates, it has seen an erosion of float along the Murrayfield Corridor as well as along Section 7A (Depot to Airport), subsequently increasing risk to the project and the Section B, C & D dates.

Along the Murrayfield corridor, there has been continued turbulence with several structures' completion dates. Reinforced earth works at Murrayfield Viaduct (S21A) and Murrayfield Retaining Walls S21B and S21D have all shown poor progress this period, which has impacted on the subsequent planned commencement of track civils. The overall result forecasts a further slippage (4 days in period) to Section 5A completion. To mitigate this series of period slippages opportunities for earlier commencement of track civils may arise now that structures' works are out of the ground.

Progress Report No. 12 – 19th August to 15th September 2012 FINAL

Despite BBS' period report 5-5 stating ongoing works with the attenuation tank at the Gateway, no progress was shown against the Rev5. As such, Turner and Townsend have used their own site data and project records to input progress against the Gateway works for this period. It has been assessed, based upon Expanded's schedule of works, that attenuation tank works are approximately 2 weeks behind programme and the King Post embankment works are on schedule. As a result it is Turner and Townsend's understanding that there is currently no impact to the subsequent commencement of track laying at the Gateway.

The forecast completion for Section B continues to be the 5^{th} of March 2013, marginally ahead of the contractual date 8^{th} of March 2013. This date has been achieved through improved detail for Section B Testing and Commissioning. However, progress to both Section 7A track laying ahead of the tamper works and E&M works at the tram-stops has been negligible, with slippages of 3weeks shown in some instances. This lack of progress has been absorbed by the float that has been generated by the fixed date for the tamping machine works, planned to commence on the 22^{nd} of October 2012.

Work to the outbound track 'Plug' area at St Andrews St/Waverley Junction has progressed to programme and has opened as scheduled on the 14th of September 2012 allowing revised traffic phasing in York Place to commence on the 21st of September 2012.

Shandwick Place works continue to progress significantly ahead of the Rev5 programme in most locations. Interfaces between BBS and McNicholas are being coordinated with minimum disruptions and good cooperation on all sides. In the Crescent area, excavation works are now substantially complete with final preparation for the pouring of the Inbound RC slab, planned for the 13th of September 2012. Black Concreting Works have also commenced in the Inbound section between Lothian Road and the Crescents.

At Haymarket the link into the Viaduct has commenced together with outbound Track laying activities.

FINAL

3.4 22 Week "Time Bank"

Turner & Townsend meet each period to review and agree the project drawdown against the 22 week time bank. These discussions are informed by joint reviews of the "On Street Delay Tracker" which is reviewed on a weekly basis between the parties.

There has been no movement to the "time bank" this period. Based on Infraco's programme update contained within their period 5-5 progress report, and subsequent agreement in the 'Planners Forum', 11 weeks of the 22 week cost engineering programme saving has been eroded as a result of utilities works and the re-design of the On Street drainage.

With the majority of utility conflicts now resolved, progress is being seen in most On Street areas. There is evidence to suggest further improvement to the time bank could be realised in the next few periods as Infraco take advantage of potential de-scoping of works and improved works arrangements. These result from a natural re-sequencing of on street civils works brought about by the removal of embargos and revised traffic management arrangements.

There is a risk to the draw down resulting from CEC's request to deliver the York Place works whilst keeping the bus station open. The original 22 week saving had been predicated on a complete closure of York Place. Initial estimates by Turner & Townsend suggest that an additional delay in the region of one month duration will result. This would switch the critical works On Street from Shandwick Place to York place.

3.5 Infraco have yet to confirm their assessment of the impact of keeping the bus station open, however they have verbally indicated an a predicated overall drawdawn in the region of 22 weeks. Programme Structure

3.5.1 York Place 'Radical Programme'

Option 2; of the York Place Radical Programme has been implemented and works have commenced and the Master schedule has been updated to reflect the changes implemented.

As a result of CEC consultation with stakeholders the York Place works will now be delivered whilst keeping the bus station open.

3.5.2 Critical Path and Alternate Float Paths (Master Schedule)

The current forecast completion dates for Section B, C and D are in advance of the contractual dates, with an overall saving of more than 2 months to the schedule. The Critical Path referred to below, relates to the 'Longest Path' through the programme which would adversely affect the currently forecast end date if delayed.

As result of the good progress along Shandwick Place which has also enabled Phase 5 to be brought earlier, in line with the completion of Phase3 works, the Critical Path now runs through:

Off Street: Section 5C (Edinburgh Gateway) / Tamping and Full Line Track Finishes

There continues to be some question over the planned dates for commencing track laying at the Gateway. This is due to conflicting information provided by BBS in their Rev5 schedule and a Gateway Enabling Works letter dated the 5th of July. At present Turner and Townsend's Master

FINAL

Schedule is based on the less favourable outcome, therefore it is possible in future periods that the critical path could switch to one of the alternate float paths below:

- 1 On Street: Section 1D (Shandwick Place)/ Section 1D E&M Installations
- Off Street: Section 5A (Roseburn Junction to Balgreen Road)
- 3 On Street: Section 1C (Waverley Junction) / (York Place utilities / main works)

There has also been a change to the nature of works along the critical path. Off-street E&M works no longer lie on the critical path and have been replaced by tamping and full line track finishes, as the final works driving construction completion. This is based upon recent discussions with BBS who have stated that due to a portion of ballast track within the Gateway works, not shown in the Rev5, there is a requirement for the services of a tamping machine in order to complete the Section 5C track works. Infraco have intimated that the tamping machine shown in the Rev5 for works along Section 5A, will be tasked to tamp at both Sections 5A and 5C. It is also believed that BBS intend to delay the tamping dates for Section 5B, in order to have this section's tamping coincide with Section 5A and 5C, thereby confining all tamping works to the one visit much later in the project. The Master Schedule has been amended to reflect the new works requirement for the "5A tamper", monitoring of the slipping date for "5B tamper" continues.

3.5.3 Programme Value Engineering

On the 29th of August 2012, Turner & Townsend presented a series of On Street and Off Street programme opportunities to CEC. Within the presentation, specific activities and durations, from the Rev5 schedule were identified as potential value engineering savings. No formal engagement with Infraco is currently intended in relation to these savings. Turner & Townsend will use this information to inform the client side assessment of ongoing and future progress.

3.5.4 Deferred Fit-Out of Tram Stops

Infraco's proposed, deferred fit-out schedule is yet to be agreed. The schedule is based upon a sequential strategy in completing tram stops west to east (Depot to York Place) along the route. Infraco's intent appears to be a streamlined series of completion dates based upon the installation of the shelters and completion of the E&M works at each tram stop. However, there remain a number of issues with the proposal.

Due to the length of the deferred fit-out schedule more than half of the stops will still have a significant period of time dormant (ie duration between completion of works and the commencement of the Testing and Commissioning Phase). In the case of Bankhead, Saughton and Balgreen tram stops, which were primarily identified as stops most at risk, their completion dates have not been significantly deferred.

Turner & Townsend are exploring with Infraco, the potential for taking positive measures to further protect trams stops against vandalism. These measures may include:

- Making cctv operational at the time of installation
- · Deferring the installation of tram stop glazing or protecting glazing
- Installing exclusion fencing around tram stops

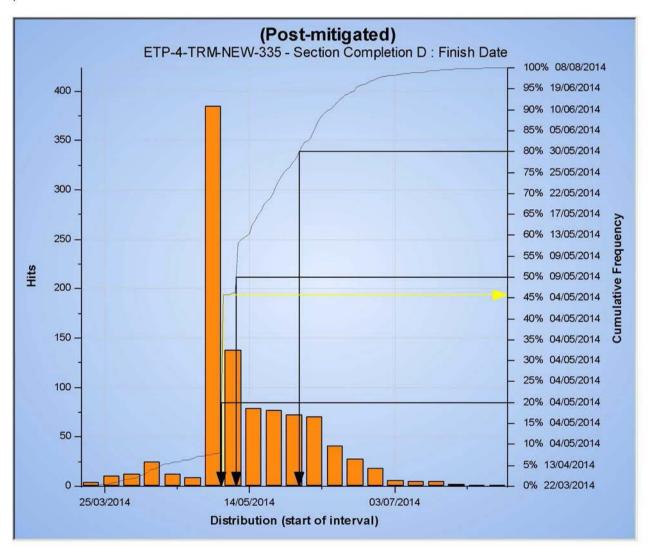
4 Risk

4.1 QSRA Tracker

A QSRA update was completed this period and the results are detailed below.

The latest QSRA was carried out on the most up to date master schedule as at the 18th of September 2012. This was analysed with the current risk and opportunity profile to calculate the milestone dates as shown below. The analysis predicts a P80 project completion date of the 30th of May 2014 against the current risk and opportunity profile and a 46% probability that the master schedule completion date of the 4th of May 2014 will be achieved as shown in the distribution graph below.

P80 represents an 80% likelihood of completing the milestone on that date, it is usual practice to utilise the P80 date as a standard on a project of this size, nature and public profile.



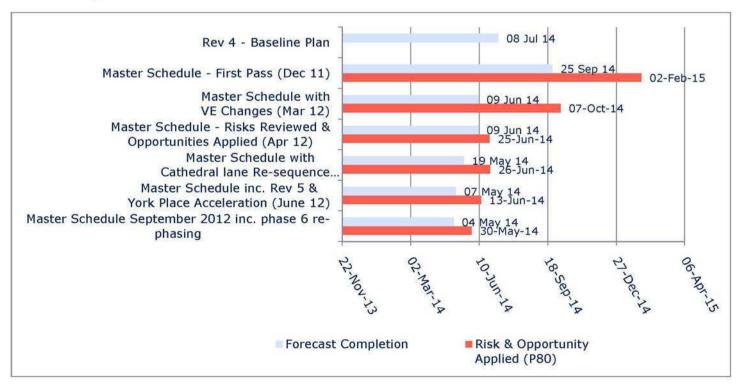
Progress Report No. 12 - 19th August to 15th September 2012

FINAL

QSRA's have been and will continue to be carried out on a quarterly basis unless there are any new significant changes to programme or delivery strategy. These iterations of the Quantitative Schedule Risk Analysis have been carried out since September 2011, details and progress made are summarised below:

QSRA Iteration	What is Included (Description)
Master Schedule – First Pass	High Level schedule produced for QSRA analysis. Including utilities diversions.
Master Schedule with VE Changes	Post VE exercise Revised On-Street phasing Removal of summer embargoes More mature Risk Register
Master Schedule – Risks Reviewed & Opportunities Applied	Updated programme Detailed Risk review Identification of opportunities and application to the QSRA
Master Schedule with Cathedral Lane Re- Sequence	Further updated programme Early start of Cathedral Lane Sub-Station works Impacted Scottish Water risks Risk Review
Master Schedule – including Rev5 and York Place 'Radical Programme' changes	Further updated programme Rev 5 changes to Off-Street section Early start of utility diversion works at York Place Risk Review
Master Schedule as at September 2012 including phase 6 re-phasing	As above plus progress to date and the rephasing of section 6 to follow phase2 instead of 5. This is assumed to be achievable.

The chart below shows the forecast dates (before risks and opportunities are included) and the 'impacted' dates at each iteration:



FINAL

The risk profile is made up of schedule related risks as detailed in the attached risk register. The opportunities Turner & Townsend have assessed in relation to the master schedule and included in the QSRA are shown below:

- · Value Engineering opportunities identified at Shandwick place
 - This has been added as a re-phasing of phase 6 works to follow phase 2 and assumed to be possible.
- · Value Engineering opportunities identified at Murryfield to Balgreen corridor
- · Value Engineering opportunities identified at Gateway
- · Opportunity to reduce full line testing if first phase of testing is successful
- · Opportunity to start testing and commissioning early on the off street section
- Opportunity to complete utility diversions within 22 week period assigned in master schedule

4.2 Project Risk update

Each period the risk register is reviewed and risks are assessed on an ongoing basis, with a general trend of reduction of risks as the team continues to mitigate against the potential impact.

At the last 4 weekly risk review the following risks were positively reduced or closed out. No new risks were identified in the period. (See following page)

Risk	Mitigations/ Reasons
Design approvals milestones are not met in line with rev4 programme and construction is delayed as a consequence	Closed. Delays and consequences are now included within other design risks
Reduced system envelope of TRW system (less than 1,200 mm) - on street	Works have progressed reducing the area where Bridging Track Form may be required
Risk that the project relationship with Scottish Water deteriorates and access to utilities and resolving of delay issues becomes prolonged	Works have progressed at York Place and St. Andrew Square reducing the area where potential Scottish water issues can arise.
Discovery of additional Track construction conflicts (Live)	Works have progressed at York Place and St. Andrew Square reducing the area where potential conflicts can be found therefore the probability reduced
Discovery of old Tram tracks and equipment	Works have progressed at York Place and St. Andrew Square reducing the area where Tram tracks can be found. Incidents have occurred but it is believed they have been successfully over come with minor disruption.
OLE bases conflict with existing unknown and known utilities	Works have progressed at York Place and St. Andrew Square which leaves minimal OLE bases to be completed.

FINAL

5 Commercial

5.1 Commercial Summary

5.1.1 Cost summary

	£M	Comment	
Contract Sum	479.66		
Committed Costs			
approved change	15.12	Includes programme impact rev 3A to rev 4, £2M included for Sep-11	
changes in progress	4.11	£2.5M included for Rev 3A to Rev 4, period 20 th May to 8 th Jul-14	
anticipated changes	7.81	Changes required to complete, subject to approval	
contributions	-7.64	Third party contributions received and anticipated	
Total Committed	499.06	Budget £500.15M	
Risk			
risk estimate	4.00	QCRA: c. £4.4M (however subject to review regarding project scope (e.g. footway repairs to be excluded from the project funding)	
Risk adjusted forecast	503.06	Budget £500.15M	
Opportunities			
utilities diversions	t.b.c	Possible opportunity to optimise scope, work sequence and resource t.b.c	
rev 3A to rev4	0.00	BBS position: prelims aligned with contract completion and BBS will confirm costs are incurred	
rev 4C time bank	0.00	Subject to outcome of negotiation on rev 4c, refer below and advice note	
early programme completion	0.00	Dec 13 / Jan 14 completion: BB prelims £7.8M and Siemens £3.7M = £11.5M, however no mechanism to realise saving agreed with Infraco	
Total Opportunities	0.00		
Total Forecast	503.06	Budget £500.15M	
Excluded risks			
Opportunities, rev 3A to Rev4	0.00	BBS obliged to confirm costs incurred, not obliged to demonstrate actual costs. BBS have declared their position and non-payment is unlikley. If progress is maintained then there may be an opportunity to save some costs at the end of the project, say 5 weeks from 31 May 14 (QSRA forecast): therefore the cost range is -(£0.5M) to -(£3.10M), however this includes Siemens £0.6M costs Sep-11 which they can prove some/all resources were present.	
rev 4C (refer T&T advice note)	6.45	No clear entitlement: Refer rev 4C advice note, the possible scenarios involve holding Infraco to the intent of the VE and achieve a saving through to a negotiated settlement to retain continued co-operation. CEC to advise based upon a review of the advice note and legal advice. The implications of withdrawal of co-operation and further ex contract claims are not included.	
Total	6.45		
Forecast +Exclusions	509.51	Subject to CEC Project Board approval for an ex Contract payment for Rev 4C programme changes	
	506.41	Adjustment if costs associated with the Rev 3A and Rev 4 programme changes are not paid. This is unlikely given BBS position, BBS can work to the Rev 4 date. An example is Section 7A/5C where the sub-contractor is due to complete two to 3 weeks later than the Rev 3A date.	

5.1.2 Movement from previous period

The overall forecast has **increased** by £29k in the period. The principal movements are identified below.

The Infraco contract forecast has **increased** by £112k from the previous forecast. Significant changes include:

- The forecast cost of the floating track slab has been reduced by £230k as a result of a review of the civils element of this work. A provisional allowance is included in the BBS contract for this work.
- The allowance for a water main crossing at Lochside Avenue has been removed, reducing the forecast by £120k following instruction from CEC to remove this allowance.
- The use of new kerbs in lieu of recycled has increased the forecast by £60k
- The requirement for a CAD resource to amend drawings to reflect as built traffic signal ducts and street signage has increased the forecast by £50k
- The requirement to repair the shunt line at ScotRail's depot has increased the forecast by £150k
- The de-scoping of traffic lights at West St Andrew Street has reduced the forecast by £170k
- The requirement to pay additional preliminary costs to CEC, confirmed by CEC, has increased the forecast by £200k.

The forecast for outstanding utilities, principally ducting and bases associated with traffic signs and street lighting and associated conflicts has been reviewed in detail during the period and has **increased** the forecast by £1,827k. This has resulted from a new programme from the contractor based upon the confirmed scope of work. The contractor was requested to determine efficiencies in execution however their programme does make a number of conservative allowances associated with the complexity of the work, working around Infraco and spatial / physical constraints. We have included this forecast in this cost report to provide visibility on the contractors out-turn estimate. The contractor has been requested to revise the cost estimate and we have also explained that further work may not be instructed unless a better value solution is provided.

The allowance for remedial work in Leith Walk has been **reduced** by £1,370k to £900k. This is as instructed by CEC and it is understood that work up to this value only will be delivered.

The risk allowance has **reduced** by £500k during the period. This is based on the latest outputs from the Quantitative Cost Risk Assessment (QCRA) and reflects the expected transfer of risk allowances into realised risks over time. The QCRA will be updated in the coming period to provide a revised forecast based upon work instructed and risk remaining.

5.1.3 Commercial issues

The delay in contract signing the contract mid August 2011 impacted the start date and the completion date. The Independent Certifiers Opinion confirmed that Infraco were entitled to costs (using the weekly prolongation costs in the contract) provided that at each valuation application the milestone payments were incurred. Turner & Townsend have assessed Bilfinger Berger's costs at £0.8M for the delayed start, Bilfinger Berger have claimed £1.4M which has been certified by the Independent Certifier, subject to satisfactory evidence that the costs were incurred. Bilfinger Berger have now confirmed that there is no further information to provide beyond the correspondence with sub-contractors advising of the delayed start.

In our view we believe that further information could be provided to confirm that costs were incurred. Siemens costs for the delayed start are estimated at c. £0.6M and the balance of the overall amount is £2.5M for the impacts at the end of the programme. If Infraco were to maintain current progress then it is likely that some sections of the work will complete ahead of the Rev 4 completion dates. They have stated that they believe they are entitled to prelims to the end of the Rev 4 programme therefore if they were to work to the Rev 4 dates or work intermittently then there is a risk that they would claim entitlement under their interpretation of the Independent Certifier's Opinion. Given their stated position at this stage, we have included the full amount in the sum of £4.5M in the cost report.

We have not at this stage included the potential saving of the £2.5M at the end of the programme as an opportunity given the nature of BBS's position on the matter and the possibility that they could work to the Rev 4 dates. It is also likely that the £0.6M for Siemens for the delayed start can be proven. We believe that this issue and the Rev 4C 22 weeks issue could be taken together in order that a commercial strategy for completion could be agreed.

Rev 4C 22 week saving

At the valuation meeting 5th September 2012 Infraco confirmed that they believe their entitlement is reimbursement of contract prelims including the Rev 3A to Rev 4 adjustment and their share of the saving at an additional cost of £6.45M. This has been contested and Turner & Townsend have issued an advice note which confirms that the intent of the value engineering was to save time and money. The advice note appraises each of the commercial evaluation options and provides a recommendation that a negotiation should commence at a saving of the likely prelims achieved and that CEC may need to move to other options such as reimburse prelims and CEC forgo a saving in the interests of securing early completion.

Turner & Townsend have confirmed to CEC that they cannot issue a change order since the scope of the change extends beyond that contemplated by the contract. We have also confirmed for this reason legal advice should be sought.

Prelims / Overhead Mark ups on scope deductions

A difference of opinion has arisen in the case where the work is changed and the original specification is part omitted and a new specification has been added. BBS have submitted a proposal which results in a higher overhead and prelims recovery than the contract provides for. This has been queried and work is ongoing to resolve it. There would be an adverse impact of c. £300k to £400k if Infraco's interpretation was accepted.

Claims

FINAL

The Independent Certifier has confirmed that a management fee of 25.65% should be applied to the list of design changes attached to the e-mail 29 August 2012. This has been incorporated into the cost forecast.

Off Street Utilities

The Independent Certifier's August 2012 opinion paper states that Infraco should declare the allowance for off street utilities and this is offset against the final SGN gas diversion costs to determine a credit due to CEC. A meeting is required with Infraco to agree the amounts.

5.2 Committed Costs

5.2.1 Approved Change

Approved change is items that have been instructed to Infraco and a commitment value agreed.

Infraco

The total value of approved changes in the Infraco contract is £4,746k. This is an increase of £1,400k from the previous period. Significant changes are as follows:

Description	Change Amount (£k)
Delay in signing contract – impact at end of programme moved out of approved change (tNC 539)	-2,541
Design changes (tNCs 562,567,571, 647,648,653,657, 667, 672, 689)	205
Edinburgh Gateway design and construction	3416
Remedial Works to West shunt line at Haymarket Depot	75

The approved change amount for all other sections of the cost report remains as per last period.

5.2.2 Changes in Progress

Changes in progress are known changes that have not yet been incorporated into the contract sum, either because we are awaiting a price from Infraco or the value has not yet been agreed. The total value of change in progress is £4,113k a reduction of £2,662k from last period.

Infraco

Change in progress associated with the Infraco contract is £4,078k. This is a reduction of £2,627k from last period, resulting mainly from a transfer into approved change. Refer to the cost report for a complete list of change in progress.

Tramco

Change in progress associated with the Tramco contract is £35k. This is an increase of £35k from last period resulting from the requirement to terminate wiring connecters for bus trackers which will not be installed in trams at this time.

FINAL

Other Change in progress

The change in progress amount for all other sections of the cost report remains as per last period.

5.2.3 Anticipated Change

Anticipated change are variations to the contract that are known about but no change has been raised at this time, either because the scope has not yet properly been defined or the change has not taken place yet. Anticipated change during the period has increased by £1,027k

Infraco

Anticipated change has increased by £645k although this is in part a result of the transfer of descoped items into change in progress. Excluding transfers to change in progress, anticipated change has increased by £380k. The largest increase is the requirement to pay an additional 25.65% on SDS change to cover preliminary costs. This has been confirmed as an allowable variation by the Independent Certifier. Other items include a requirement to re-ballast ScotRail's shunt line and to resolve road level issues at St Andrew Square.

York Place direct works

The anticipated change allowance for the Crummock Work has reduced by £75k in the period. This is offsetting an increase of £75k in the Infraco contract for Cathedral Lane ducting works.

Utility Works - York Place to Haymarket

Over the course of the last 2 to 3 periods, the scope of the McNicholas contract has been evolving and now incorporates a significant element of the permanent works including excavation of areas where utilities are a major issue and installation of ducting and bases associated with traffic signs and street lighting. In order to properly capture all of the costs associated with this change, we have carried out a full review with McNicholas of the scope and costs to complete. This has resulted in an increase to the overall Utility Works forecast of £1,827k. This review is ongoing and a further breakdown of theses costs will be provided to CEC to explain this cost increase.

Legacy Utilities (Leith Walk)

As instructed by CEC, we have removed allowances for water main / gas separation issues on Leith Walk and reduced the allowance for manhole remedial work to £900k. This has resulted in a reduction of £1,370k in this section of the cost report.

5.2.4 Contributions

The amount of forecast contributions to the project has reduced by £724k during the period. However, this is as a result of finalising values for Edinburgh Gateway which has reduced in value by the same amount. Consequently the net effect on the overall forecast is zero.

5.3 Risk and Contingency

Quantified Cost Risk Analysis (QCRA)

A meeting was held with CEC 13th September 2012 to review the QCRA. It was agreed that where risks in the risk register were general in nature e.g. ED019 "Risk that additional scope/work is required that is not currently scheduled or costed" should be analysed as discrete risks e.g. additional Traffic Management in York Place and that uncertainty relating to ongoing additional costs emerging each period in the On Street Works Estimate e.g Third Parties

FINAL

(Utilities contractors) affecting Infraco's ability to progress the works should be transferred into a contingency pot.

Also it was advised at the CEC Client Change meeting that greater clarity was required on known anticipated change vs. discrete risks which would enable greater clarity on expected scope and financial approvals.

The QCRA is being updated on this basis however given the number of inter-related items it is important that clarity is achieved and that we focus on mitigating the known risks and take prompt corrective action on the emerging risks.

The QCRA is also including an update of the QSRA and will be available w/c 17 September 2012. An allowance of £4M has been included for risk in the current cost report. The QCRA is likely to be in the order of £4M to £4.5M.

Contingency

Following the meeting on the 13th of September 2012 we understand that there will be an opportunity to meet with CEC to review risks and contingency requirements to complete the project. We recommend that the known risks, risk estimates and uncertainty is reviewed in the aggregate to help inform what level of contingency is required to fund unknowns not included in the risk estimate and to fund exclusions, refer below.

5.4 Opportunities

The total value of opportunities in the current forecast is £13,117k. Most of these opportunities are secured. However, there remains a risk to certain items included within this total, identified below:

- Item 01 Revised TM and embargoes refer to the commercial issues section above and programme opportunities section below for a commentary on this item
- Item 02 Setts: This opportunity is for a non tram budget in CEC to contribute towards the cost of setts in St Andrew Square. We are still in negotiation with Bilfinger Berger over the rate for the revised specification of setts which may affect the total value for this item although it is assumed that any additional / reduced cost will be part of the contribution and therefore have no overall effect on the tram forecast
- Item 14 Road Reconstruction depth: This opportunity was to reduce the depth of road reconstruction to generate a target saving of £700k. From analysis of the marked up drawings and site inspections there are very few areas of roadway that can be preserved. The reason for this is the impact of the utilities diversions at junctions and also the need to bench in road construction infill between the depth of the track slab at 300mm steps. It is anticipated that savings will be realised by retaining pavements. It should be noted that there is a cost risk that the full saving will not be achieved. Also many paving slabs in the pavement are cracked and that there will be pressure to repair areas. We recommend that CEC advise whether the project will be required to fund essential pavement repairs or whether CEC as highway authority will fund repairs from another budget. For information there was and additional £0.25M of repairs at Princes Street following completion which had to be funded by the project.

FINAL

There are limited further opportunities to de-scope elements of the work. However there are opportunities to refine the final scope of work and refine estimates. One of the issues on certainty of estimates has been Infraco's insistence that out-turn estimates do not need to be provided for On Street Works. This issue has been identified previously and was included in the CEC Lawyer's review of our contract queries.

Examples include:

- Revised design for the retaining wall for the Cathedral Lane Sub-Station;
- Out-turn costs for the York Place Terminal Point
- Out-turn costs for the floating track slab

Other discrete items which could be omitted include the removal of the CEC site accommodation and reduction in the service charge, omission of the breakdown vehicle from say January 2013. These items are unlikely to realise significant amounts.

Programme Opportunities

The master schedule shows a completion date of the 4th of May 2014. The time saving is c. 11 weeks. If the intent of the value engineering programme saving was applied then CEC's proportion of the saving would be c. £3.2M. Infraco have changed their position on this matter and believe that they are entitled to contract prelims to the 8th of July 2014 and their share of the additional saving of £6.45M (refer commercial issues above).

At the programming workshop we advised CEC that if Infraco maintain their rate of progress and remove resource constraints then it may be possible to complete January 2014. The total saving in prelims is c. £11.5M however this overlaps with the previous saving of 11 weeks. CEC have been in discussions with Infraco regarding this saving, however Infraco are unlikely to release this saving as there is no requirement under the contract to do so. (Note: there are ongoing discussions regarding Infraco's entitlement to costs for the movement from Rev 3A to Rev 4 and costs which will or will not be incurred at the end of the programme. This amounts to c. £2.5M and overlaps with the items above).

5.5 Exclusions

The following items are excluded from the Cost Report

- Payment of Infraco's share of the saving resulting from Rev 4c Cost Engineering initiative amounting to £6.45M
- Additional costs associated with Infraco's interpretation of the application of mark-ups on On Street Change.
- Shandwick Place Tree Pits and Trees (it is understood that CEC would fund this from a separate budget)
- Repairs to pavements and footways
- Further design changes beyond those included in the cost report (note: production of as built drawings from the MUDFA contract and collation of as built information from

FINAL

current utilities diversions is a significant exercise. Also design costs are beyond the norm since SDS Management Fee at 25.65% and Infraco mark up at 34.9% is applied. We suggest a review of this is undertaken with CEC and alternative solutions are evaluated).

- Leith Walk Utilities Diversion CEC has confirmed that the budget for defined scope should be £0.9M (based upon the tender and a general contingency allowance). The intention is to value engineer out the undefined scope e.g. gas water pipe separation and to restrict the work done. Should, for technical reasons this approach not be feasible then additional funding would be required.
- All Utility Companies and Network Rail management resource has been included to September 2013. Should they have a legitimate reason for continuing beyond this date then additional funds would be required.

5.6 Payments and Cashflow

A summary of the certified amounts are provided below.

	Certified £K	Planned £K	Comment
Infraco	325,528	320,680	Planned – based upon Rev 3A programme
Utilities	10,344	10,120	McNicholas plus SUC costs
Trams	60,531	60,531	Payments generally in accordance with milestone schedule. Incomplete milestones are not included in certified amounts.

6 On Street - Enabling Works & Utility Legacy Works

6.1 General

Enabling and utility legacy works have progressed well during the period and works are being completed to meet dates agreed with Infraco. Similarly "Type 2" utility conflicts (those outside the DKE+2m, including road sign bases, traffic signal bases and associated ducting) are underway and a detailed programme has been agreed with Infraco to minimise disruption to the main works.

6.2 York Place

McNicholas and Crummock are working well together within York Place and both parties are working well with Infraco in relation to the York Place interfaces with the main contract.

The phase 1 enabling works in York place were completed to programme allowing Crummock and McNicholas to commence the wider enabling works following the opening of the "plug" on Princes Street.

Despite the bus station having to remain open for the duration of the enabling works Turner & Townsend is seeking to complete all enabling works in York Place by mid November, this is an ambitious programme but if achieved will provide a clear site for Infraco to move into before the Christmas shutdown.

Infraco has been instructed to review the impacts of the change to traffic management and report back on the likely impacts on programme. Its response remains outstanding

6.3 Legacy Works

There remain some key water issues that have the potential to cause significant difficulty for the project. Agreement on some of these issues will only be reached when the wider commercial discussions with Scottish Water have concluded, at that time Turner & Townsend will need to ensure the residual works are planned in consultation with Infraco and at such a time as to minimise or avoid any delays.

Since the last reporting period behaviours within Scottish Water appear to have changed and it is becoming increasingly difficult to reach agreement on a range of issues. It is likely this is being driven by the lack of progress on commercial matters despite attempts by Turner & Townsend and CEC to move matters forward. It is also driven by what appears to be a lack of coordination on the part of Scottish Water with different departments appearing to disagree with the project management team tasked with delivering tram related works. Added to this Scottish Water has recently confirmed to Turner & Townsend that the scope of legacy works previously being tracked is now likely to increase significantly, this will have the effect of increasing direct costs to the tram project and will have a negative impact on ensuring Infraco has continuity of work in all areas. Scottish Water also seems unwilling to progress technical completion certificates and the Health & Safety File dating back to before September 2011 and matters relating to build over agreements are also becoming more difficult to progress.

In response to this and in discussion with CEC Turner & Townsend is exploring ways of capping and indeed reducing the scope of works being carried out on Scottish Water assets, CEC is also

Progress Report No. 12 – 19th August to 15th September 2012 FINAL

exploring ways of dealing with some of the wider behavioural, commercial and land related issues. An update will be provided at the tram briefing meeting.

Progress Report No. 12 – 19th August to 15th September 2012 FINAL

6.4 Grosvenor Street Sewer Collapse

Meetings have been held between CEC and Scottish Water to discuss how to best progress the matter and Turner & Townsend continue to provide support as required. The matter is now in the hands of the respective insurers and an update will be provided at the next tram briefing meeting.

6.5 Look Ahead

The York Place enabling works will continue and Turner & Townsend will remain ready to react to utility discoveries by Infraco. Work will also continue with CEC is seeking to limit the scope of Scottish Water legacy works. Type 2 works will also be ongoing in the period.

7 On Street - Main Works

7.1 Progress in Period

All On Street areas from Haymarket to Lothian Road and from Princes Street to North St Andrew Street remain in the possession of Infraco with some minor exceptions agreed where residual works are being carried out by McNicholas. Infraco has continued with track slab construction in all areas and is making good progress. Track laying has also progressed well during the period.



Princes Street / St Andrews Square

The "plug" on Princes Street at the south end of St Andrew Street was opened on the 14th of September enabling the closure of York Place on the 21st of September 2012. As reported previously the bus station at Elder Street is remaining open for the duration of the works and consequently a single traffic lane is being provided between Elder Street and Broughton Street to facilitate egress from the bus station. It has been agreed with stakeholders that this will be increased to two lanes for the Christmas period between the 17th of November and the 11th of January.



South St Andrews St Junction/ Princes Street

Infraco has confirmed that the completion date for St Andrew Street is still likely to be the end of 2012. There have been some quality issues in St Andrew Street during the period and Infraco has had to remove sections of concrete at the north and south ends of the street. The problem at the north end related to the rails being out of tolerance and the issue at the south end related to defective concrete. Both matters are now resolved.



St Andrews Street

FINAL

Works in Shandwick Place are progressing well and ahead of the dates in the Rev 5 programme, it is anticipated this will continue for the duration of the civil engineering works. This is discussed in more detail in Section 3 of this report.



Shandwick Place

Between the Crescents Infraco has continued with excavation works with McNicholas in attendance. As expected there have been no major utility conflicts found in the area. In the same geographic location agreement was reached previously with CEC to de-scope the rebuilding of the Shandwick Place walls. These works were scheduled to be carried out directly by CEC together with the excavation of tree pits, the planting of new trees through the area and the construction of a footpath in the gardens. Since the last reporting period however CEC has confirmed it is not in a position to carry out the works and consequently Turner & Townsend is now preparing tender documents with the intention of managing the contract directly on behalf of CEC (tram). A programme is currently being finalised that will seek to avoid any disruption to Infraco.

Princes Street snagging continued in the period and it is anticipated the majority of snags will now be closed out by the end of September. This is slower than originally anticipated due to the lack of access for Infraco during the festival period. Regarding future maintenance a meeting has been held with CEC to discuss the ongoing maintenance requirements for Princes Street.



Princes Street

Following planning approval for the Dublin Street Steps the issue that remains outstanding is reaching agreement with the building owner on the east corner of the street. Progress has been made in this regard and CEC is currently finalising the legal agreement.

8 Off Street Works

8.1 Progress in Period

8.1.1 Bridge Installation



The deck construction at the Water of Leith.

Following the installation of bridge beams to South Gyle Access, Balgreen Road and The Water of Leith Bridges last period, deck construction is now taking place at all three bridges and the formwork is starting to be removed.

8.1.2 Murrayfield

Following the contractor damaging to the sewer with the ground improvement rig at Murrayfield, agreement had been reached with Scottish Water on the solution to reinstate the sewer. Infraco's initial attempt to undertake remedial works resulted in team progressing without the necessary approvals in place. The works were stopped on site until an investigation with subsequent Incident Report was produced and the appropriate approvals and Health and Safety measures were in place.

8.1.3 Edinburgh Gateway

Despite of a slow start at Edinburgh Gateway, the attenuation tank excavation has been completed, the reinforcement bar placed and concrete base poured. The creation of the columns and walls shall form the next phase of the tank's construction. Earthworks have commenced for the King Post Wall and piling will commence in the next period. No major construction issues are expected with the attenuation tank works, and any time loss at the start of these activities should be recovered.



Concrete Pour at Attenuation Tank

8.1.4 Network Rail/ScotRail Shuntline

The ScotRail shunt-line was in a very poor condition prior to tram works commencing and has been settling during the adjacent tram works. This line cannot remain operational if subjected to further settlement. A client instruction has been issuede to undertake work which reduces the

FINAL

risk of embankment movements affecting the shuntline. These works raise the track by placing a ballast layer under the existing track components and are progressing well. By placing this new ballast and realigning the track greater settlement can be accommodated and is easier to remediate should settlement occur. Excavation for the strip foundations for the retaining wall (S21B) adjacent to the shuntline has commenced concurrently with the ballasting works. Settlement and remedial action will continue to be monitored in accordance with the track monitoring plan.

8.1.5 Haymarket Station Interface

The Network Rail Haymarket Station Development works now occupy the car park at Haymarket Station. The scope of this project includes the removal of the tram Haymarket viaduct staircase and parapet at Haymarket. Network Rail have undertaken these works without following agreed project protocols. The project's concerns have been raised with Network Rail.



Haymarket Station Development

8.1.6 Section B Progress

All track including the crossover at the airport and overhead line masts have been installed between the airport and Gogar. All overhead line masts have been erected and the overhead line wire has started to be placed. Communication cables are currently being installed.

8.1.7 Other Items of progress in this period;

- Tracklaying at the airport including installation of the crossover;
- Tram stop furniture at Ingliston and Gogarburn being installed;
- Traction power cables Ingliston Gogarburn;
- Snagging on civils to commence on Section 7;
- Drainage and ducting at A8 underpass complete;
- A8 underpass to Edinburgh Park bridge track laying complete with topsoiling commenced for the grass track through Edinburgh Park;
- Bankhead attenuation drainage complete;
- Bankhead track and OHLE mast excavation commenced;
- Carrick Knowe outbound track commenced and progressing;
- Balgreen Road bridge deck cast with cantilevers removed during a weekend road closure;

Progress Report No. 12 - 19th August to 15th September 2012

FINAL

- Murrayfield underpass (S21C) structural works complete;
- Initial problems with the dimensions of the track slab precast units at S502 and S504 resolved; and



Floating trackslab being installed at Haymarket Yards

8.2 Key Issues

The following issues are currently affecting the off street section;

- Bankhead overhead mast works are progressing at risk due to a Scottish Water buildover agreement not being in place. This approval has been agreed with CEC.
- Eastfield Avenue issues still require resolution with the airport; alignment and low voltage supply. Confirmation of a scope is awaitied from CEC.
- Radio tests at the depot have interfered with NATS signals therefore further tests shall be required. Alternative frequencies have been requested from Ofcom, however Ofcom have had to write to NATS for clarification on the frequencies they are using in the area prior to issuing tram new frequencies. Turner & Townsend have contacted NATS requesting their assistance and making them aware of the timescales the Tram Project are working to.
- Continued poor performance by Infraco at Murrayfield, especially in relation to the ongoing incident with the sewer.
- ScotRail depot potential issues with gates on the main access into the depot. The designer
 has been asked for his risdual risk register for this work and the operator will subsequently
 be requested to assess this junction.
- Turner & Townsend have written to Infraco seeking further clarification on how water ingress under the Depot Door will be resolved.

Progress Report No. 12 – 19th August to 15th September 2012 FINAL

8.3 Look Ahead

The following works will be progressed during the coming period;

- Overhead Electrification works continuing on Section 7;
- Snagging on the civil items within Section 7 to commence;
- Edinburgh Gateway attenuation tank walls to be formed;
- King Post Wall construction to commence at Edinburgh Gateway;
- Completion of Gyle Broadway crossing.
- Bankhead track formation and overhead line mast foundation works continuing;
- Formwork removal from Water of Leith and South Gyle access bridges;
- Baird Drive embankment level to be raised;
- Haymarket Yards trackslab construction
- ScotRail depot entrance works continuing;



Tensar wall construction at S21B Murrayfield commencing



W3 and W4 wall construction continuing;

9 Trams



Tram Depot

9.1 Progress in Period

The delivery of trams to Gogar Depot shall recommence in September, following a break for the holiday period. There have now been twenty one trams delivered to Gogar, with nineteen having completed routine testing on the Mini Test Track (MTT).

CAF have scheduled the delivery of three trams in the coming period, with two scheduled to complete Routine Testing. Turner & Townsend are awaiting confirmation of delivery dates for the final trams, with the likelihood that they will be delivered in November 2012; significantly ahead of the programmed December 2012 completion date.

System Acceptance and Integration – The Section B Test & Commissioning Programme is now being updated and issued by BBS on a monthly basis. Meetings have been arranged with BBS, CAF, ET and Turner & Townsend to discuss these updates and any other issues which may affect the completion of the testing to schedule, or the handover of Section B to CEC.

Turner & Townsend have developed a KPI to track the delivery dates of key activities within the programme, in order to identify potential risks to completion. Programme dates are being monitored to identify activities which are either progressively being delayed month on month, or incur significant delays in a single month. Any such activities will be identified and discussed during the monthly meeting.

Sub contract agreements – CAF have submitted a number of agreements with their suppliers however they have been amended the standard form. This may require a further review by The City of Edinburgh council's legal team.

9.2 Fare Collection System

Turner & Townsend have now taken a more active Project Management role in the procurement of the Integrated Fare Collection system.

Progress Report No. 12 - 19th August to 15th September 2012

FINAL

During initial discussions, Almex (the proposed Preferred Bidder for the system), stated that while there was still some level of technical and functional requirement to be specified, Almex were happy to continue as Preferred Bidder within the competitive dialogue procurement process tie had started in March 2010.

Following a change in Almex's position, whereby Almex required the inclusion of undefined additional costs and the alteration of the scope of delivery; Turner & Townsend submitted a briefing paper to CEC, outlining the options available following this material change to Almex's bid. Within the paper Turner & Townsend recommended that a review be carried out on the original short-listing evaluation, to determine whether such a change to the preferred bidder's proposals would have changed the short-listing conclusions.

Having completed an initial review of the Draft ITT submissions, it is clear that by amending the cost of the TVMs as required by Almex, there is a change to the overall scoring; there is no change however to the position of the three suppliers in the tender review process.

Following Parkeon's to submission of an updated pricing schedule for the supply and maintenance of the Fare Collection System, Turner & Townsend have advised that Parkeon are in a better position to supply the Integrated Fare Collection system to Edinburgh Trams to the required functionality and within the required timescale. Re-scoring of the latest submissions by both suppliers, however, remains outstanding and Turner & Townsend have further advised that CEC seek advice in relation to the public procurement process going forward.

9.3 Key Issues

The change in Almex's bid position has further delayed the provision of TVM and Validator installation information to BBS, which is reported to be delaying the completion of tramstop design and equipment installation.

Turner & Townsend have submitted installation information for both supplier's TVMs informally and will issue a formal change notice to BBS when Preferred Bidder status has been determined and installation requirements confirmed.

Further information on the interface between the Fare Collection equipment and the Operator's infrastructure management system (RailCom) can only be provided when the scope and functionality of the system is defined and agreed.

The structure of the Section B Test & Commissioning meeting needs to be further developed, to ensure that all issues and risks to the programme can be identified and managed. Turner & Townsend have proposed an agenda for this meeting and submitted it to all participants for review. The final agenda shall be agreed during the next meeting on 18th September 2012.

9.4 Look Ahead

The following items will be progressed during the coming period(s):

- Tram Commissioning Plan;
 - · A total of twenty three trams will have been delivered to Gogar Depot
 - A total of twenty one will have completed Routine Testing on the MTT
 - Delivery schedule will be updated to show new delivery completion date
 - Interim Routine Testing scheduled to be completed on all trams by the 29th of January 2013

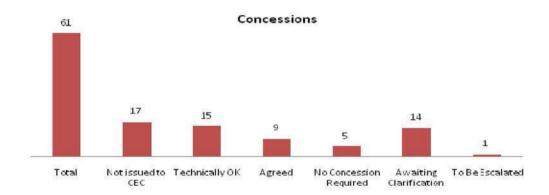
- The requirements and schedule for the completion of Section B will be discussed at monthly System Integration meetings due to commence on the 7th of August 2012 and attended by BBS, CAF, ETL and Turner & Townsend.
- 3. Fare Collection Following receipt of an updated pricing schedule from Parkeon, Turner & Townsend will:
 - Produce a paper comparing the quality, cost and delivery timescales of the Almex and Parkeon pricing schedules, to allow CEC to decide on its Preferred Bidder;
 - Confirm the scope of equipment and functionality of the system with CEC and LB;
 - Provide information to BBS to allow completion of tramstop design;
 - · Manage actions required to allow the sign off of the Fare Collection contract; and
 - Develop a schedule for the delivery, installation and test of Fare Collection equipment.

10 Assurance

Evidence File – The City of Edinburgh Council IT provider are still unable to fully transfer the files and metadata from the old sharepoint to the new system. The new IT provider (Amor Group) has been briefed on the outstanding issues. Amor Group have confirmed they will raise this issue internally with CEC and agree a resolution to the actions required. If unresolved this may have an impact on referencing Section B Documentation. This remains an ongoing concern.

Following the issue of the Advice of Possible Non Compliance (ANC) 002, concerning the - Confirmation of the Duty Holders ability to deliver Safety Verification for the Edinburgh Trams Project BBS have now provided additional information for review which should enable this notification to be closed.

Requirements Management is progressing well, the process has now been agreed with BBS, There is a total of 61 concessions, 9 of which have been agreed. The remaining items have been categorised, identifying 5 areas of approval, graphic provided within the Environmental, Quality and Assurance Dashboard.



FINAL

Safety Verification Scheme Audits –Safety Verification audit TSA/12/01 – Maintenance of Depot Workshop Equipment and track, report to be updated and reissued. TSA/12/03 – Section 1C Slips, Trips, Falls (2 Wheel Vehicles) completed check sheet received from Bilfinger Berger Siemens. The assurance team are collating evidence for issue to Technical Support Services.



10.1 Quality

The monitoring of the NCRs raised on the project continues to be reviewed. Details of the NCRs are included below:

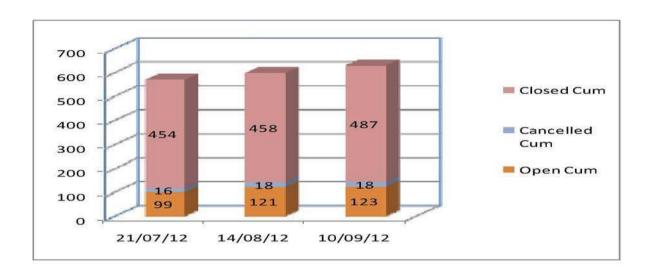
- The number of NCRs raised to date is 628. 31 NCRs were raised during the period and 29 NCRs were closed out during the period.
- 35 open NCRs are greater than 6 months old. Further details may be found within Section 6 of Deliver a Safe Tram Report (See Appendix 2).

A review has been undertaken of the open NCRs that were greater than 6 months old. This review has identified that:

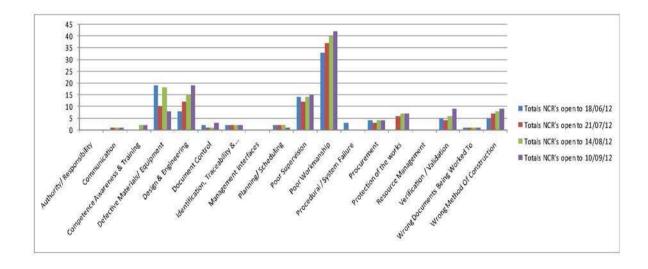
- 13 NCRs had been actioned, but were awaiting final verification prior to being closed out on the database.
- 13 NCRs are open pending construction works recommencing in the specific areas.
- 3 NCRs are open pending final acceptance by City of Edinburgh Council.
- 2 NCRs relating to South St Andrews Street are progressing through the close out process.

Progress Report No. 12 – 19th August to 15th September 2012 FINAL

Summary of non conformances:-



Classification of open non conformances:-





Appendix 1 – Dashboard

Produced by	Julian Weatherley & Shirley-Anne Collin	SECTION	CONFIDENTIAL - LEGALLY PRIVILEGED AND POI(3)A EXEMPT		Employer	City of Edinburgh Council Waverley Court, Edinburgh,EH8	
Approved by	Julian Weatherley	Issue By:	Turne	 * Townsend Project Mar 9 Lochside Avenue, Edin 	Address	8BG	
Status	FINAL	Issue Date	01-10-2012	REPORTING PERIOD	19 th August to 15 th September 2012	Project:	Edinburgh Tram Network

Executive Summary

There were nine incidents recorded during the period, none of which have been identified as Serious / Significant.

Infraco have produced a risk assessment in relation to soil removed from Baird Drive. This is currently under review by SEPA

No erosion of the 22 week time bank took place during the period with eleven weeks remaining to date. It is likely that further erosion will result from the need to keep the bus station operational during the York Place works.

Sectional completion dates (excluding risk and opportunity) for Section B, C and D are forecast for 5 March 2013, 3 Feb 2014 and 4 May 2014 respectively. The critical path has now switched to run through Section 5C (Edinburgh Gateway).

Turner & Townsend has presented to CEC potential programme value engineering opportunities. Following discussions with Infraco, CEC has requested T&T not to peruse the production by Infraco of a revised contract programme.

The removal of the "half plug" on Princes Street was achieved on programme on the 14th September 2012. This should enable the commencement of Phase 2 of the York Place enabling works on 21 September.

A number of Scottish Water legacy issues remain which cannot be addressed without significant reconstruction works. Some of these may only be resolved through wider commercial discussions with Scottish Water. Resolution of these Items is being led by CEC. Scottish Water behavioural issues continue to frustrate the resolution of matters on site.

MnNicholas have commenced works to address Type 2 conflicts. Turner & Townsend are working with McNicholas to affect further efficiencies in relation to the scope and execution of these works.

Infraco are now in possession of all On Street areas from Haymarket to Lothian road and from Princes Street to North St Andrew Street. Works in Shandwick place are progressing well ahead of the Rev5 programme.

Landscaping works in Shandwick Place have been de-scoped from Infraco. CEC has requested that Turner & Townsend tender these works as a separate contract.

Some slippage has occurred against the critical float paths of Edinburgh Gateway and Murrayfiled corridor. This has resulted in seven days slippage of the project Section C and d dates.

Discussions are ongoing between CEC and the airport in relation to the resolution of issues at Eastfield Avenue Crossing.

Infraco's latest attempts to remedy water ingress snags at the depot have failed. Proposals have been sought by Turner & Townsend.

Twenty one trams have now been delivered to the Gogar depot with nineteen having completed routine testing and commissioning.

Following an increase by Almex in their price for the project fare collection system, CEC have requested that procurement be extended to include Parkeon. A recommendation on the way forward is being prepared by Turner & Townsend.

The commercial issues that have been progressed during the period include an increase to the cost report for Infraco's subconsultant designer's management fee.

A difference of opinion between Turner & Townsend and Infraco remains in relation to the application of overhead and prelims mark ups where work is omitted. Work is ongoing to obtain a resolution. There would be an adverse impact of c. £300K to £400K if Infraco's interpretation were to be accepted.

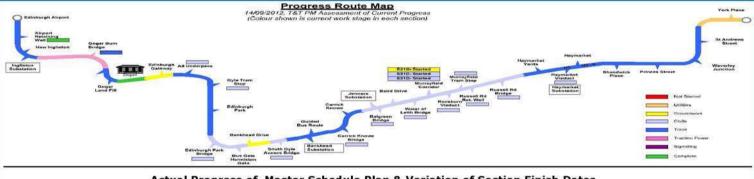
Turner & Townsend have provided an advice note in relation to the valuation of the 22 week saving. This recommended that legal advice should be sought and that the intent of the value engineering was to save time and money and not to agree what potential prolongation costs may be if CEC did not agree to relaxation of the festive embargoes and traffic management constraints. CEC have confirmed that they are discussing the matter with Infraco.

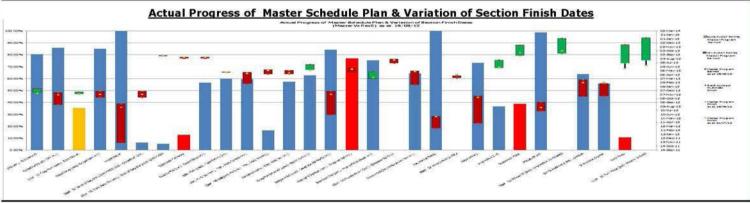
Meetings have taken place with McNicholas to confirm the scope and programme for the type 2 utility conflicts, diversions and transfer of traffic sign foundations and ducting from Infraco. An initial estimate to complete has been submitted by McNicholas which is in excess of previous estimates. The programme and estimate has been challenged and McNicholas have been requested to amend the estimate.

- Scottish Water Buildover agreements require to be progressed.
- 2. Scottish Water Requires legal agreement for derogations to specification in Princes Street.
- 3. Network Rail Asset Protection Agreement requires to be finalised.
- 4. Network Rail Bridge agreements require to be progressed.
- 5. Network Rail Verity House Commercial position to be decided and agreed with Network Rail.

CEC Actions / Decisions

- 6. **Haymarket wayleave** Close out of the wayleave with Scottish Power and Network Rail at Haymarket.
- 7. Fare Collection System Agreement to scope, functionality and procurement route
- 8. Dublin Street Steps Legal Agreement with landowners to be closed out
- 9. OLE Building Fixings Legal Agreement with landowners to be closed out
- Evidence File The transfer the files from the old sharepoint to the new system has yet to be completed
- Eastfield Avenue Confirmation of scope for L.V. supply and carriageway crossing amendments







Produced by	Julian Weatherley & Shirley-Anne Collin	SECTION		CONFIDENTIAL – LEGALLY PRIVILEGED AND FOI(S)A EXEMPT		Employer	City of Edinburgh Council Waverley Court, Edinburgh, EH8
Approved by	Julian Weatherley	Issue By:	Turner & Townsend Project Management Limited, 9 Lochside Avenue, Edinburgh Park			Address	8BG
Status	FINAL	Issue Date	01-10-2012	REPORTING PERIOD	19 th August to 15 th September 2012	Project:	Edinburgh Tram Network

				KEY MILESTONE	S);		
		Α	В	B-A=C			1
Section	Description	Rev5 Schedule Date	Forecast/Actual Date	Var. (d's)	Completed	Crit. Path	Comments
Section Completion	15.:						
ALL	Section B; Test Trackcomplete	08-Mar-13	05-Mar-13	3		Y	Critical Path now originates from 7A Tamping, which is planned to commence 22/10/12.
ALL	Section C; All construction complete	09-Apr-14	03-Feb-14	65		Y	So slip to Section C date, due to altered tamping machine requirements (le increase in scope and reduction in visits)
ALL	Section D; open for revenue	08-Jul-14	04-May-14	65		Y	5d slip to Section D date, due to altered tamping machine requirements (ie increase in scope and reduction in visits)
On Street Haymarket							
On-Street	Civil Works complete (H1 to H3B)	17-May-13	19-Mar-13	59		N	Dates Currently Under Review as part of a wider Value Engineering Initiative
On-Street Shandwick Place	All Remaining Works Complete (H4 to H6)	25-Jul-13	28-May-13	58		N	Dates Currently Under Review as part of a wider Value Engineering Initiative
On-Street	Civil Works Complete Plamerston Place to Crescents (SP2 & SP6)	18-Oct-13	29-Jul-13	81		; Y .	Dates Currently Under Review as part of a wider Value Engineering Initiative
On-Street	Civil Works Complete Crescents including Atholl West Tie-in (SP4 & SP5)	05-Jun-13	22-Apr-13	44		Y	Dates Currently Under Review as part of a wider Value Engineering Initiative
On-Street	Civil Works Complete Crescents to Lothian Road (SP1 & SP3)	25-Mar-13	06-Mar-13	19		Y	Dates Currently Under Review as part of a wider Value Engineering Initiative
On-Street	All Remaining Works in Shandwick Place Complete (SP1 to SP7)	04-Dec-13	30-Aug-13	96		Y	Dates Currently Under Review as part of a wider Value Engineering Initiative
Princes Street	Princes St Tram Stop Complete	04 Oct 12	11-Jan-13	00		N	T ₁
On-Street On-Street	Commence M& E Works	04-Oct-12 07-Oct-13	11-Jan-13 15-Jul-13	-99 84		N N	His
On-Street	All Remaining Works complete	22-Nov-13	02-Sep-13	81		N	
South St Andrews St On-Street	t / Waverley Junction Outbound Civil Works Complete	10-Jul-12	09-Sep-12	-61		N.	Dates Currently Under Review as part of a wider Value Engineering Initiative
On-Street	Open 1/2 'Plug'	N/A	21-Sep-12			N	Dates Currently Under Review as part of a wider Value Engineering Initiative
On Street	Remaining Civil Works Complete	03-Oct-12	01-Feb-13	-121		N	Dates Currently Under Review as part of a wider Value Engineering Initiative
On-Street St Andrews Square	All Remaining Works Complete & St Andrews St North	25-Oct-12	26-Feb-13	-124		N	Dates Currently Under Review as part of a wider Value Engineering Initiative
On-Street	Civil Works Complete	15-Oct-12	09-Jan-13	-86		N	Dates Currently Under Review as part of a wider Value Engineering Initiative
On-Street York Place	All Remaining Works Complete	26-Oct-12	15-Jan-13	-81		N	Dates Currently Under Review as part of a wider Value Engineering Initiative
On-Street	Complete Enabling Works	N/A	11-Dec-12	N/A		N	Dates Currently Under Review as part of a wider Value Engineering Initiative
On-Street	Commence Main Works	22-Nov-12	07-Jan-13	-46		N	Dates Currently Under Review as part of a wider Value Engineering Initiative
On Street	York Place Tram Shelter installed	08-Mar-13	21-Mar-13	-13		N	Dates not yet adjusted to follow proposed BBS fitout solution to TCN 651 & 656 (02Sep13)
On-Street	Civils Works Complete	29-Oct-13	10-May-13	172		N	Dates Currently Under Review as part of a wider Value Engineering Initiative
On Street Off Street	All Remaininig works Complete	18-Nov-13	02-Jul-13	139		N	Dates Currently Under Review as part of a wider Value Engineering Initiative
Off-Street	Haymarket Yards Complète	27-Feb-12	25-May-12	88	- 2	N-	Handed over 28Jun
Off-Street	W4, 19-29; Russell Rd. Retain Complete	29-Oct-12	20-Dec-12	-52		N	Progressing with all units 19-29 Reinforced Earth works delayed, result is further slippage to track civils
Off-Street	S21A Roseburn St. (501-505 Viaduct) Complete	19-Oct-12	05-Dec-12	-47		N	commencing
Off Street	Murrayfield ground improvements Complete	23-May-12	10-Aug-12	-79	7	N	Complete
Off-Street	Water of Leith Bridge Complete S22A Balgreen Road Bridge Complete	31-Aug-12 18-Sep-12	01-Nov-12 24-Oct-12	-62 -36		N N	Progressing well with Steelwork and Deck Reinforced Earthworks delayed, however good progress of Deck Work has seen
Off-Street	Track civils - (Formation and Ballast) between MUS and BAL	06-Feb-13	08-Mar-13	-30		N	further improvement to completion date The alternate critical float path for Off-Street slipped by 4d S21A 505 is back to
Off-Street	Complete 58 Track Ready for Tamping	31-Oct-12	01-Mar-13	-121		N	driving this phase of works Resource levelling has postponed completion in line with slipping SB Tamper date
Off-Street	Tamping Ballast Section 58 Complete	21-Nov-12	25-Mar-13	-124		N	Long lead requirement of ordering 58 Tamper is driving earliest date for this works.
Off-Street	5A Track Ready for Tamping	25-Mar-13	25-Apr-13	-31		N	BBS indicate intent is to let this slip till date 5A Tamper is due 4d slip is as a result of poor progress at S21A-505
Off-Street	5C Track Ready for Tamping	19-Jun-13	27-Jun-13	-8		Y	New scope requirement identified at the Gateway not shown in Rev5 nor in the accepted Expanded schedule
Off-Street	Tamping Ballast Section 5A (&5C) Complete	16-Apr-13	18-Jul-13	-93		Υ	This works will now cover Tamping along 5A and 5C. As such the dates have moved right by approx2months
Off-Street	Full Line Pre-Stressing and Grinding	16-Sep-13	25-Oct-13	-39		·Y.	Emphasis on final stage works has changed from E&M (OHLE) to final rail systems works for full length of route
Off-Street	5ATesting & Commissioning (5C-2AT&C)	23-Sep-13	24-Sep-13	-1		N	Removed from Crit Path. Emphasis on final stage works has changed from E&M (OHLE) to rail finishes for full length of route
Off-Street	Balgreen Tram Shelter installed	07-Aug-12	06-Feb-13	-183		N	Dates not yet adjusted to follow proposed BBS fitout solution to TCN 651 & 656 (29Apr13)
Off-Street	Saughton Tram Shelter installed	13-Dec-11	31-Aug-12	-262		i N	Dates not yet adjusted to follow proposed BBS fitout solution to TCN 651 & 657 (09 Apr13)
Off-Street	Bankhead Tram Shelter installed	19-Mar-13	08-Feb-13 17-Aug-12	39		N.	Dates not yet adjusted to follow proposed BBS fitout solution to TCN 651 & 658 (19Mar13) Complete
Off-Street	S26 South Gyle Beam Instit Complete Gyle Tram Shelter installed	21-Jan-13	23 Jan-13	-2	70	N	Complete Dates meets proposed BBS fitout solution to TCN 651 & 658 (18Jan13); NOTE: in Rev5 Fibre Optic for CCTV not due till 27Jun
Off-Street	Gateway King Post Retaining Structure complete	03-Oct-12	05-Nov-12	-33		N	BBS showed no progress in period for Gateway works, as illustrated by the slippage to this non-critical works activity
Off-Street	Gateway Post Eathworks Drainage Complete	14-Nov-12	22-Nov-12	-8		Y	TT assessment is Gateway works under Expanded schedule has not slipped, as illustrated by the same forecast date this period
Off-Street	Gateway Track laying underway	22-Feb-13	04-Mar-13	-10		Y	Due to revised logic of works along the Murrayfield corridor this section has now become the Off-street critical path
Depot & Test facilit	ies						
Depot & Test Facilities	Gogar Burn Tram Stop Complete	17-Oct-12	03-Dec-12	-47		N	Delivery and Installation of tramstop delayed
Depot & Test Facilities	AIR Tram Stop Complete	21-Dec-12	02-Nov-12	49		N	Delivery and Installation of cubicle delayed along with installation of LV power
Depot & Test Facilities	7A&5C-02 Track Ready for Tamping	27-Sep-12	21-Sep-12	6		N	Slip to completion date attributable to poor progress of track laying and ballast between GBN and IPR
Depot & Test Facilities	Tamping Ballast Section 7A Complete	26-Oct-12	26-Oct-12	0		Υ	Remains key Date driving Section B completion
Depot & Test Facilities	Overhead Catenary Systems 7A Complete (pre SP2.0 testing)	26-Nov-12	05-Nov-12	21		Y	OHLE works now underway, completion however is driven by Tamping 7A
Depot & Test Facilities	Rail Systems 7A Complete	17-Sep-12	09-Nov-12	-53		N	No change
Depot & Test Facilities	AIR-Depot Test Track available (post IR1.0)	14-Dec-12	07-Dec-12	7		Ý	Now driven by Tamping 7A, OHLE and revised logic from commissioning plan

CEC02017359_0045

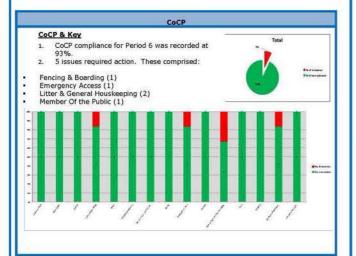
HEALTH & SAFETY SECTION Produced by Graeme Walker, Hazel Kennedy & Shirley-Anne Collin Employer CONFIDENTIAL - LEGALLY PRIVILEGED AND FOI(S)A EXEMPT City of Edinburgh Council Waverley Court, Edinburgh, EH8 8BG Turner & Townsend Project Management Limited, Julian Weatherley Issue By: Address Approved by 9 Lochside Avenue, Edinburgh Park FINAL Issue Date 01/10/2012 REPORTING PERIOD 19th August 12 - 15th September 12 Project: **Edinburgh Tram Network**

PROGRESS

SUMMARY

During the last period Turner & Townsend have been working to implement a number of initiatives regarding health and safety on the project. These have comprised:

- A review of occupational health procedures across the project prior to the Health and Safety exectutives visit on the 25th of Sepetmeber.
- Undertaking targeted monitoring. A continued emphasis on housekeeping has been undertaking, with a focus on sites where there is joint occupancy by contractors.
- The recruitment of additional support to the health and safety team has been progressed with a review of prospective candidates' CVs followed by the interview of two suitable candidates. A recommendation regarding the preferred candidate has been provided to The City of Edinburgh Council.



CDM Regulations

The Construction Phase Plan developed by McNicholas has been reviewed to confirm that the revised management arrangements that have been developed following the incident investigation relating to the overturned excavator have been included and responsibilities allocated.

Initiatives

A further review of housekeeping on the sites has been the focus of review during this period.

A focus has been on occupational health in preparation for the Health and Safety Executive's visit on the 25th September.

The following safety initiatives will be targeted in the next period:

- Management of lifting operations.
- Vehicle movements in and around work sites.
- Housekeeping
- Public Safety

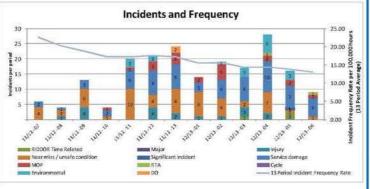
HEALTH & SAFETY

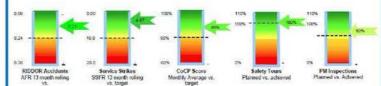
There were 9 incidents reported during the period since the last dashboard. A summary is provided below. The RIDDOR reportable incident related to the overturning of the mini excavator which was reported within the P4 report. Full details can be obtained on page 7 of the Progress Report.

The rolling 13 Period AFR is 0.20

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

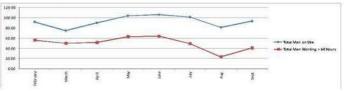
TREND



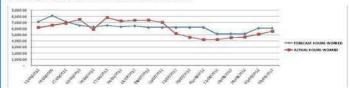


McNicholas

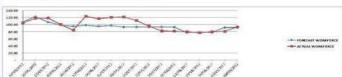
Labour exceeding 60hrs per week



Forecasted Hours Worked V Actual Hours Worked

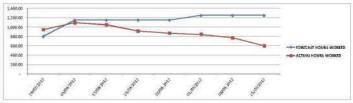


Forecast Workforce Vs Actual Workforce

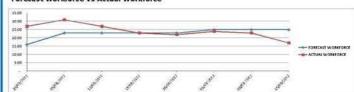


Crummock

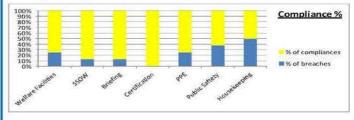
Forecasted Hours Worked V Actual Hours Worked



Forecast Workforce Vs Actual Workforce



Monitoring of Leading Indicators



PROGRESS

SUMMARY

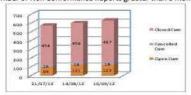
- Independent Competent Person Advice of Possible Non Compliance (ANC) 002 - Confirmation of 'Duty Holder' ability to deliver Safety Verification remains open, BBS have now provided additional information for review.
- Requirements Management -Requirements requiring concessions are being progressed. Total of 61 concessions, 9 of which are agreed. Good progress is being made through regular review meetings with BBS.
- Evidence File IT are still unable to fully transfer the files and metadata. New IT provided to complete the transfer if it is not completed by 14th September.
- 4. Safety Verification Scheme Audits Safety Verification audit TSA/12/01 Maintenance of Depot Workshop Equipment and track, report to be updated and reissued. TSA/12/03 – Section 1C Slips, Trips, Falls (2 Wheel Vehicles) completed check sheet received from Bilfinger Berger Siemens. The assurance team are collating evidence for issue to Technical Support Services.
- Design 3 building fixing approvals remain outstanding. All owners requested further information. A formal agreement has now been sent to each owner. A further building fixing has been identified. The action remains with CEC to gain approval.
- Total No of NCRs raised is 628. 31 NCRs were raised during the period and 29 NCRs were closed out during the period.

QUALITY

NCRs by Period

Total number of Non Conformance Reports raised - 628

- Total number of Non Conformance Reports raised in period 6 31
- Total number of Non Conformance Reports closed in period 29
- Number of Non Conformance Reports greater than 6 months old -35



ENVIRONMENT

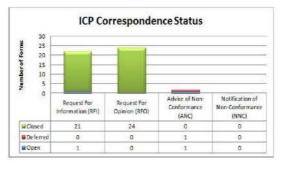
Environmental

- 1. There were no environmental incidents reported during this period.
- An 'Air Raid' shelter was identified during works at the east end of York Place. This is thought to be part of the old tram structure. John Lawson (CEC Archaeological Services) and a representative from Guard visited site and agreed that a photographic record; to be produced by the site team would be adequate. As this find is just outside the work area this find will not have any impact upon the works.
- The Conan Doyle Monument has now been reinstated, by CEC. It is noted that the stonework has not been cleaned and the plaque is missing from the front. CEC are responsible for this action.



INDEPENDENT CERTIFIED PERSON

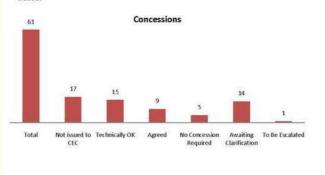
- Advice of Possible Non Compliance (ANC) 002 Due to cancellation of Safety Verification (SV) audits VS Audit TSA/12/03, BBS have provided a response to the checklist. These documents are current being identified to enable the review to take place.
- The introduction of a new traffic island in South St Andrew street has been agreed in principle with the ICP.



REQUIREMENT MANAGEMENT

Progress

- Verification and Validation Agreed Status 100% complete.
- Requirements requiring concession being progressed.
- 61 concessions have been identified with 9 having been agreed. A further 3 concessions
 were requested during this period, therefore the total has increased.
- Following the completion of BBS's review of requirement management workshops additional concessions may be identified...
- 5 concession have been deemed to not require a concession and have therefore been closed.



Assurance Graph

- The following graph is based on figures from the draft Safety Assurance programme which is being developed in line with the main contract dates. The safety assurance programme will be utilised to update the graph.
- 2. BBS have been notified of outstanding Assurance Planning documents.
- The Section A completion assurance record of review responses have now been reviewed and comments are being documented for agreement with BBS.



CONSENTS

Key Consents due in the next period, with full list in the appendix.

Combined Consents requ	ired	1		
	Total Required	Total On Hold	Total Outstansding	Total Closed
Third party	19	4	12	3
Technical Informatives	6	1	3	2
Planning Consents	38	15	5	18
Other Approvals	13	0	5	8
Legal Agreements	15	0	10	- 5

- 1. Network Rail Asset Protection Agreement -now signed by CEC
- 2. Earthing and Bonding technical informative delayed due to late submission from BBS
- Planning consent for Hearts memorial Relocation approved
 Technical informatives are planned to be closed by the next end of next period.

	Š	OFT ANALYSIS
SUCCES	SES	OPPORTUNITIES
	All stakeholders are working well together at the depot.	Increased monitoring of onsite activities. Project Management resources will become part of integral On Street assurance process.
2.	Establish a detailed testing and commission workshop.	Safety seminars to be arranged for project managers.
		Review of supervisor competencies
FAILUR	ES None.	THREATS
1.	None.	 Statuary bodies co-operation.
		Late issue of documentation by BBS.
		 Potential gaps between contracted maintenance responsibilities
		Visibility of BBS design and assurance documentation.

PHOTOGRAPHS / KPIs PROGRESS IN PERIOD **KEY ISSUES**

PROGRESS IN PERIOD

- 1. Test and Commissioning Testing on the Mini Test Track (MTT) continues to progress well ahead of schedule:
 - Twenty one trams have now been delivered to Gogar Depot Nineteen have completed Interim Routine Testing on the MTT

CAF have scheduled the delivery of three trams in the coming period, with two scheduled to complete Routine Testing on the MTT, Turner & Townsend are awaiting confirmation from CAF of the delivery dates for the final trams.

2. System Acceptance and Integration - Turner & Townsend are now participating in regular meetings with CAF, BBS and Edinburgh Trams to review the updated T&C programme and manage the Integration and Acceptance process for Section B.

Key activities are being monitored to identify potential risks to completion dates. Activities which show progressive delays month on month, or a significant delay in a single month are identified and discussed during the monthly meeting

- 3. Bus Tracker CAF and Siemens are currently implementing the instructions provided.
- 4. Fare Collection The technical requirements have been agreed by the project and a proposal has been issued to CEC for acceptance; this relates to Ticket Vending Machines (TVMs), Hand Held Devices (HHD) and Platform Validators.

Following a change in Almex's original bid position, whereby Almex required the inclusion of undefined additional costs and the alteration of the scope of delivery, CEC started discussions with Parkeon; to determine whether they would be interested in submitting an updated bid.

On request from CEC, Turner & Townsend completed an initial review of the Draft ITT submissions, to determine whether the change to Almex's position would have affected the selection of Almex and Parkeon as the final two candidates, had it been known at the time. It would appear that the additional costs would not have affected this decision

Turner & Townsend are now supporting CEC in its request to Parkeon to submit an updated pricing schedule for the supply and maintenance of the Fare Collection System

The construction of the trams stops is progressing, and a review of the TVM foundation requirements is underway. The majority of the TVM foundations will require an amount of rework at the tram stops and the platforms have been constructed.

5. Sub-Contractor Direct Agreements - CAF have submitted a number of agreements with their suppliers, as required by the Tram Supply Agreement, however some of the wording has deviated from that in the relevant Contract Schedule. These amendments may need to be reviewed by CEC, to ensure such amendments are acceptable.

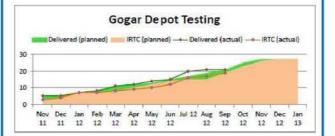
LOOK AHEAD

The following items will be progressed during the coming period(s):

- 1. Test and Commissioning:
 - A total of 23 trams will have been delivered to Gogar Depot
 - A total of 21 will have completed Routine Testing on the MTT
 - Delivery schedule will be updated to show new delivery completion date
 - Interim Routine Testing scheduled to be completed on all trams by 29th January 2013.
- 2. System Acceptance and Integration Turner & Townsend shall produce a KPI monitoring key dates in the T&C programme, to confirm testing is completed in line with scheduled dates
- 3. Fare Collection Following receipt of an updated pricing schedule from Parkeon, Turner & Townsend will:
 - Produce a paper comparing the quality, cost and delivery timescales of the Almex and Parkeon pricing schedules, to allow CEC to decide on its Preferred Bidder;
 - Confirm the scope of equipment and functionality of the system with CEC and LB;
 - Provide information to BBS to allow completion of tramstop design:
 - Manage actions required to allow the sign off of the Fare Collection contract; and Develop a schedule for the delivery, installation and test of Fare Collection equipment.
 - Engineering Change Control process to be issued, following final discussion with stakeholders (Turner & Townsend, CAF and ET)



Trams at Gogar Depot



Trams scheduled for delivery	Date
Tram 22 (#262)	18/09/2012
Tram 23 (#266)	02/10/2012
Tram 24 (#256)	16/10/2012



KEY ISSUES

The change in Almex's bid position has further delayed the provision of TVM and Validator installation information to BBS, which is reported to be delaying the completion of tramstop design and equipment installation. Turner & Townsend will issue a change notice to BBS when Preferred Bidder status has been determined and installation requirements confirmed.

Further information on the interface between the Fare Collection equipment and the Operator's infrastructure management system (RailCom) can only be provided when the scope and functionality of the system is defined and agreed.

The structure of the Section B Test & Commissioning meeting needs to be developed, to ensure that all issues and risks to the programme can be identified and managed

Turner & Townsend have proposed an agenda for this meeting and submitted it to all participants. The final agenda shall be agreed during the next meeting on 18th September 2012.

OPERATIONAL ISSUES

SUCCESSES

Collection equipment.

FAILURES

None identified

The water ingress into the depot building maintenance pits remains to be resolved by BBS. Further action is now required as CAF have confirmed that this issue is affecting their operation.

CEC ACTIONS / DECISIONS

- The Preferred Bidder for the Fare Collection system must be determined, the system equipment and functionality requirements confirmed and all stakeholders informed
- Acceptance of the wording of Sub-Contractor Direct Agreements between CAF and its suppliers. as submitted by CAF in accordance with the Tram Supply Agreement.

SOFT ANALYSIS

OPPORTUNITIES 1. Tram delivery and testing continues ahead of 1. Start system testing and commissioning on schedule. CAF intend to complete delivery completion of Off Street Section (Airport to way ahead of the scheduled December date Shandwick Place crossover) leading to earlier commencement of Revenue Service Turner & Townsend have now taken a more date (early partial service on Off Street active role in the procurement of Fare Section and early service on full route)

- 2. Further review of BBS Section B completion programme may allow trams to be commissioned ahead of current schedule
- 3. Increase in tram delivery rate could allow all trams to be delivered well ahead of schedule

THREATS

1. Lack of information on TVM procurement is delaying the completion of tramstop design and equipment installation

2. FRACAS / Engineering Change procedures required to manage technical issues raised.

Produced by	Rob Leech & Shirley-Anne Collin	SECTION	ON STREET DASHBOARD REPORT CONFIDENTIAL – LEGALLY PRIVILEGED AND FOI(S)A EXEMPT				HEROTOPIC OF A PROPERTY OF A P		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	01-10-2012	REPORTING PERIOD	19 th August to 15 th September 2012	Project:	Edinburgh Tram Network			

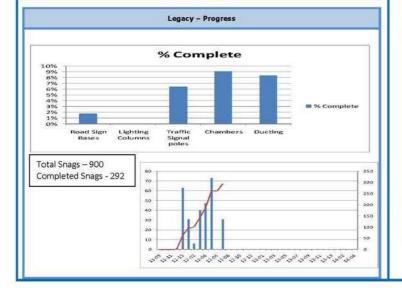
PERIOD

PROGRESS

- 1. All available sites are in the possession of Infraco for installation of trackwork.
- Infraco progressing well with track slab, track installation and carriageway reconstruction in all areas from Haymarket to St Andrew Square
- 3. Plug opened on Princes Street
- York Place Phase works progressing well and bus station being kept open anticipate all enabling works complete by mid November.
- Legacy Works Final scope of works to be agreed with Scottish Water before works commence
- 6. Shandwick Place legacy works being completed to meet Infraco programme.
- 7. Type 2 conflicts programme agreed and works progressing
- 8. Non conformances in St Andrew Street resolved and works progressing
- 9. Excavation works underway in the Crescents.
- 10. Tender being prepared for Shandwick Place walls, trees and footpaths
- 11. Dublin Street Steps Owners formal agreement being finalised
- 12. Snagging in Princes Street has continued with completion end September

LOOK AHEAD

- Track slab, track laying and carriageway reconstruction will continue in St Andrew Square and from Lothian Road to Haymarket.
- 2. Continue with Type 2 conflicts.
- 3. Turner & Townsend will continue to react to utility discoveries by Infraco.
- 4. Scope finalisation with SW for legacy works north of York Place to continue.
- Continue to work with Infraco to recover time lost due to utility conflicts replenish the time bank.
- Crummock to commence remainder of works in York Place under new traffic management.



PHOTOGRAPHS





Princes Street / St Andrews St

St Andrews Street





Princes Street

Shandwick Place

Princes Street

Princes Street / St Andrew Square

KEY ISSUES

- Scottish Water relationship generally and in particular behaviours and expanding scope
- 2. Type 2 conflicts and SW Legacy issues Possible delays.
- 3. Legacy works North of York Place.
- 4. Time Bank Recovery.

CEC ACTIONS / DECISIONS

- SW requires legal agreement for derogations to specification in Princes Street.
- 2. Dublin Street Steps Legal Agreement with landowner
- 3. OLE Building Fixings Legal Agreement with landowners

SOFT ANALYSIS

SUCCESSES

- Working relationships with BBS remains good, particularly on site
- 2. Speedy reaction to conflict issues

OPPORTUNITIES

- Optimize revised traffic phasing and work with Infraco to replenish time bank
- Return buses to Shandwick Place before 31st March 2013
- Clear York place before end 2012 to allow Infraco trackslab works to commence – target now 16 November 2012

FAILURES

- Carriageway vertical alignment in south St Andrew St
- 2. SDS OLE design
- MUDFA design, as builts, contract administration & supervision

THREATS

- 1. Type 2 Conflicts
- 2. Legacy works at Leith Walk
- Legacy works within tram worksites
- Scottish Water relationship and derogations required to specification along route.
- 5. Unknown utilities
- Owner consent at Dublin Street Steps
- Infraco delay to Rev 5 due to utilities

	(T)	
	10000		3	
	5			
	0	;	į	
I			2	
	1	-	2	

Produced by	Shirley Mushet & Shirley-Anne Collin	SECTION	CONFIDENTI	OFF STREET DASHBOARD REP AL – LEGALLY PRIVILEGED AN	Employer	City of Edinburgh Council	
Approved by	Julian Weatherley	Issue By:	Tu	rner & Townsend Project Managemer 9 Lochside Avenue, Edinburgh Pa	Address	Waverley Court, Edinburgh, EH8 8BG	
Status	FINAL	Issue Date	01-10-2012	REPORTING PERIOD	19 th August to 15 th September 2012	Project:	Edinburgh Tram Network

PROGRESS IN PERIOD

PROGRESS IN PERIOD

- 1. Tracklaying has continued at the airport;
- 2. Tram stop furniture at Ingliston and Gogarburn is being installed;
- 3. Overhead line and traction power cables continuing to be installed along Section 7;
- 4. Edinburgh Gateway attenuation tank base poured;
- 5. Drainage and ducting at A8 underpass complete;
- 6. A8 underpass to Edinburgh Park bridge track laying complete;
- 7. Topsoiling commenced for the grass track through Edinburgh Park;
- 8. Bankhead attenuation drainage complete;
- 9. Bankhead track and OHLE mast excavation commenced;
- 10. South Gyle Bridge, Balgreen and Water of Leith deck constructed;
- 11. Saughton landscaping continuing;
- 12. Carrick Knowe outbound track commenced and progressing;
- 13. Murrayfield underpass (S21C) structural works complete;
- 14. Excavation for the strip foundations for the retaining wall at S21B commenced;
- 15. Initial problems with the dimensions of the track slab precast units at S502 and S504;
- 16. Ballasting of ScotRail shuntline has commenced and continuing well; and
- Murrayfield sewer repair works have required to be relaid, in undertaking these works the contractor has damaged the upstream manhole. This lead to works without the correct approvals from Scottish Water.

LOOK AHEAD

The following items will be progressing during the coming period:

- 1. Overhead Electrification works continuing on Section 7;
- 2. Snagging on the civil items within Section 7 to commence;
- 3. Edinburgh Gateway attenuation tank walls to be formed;
- 4. King Post Wall construction to commence at Edinburgh Gateway;
- 5. Bankhead track formation and overhead line mast foundation works continuing;
- 6. Formwork removal from Water of Leith and South Gyle access bridges;
- 7. Baird Drive embankment level to be raised;
- 8. Tensar wall construction at S21B Murrayfield commencing;
- 9. ScotRail depot entrance works continuing;
- 10. Russell Road bridge trackworks;
- 11. W3 and W4 wall construction continuing;
- 12. Haymarket Yards trackslab construction; and
- 13. Completion of Gyle Broadway crossing.

Edinburgh Gateway Attenuation Tank Base Pour

PHOTOS



South Gyle Access Bridge Deck Poured



Roseburn Precast Track Slab Units



KEY ISSUES

- Eastfield Avenue issues still require resolution with the airport.
- Radio tests at the depot have interfered with NATs signals therefore further tests shall be required.
- Continued poor performance by Infraco at Murrayfield, especially in relation to the ongoing incident with the sewer.
- 4. Clarity of T&T scope in relation to the airport requires to be agreed.
- 5. ScotRail depot potential issues with access gates to the main access.
- Network Rail Haymarket Station team removed the tram staircase without CEC and BBS approvals being in place.

CEC ACTIONS / DECISIONS

- 1. Close out of the wayleave with Scottish Power and Network Rail at Haymarket.
- 2. Scottish Water buildover agreements require to be progressed.
- 3. Verity House commercial position to be decided and agreed with Network Rail.
- 4. Network Rail Asset Protection Agreement requires to be finalised.
- 5. Network Rail Bridge agreements require to be progressed.
- 6. Resolution of scope at Eastfield Avenue crossing

SOFT ANALYSIS

SUCCESSES

- Deck installations at South Gyle, Water of Leith and Balgreen.
- ScotRail shuntline ballasting works progressing
 well

OPPORTUNITIES

- Purchase of the temporary mast maybe negated by using the current aerial within the depot.
- Manage the amount of snagging off street by drafting and agreeing process with Scottish Water.

FAILURES

Murrayfield sewer remedial works.

THREATS

- Edinburgh Gateway/Murrayfield potentially on the critical path for the project.
- Network Rail concerns over the King Post Wall at Edinburgh Gateway.
- As built requests from Scottish Water not consistent with the contract requirements.

	_
	n
	SE
	-
	•
	0
	C02
	0
	_
	7
	ယ
	359
	မ
ı	
	8
	0
	50
	0

Produced by	Shirley Collin, Mike Mackenzie & Peter Smith	Function	COMMERCIAL CONFIDENTIAL – LEGALLY PRIVILEGED AND FOI(S)A EXEMPT			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	01-10-2012	Reporting Period	19 Aug to 15 Sept 2012	Project	Edinburgh Tram Network

	SUMMARY					VALUE	ENGIN	EEKING			CHANGE	
				Item		11	£K	Comment] 0	On Street Works Estimate		
	Contract Sum	Approved Change	Revised Contract Sum	Remove en	nbargoes and rev	ised TM	÷,460	22 week saving reduced to 16.6 at period end 28/4/12	116	- WANGER WAY	ICC Certificates	*****
	31477201			Setts (sepa	rate CEC budget))	980	£88k CEC contribution (SAS) and £95K for revised specification.		Description	to Date (£k)	Action
Totals	479,660	15,116	494,776	De-scope p Sq	ublic realm at St	Andrew	700	Instructed, monitored through changes in progress		Disruption and other costs associated with utilities	880	Ongoing monitoring of costs and mitigation of risks
Change in P	rogress		4,113	Contribution	ns 3rd Party Agre	eements	2,997	Miscellaneous 3 rd party contributions		Temporary accommodation for utilities contractor	2	Complete
Anticipated	Change		7,808		vorks at Forth Por		2,445	Instructed, approved change	1 1	Road re-construction protocol	0	Opportunities to be valued on
Contribution	Variation and the second secon		-7,641	Omit Airpor Canopy	rt Tram Kiosk and	d	150	Instructed, monitored through changes in progress		(opportunity to reduce depth)	250	scope established
Forecast Ch	ange / Contributions		4,280	Temporary	tram stop at Yorl	k Place	150	Instructed, monitored through changes in progress	Ш	Scottish Water diversion Princes St		Complete
				Redeploym	ent of Trams			Included in CEC budget code		Christmas embargo – temporary infill Princes St	204	Complete
Forecast Tol	tal		499,056	Cancel trac Newhaven	k York Place to		1,100	Instructed, approved change		Traffic Management costs for amended programme constraints	310	Ongoing review and mitigatio of costs being carried out
Risks (refer	risk section below)	-		Omit Sieme	ens works at Tow	er Place	100	Instructed, approved change		Revised drainage design	131	Ongoing agreement on value
AND THE RESIDENCE	es (refer opportunities section below)		4,000	Road re-cor	nstruction depth		700	Instructed, monitored through changes in progress	Ш	Geotextile liner to Clifton Terrace void		amended scope Complete
Risks & Opp	ortunities		4,000	Design free	ze north of York	Place	2.8.6	Infraco design costs expended	111	700		TAXAS (PORTA)
				Lay off TM	at Forth Ports/Lei	ith Walk	13.5	TM not included in Infraco budget provision		Princes Street additional works	259	Agreement of final total costs currently being undertaken
Revised For	ecast		503,056	Roseburn V	laduct Cladding		308	Instructed, monitored through changes in progress		York Place turnback and temporary tram stop	0	Ongoing – method of cost reimbursement to be agreed
Budget			500,154	De-scope ci (Haymarke	rew relief facilitie t)	ıs.	74	Instructed, monitored through changes in progress		Floating track slab	3	Ongoing – method of cost reimbursement to be agreed
				Opportuni	ities secured		8,854		Ш	Total ICC Value to date	£2,044k	
				- AMERICAN STREET	ties to secure	A TOTAL CONTROL OF	7,310		c	Commercial Issus	,,	
								week saving. 11 weeks currently eroded. based on QSRA). However opportunity to			tus	Action
				accelerati	e utilities in YP ur ich introduces a r	nder review	v. BBS disa	agree with our method of evaluating this		Mark-ups on omissions and negative changes. BBS are	from the	Townsend require instruction independent certifier on the
								shed, cost check in progress		proposing a reduced mark-up on such items from what is stated in		s to be applied to omissions an changes as we consider what i
				The same of the same of the same	onstruction depth			duce road reconstruction depth being		the contract	being pro	oposed by BBS to be a departur contract.
	RISK	- Signific	ant Move		od (Aug/Sep	12):				Off Street Utilities; BBS claim		Townsend require instruction
										certain utilities (principally SGN diversion in NIL land) are		independent certifier as ice would be a departure from the
Risk ID	Risk Description		Old Level	Movement	New Level	Manker by		Comments		excluded from their price.		nt agreement
ED071	Discovery of additional Track construction conflic (Live)	cts	RED	1	AMBER	reducing th	e area whe	ed at York Place and St.Andrews Square ere potential conflicts can be found lity reduced.		Rev 3a to 4 Prolongation costs; BBS have not justified the costs	informati	e refusing to provide any furthe ion to demonstrate incurred
ED112	Discovery of old Tram tracks and equipment		AMBER	+	GREEN	Works have	progresse	ed at York Place and St.Andrews Square ere Tram tracks can be found.	Ш	incurred to T&T's satisfaction	resolutio	
ED109	Risk that the project relationship with Scottish W deteriorates and access to utilities and resolving delay issues becomes prolonged	of	RED	Reduced probability	RED r	Works have reducing th arise.	e progresse le area whe	ed at York Place and St.Andrews Square ere potential Scottish water issues can		Rev 4 to Rev4c Cost Engineering; BBS maintain that their portion of the VE saving (£6.5M) should not be eroded by the time bank	paper to and dem	Townsend have forwarded a CEC providing a commentary onstrating the effect of this issu- guidance is sought from the IC of
R032	Utilities encountered during BBS Construction W	orks	ŔĒĎ	Increased probability	RED: e	encountere	d utilities 1	discovery at SAS east side (RBS) 100mm under surface not been diverted. ssible) therefore needs to be diverted.	ΠL	drawdown Claims for disruption; BBS have	the inten	tion of this VE item. part 45 makes no provision fo
ED124	SDS reviewing entitlement for prelims associated design changes could result in claim from SDS for	d with or 25%	NEW	NEW	RED	Potential cla	aim could orch 2012,	cover design changes that go as far Will monitor this risk closely until a	111	stated that there is a cost for disruption in section 1C	claims fo what is i	r delay and disruption beyond included in the period end (i.e. any claim should form par
	added to design changes					noi e certai	m outcome	realised.			estimate	(i.e. diry claim should form bar



Appendix 2 – Health, Safety Environment and Consents Tracker





Project Report - Period 6

1.0 Executive Summary

Executive Summary

- Independent Competent Person Advice of Possible Non Compliance (ANC) 002 Confirmation of 'Duty Holder' ability to deliver Safety Verification remains open, Currently remains open pending resolution of TSA/12/03 Section 1C Slips, Trips, Falls (2 wheel vehicles); the evidence for this audit is currently being collated.
- Requirements Management —Requirements requiring concessions are being progressed. Total of 61 concessions, 9 of which are agreed. The total number of concessions has increased during the period. Following the completion of BBS's review of requirements pursurant to the requirements management workshops there may be a requirement for additional concessions.
- Evidence File IT are still unable to fully transfer the files and metadata . IT are currently having problems transferring the existing information to the new system; currently all files transfer across. This is now expected to be resolved during period 7.
- Safety Verification Scheme Audits –Safety Verification audit TSA/12/01 Maintenance of Depot Workshop Equipment and track, report to be updated and reissued. TSA/12/03 Section 1C Slips, Trips, Falls (2 Wheel Vehicles) completed checksheet received from BBS currently collating evidence for issue to TSS, this is proving a very time consuming task.
- **Design** 3 building fixing approvals remain outstanding. All owners requested further information. A formal agreement has now been sent to each owner. This action remains outstanding. A further building fixing has been identified.
- Tram 21 trams have now been delivered to the depot and are undergoing static and dynamic testing.

Non Conformance Reports

- Total No of NCRs raised is 628.
- 31 NCRs were raised during the period and 29 NCRs were closed out during the period. There are 123 NCRs open, 487 NCRs closed and 18 NCRs cancelled/withdrawn. 35 no open NCRs are greater than 6 months old.

2.0 Safety Verification Scheme (SVS)

Evidence File – Currently no information can be uploaded to the evidence file as the site has not been transferred over to the new SharePoint. IT are currently having problems transferring the existing information to the new system; currently all files transfer across, however about 60% of the reference information gets lost in the transfer. This is now expected to be resolved during period 7.

- Safety Verification Audit (SV) Audit TSA/12/03 Section 1C - Slips, Trips, Falls (2 Wheel Vehicles); BBS have provided a response to the checklist. We are currently trying to find evidence detailed for review on our systems. This is proving to be lengthy drawn out process.
- SVS Audit TSA/12/01 Depot workshop equipment and Track – wash up meeting held and agreement reached on findings.
- Safety Verification Report T&T-SVS-REP-12-012 for the test witnessing at Ingliston Park & Ride traction substation was sent to BBS with observations for action.

3.0 Independent Competent Person

ICP Issues

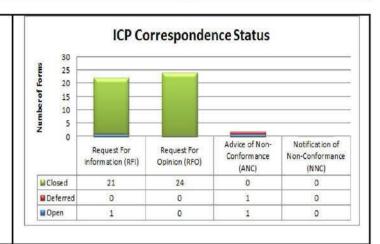
- Project Safety Certification Committee (PSCC)
 meeting took place 29 August 2012. Minutes for
 PSCC meeting held 1st August 2012 amended and
 reissued subsequent to disucsiion at meeting
 held on the 29th August.
- Advice of Possible Non Complaince(ANC) 002 Due to cancellation of Safety Verification (SV) audits SVS Audit TSA/12/03 and Infraco to support the current format – a way forward has been agreed with regard to SV audits, as detailed opposite. The ANC currently remains open.

ICP Correspondence	Open 💌	Deferred ▼	Closed *	Total 💌
Request For Information (RFI)	1	0	21	22
Request For Opinion (RFO)	0	0	24	24
Advice of Non-Conformance (ANC)	1	1	0	2
Notification of Non-Conformance (NNC)	0	0	0	0





Project Report - Period 6



4.0 BBS Design Construction and Testing & Commissioning Assurance

Design

Electromagnetic Compatibility (EMC)

- BBS Correspondence (Ref. ETN(BBS)CEC\$TEE&ABC#054959) System Integration Test (SIT) Procedure Overall Magnetic and Radiated Emissions (IO 1.0) was submitted for information during the period 2. The
 document has been reviewed and comments have been passed to BBS correspondence reference INF
 CORR 8492 sent 6th August 2012. Awaiting response from BBS.
- A meeting was held with BBS during period 4 to discuss the results to date for Rail Conductance. BBS stated that results for Princes St do not meet the contract criteria of being 5 times better than standard. BBS will produce a rationale in support of a concession to this requirement. A draft of the rationale was reviewed and comments passed back for BBS action. A follow up meeting is to be held once BBS have implemented the comments and carried out their next set of rail conductance tests. It is expected that the results for Princes Street will not reach the contract levels and so BBS are likely to seek a concession. It is not expected that the measured values will pose a significant risk for accelerated corrosion to buried metallic infrastructure, however the independent stray current expert will have to accept BBS argument.
- BBS Correspondence ETN(BBS)CEC&TEE&ABC#060100 SIT Procedure Immunisation Measurements (10 2.0) was submitted for review. The document is currently being reviewed internally and also by Network Rail (NWR). NWR have not responded yet but will be asked to do so with priority during the next period.

Trackform

Rheda City Track Typical Sections were submitted during the period. These have been reviewed by Technical Support Services (TSS) and concerns have been raised in relation to the ability to maintain the tracks in the future. Turner & Townsend have arranged a meeting with BBS on the 25th Septmber 2012 to discuss a formalised response.

Building Fixings

3 building fixing approvals remain outstanding. All owners requested further information. A formal agreement has now been sent to each. Currently awaiting approval / return. This action remains outstanding. An additional building fixing was identified during period 6, this will follow the standard approval route.

Testing & Commissioning

 Depot and mini-test track operations continue. 21 trams have now been delivered and are undergoing static and dynamic testing, with next tram delivery is scheduled for the 18th September 2012





Project Report - Period 6

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

- Depot and mini-test track operations continue. 21 trams have been delivered, with a further delivery scheduled for the 18th September, and are undergoing static and dynamic testing.
- The recommendations of the peer review by Lloyd's Register Rail of the operating and maintenance organisation are being reviewed and progressed by the management team. This is the fourth peer review which Lloyd's has carried out to date, with a further review scheduled prior to shadow running.
- Recruitment of additional drivers and controllers to facilitate Section B test track activities from early December is ongoing, as are preparations for their training and assessment. Supplier training in control systems, (SCADA, TPDS, IVU, CCTV), has been scheduled for October. Operational procedures for airport test track operations have been drafted and discussed with Bilfinger Berger Siemens, CAF and other project partners.
- ISO BS EN 9001 certification was awarded in August. The stage two certification audit for ISO BS EN14001 took place as scheduled in September with the assessor recommending certification. The stage 2 BS 18001 is scheduled for December.

Metrics

Currently progressing with QM 73 Section 6 Electrocution; and QM 78 Section 6 Depot Machinery however these metrics inspections cannot be closed until all relevant Verification and Validation evidence is reviewed and accepted / approved. This process is progressing as part of the requirements management review with close out of the depot evidence not expected to be complete until December 2012. BBS have updated the requirements management spreadsheet with references to all relevant evidence for the closure of Section A requirements. This is currently being reviewed in conjuction with Turner & Townsend.

6.0 NCR's

- Total number of Non Conformance Reports raised 628
- Total number of Non Conformance Reports raised in period 6 31
- Total number of Non Conformance Reports closed in period 29
- Number of Non Conformance Reports greater than 6 months old –35. These aged NCR's have now been reviewed by the quality team. They fall mainly into three catagories:
 - Items that have been completed but require verification prior to final sign off on the NCR database
 - Items pending construction works recommencing in the specific work areas.
 - Items which are open pending final acceptance by City of Edinburgh Council





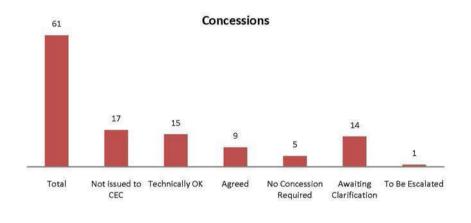


Project Report - Period 6

7.0 Requirements Management

Progress

- Verification and Validation Agreed Status 100% complete.
- Requirements requiring concession being progressed.
- 61 concessions have been identified with 9 having been agreed. A further 3 concessions were requested during period 6, hence the reason for the increase in total.
- Following the completion of BBS's review of requirements pursurant to the requirements management workshops there may be a requirement for additional concessions.
- 5 concessions have been deemed to not require a concession and have therefore been closed.



8.0 Deliver a Safe Tram - Required Actions

- Evidence File to be moved to new SharePoint system as a matter of urgency.
- Next PSCC meeting to be held on the 26th September 2012.
- TSA/12/03 to be further progressed during period 7.
- Commercial review of outstanding issued concessions to be carried out during period 7.





Project Report - Period 6

Project	90 - 1	Period	Hours	Time Related RIDDOR	Major RIDDOR	Other injuries	Near miss / unsafe condition	Service damage	Significant Incident	Environmental	RTA	МОР	AFR	SFR	EFR
ō	12/13	Period	135,928	0	0	0	2	6	0	0	1	1	0.00	4.41	0.00
۵	12	YTD	845,682	3	0	7	26	40	1	13	2	12	0.35	4.73	1.54
		13 period rolling	1,498,232	3	0	18	61	70	1	18	2	21	0.20	4.67	1.20
8	90 -	Period	Hours	>3 day RIDDOR	Major RIDDOR	Other injuries	Near miss / unsafe condition	Service damage	Significant Incident	Environmental	RTA	МОР	AFR	SFR	EFR
Infraco	12/13	Period	101,000	0	0	0	2	4	0	0	1	0	0.00	3.96	0.00
=	12	YTD	621,818	2	0	7	16	25	0	6	2	7	0.32	4.02	0.96
		13 period rolling	1,127,368	2	0	18	40	40	0	11	2	14	0.18	3.55	0.98
Other (Tram)	90-	Period	Hours	>3 day RIDDOR	Major RIDDOR	Other injuries	Near miss / unsafe condition	Service damage	Significant Incident	Environmental	RTA	МОР	AFR	SFR	EFR
- L	12/13	Period	22,928	0	0	0	0	2	0	0	0	1	0.00	8.72	0.00
Ę.	12	YTD	151,864	1	0	0	10	14	1	7	0	5	0.66	9.22	4.61
9		13 period rolling	220,864	1	0	0	21	29	1	7	0	7	0.45	13.13	3.17



EXECUTIVE SUMMARY

There were 9 incidents (1 Member of the Public, 6 service damage, 1 RTA, and 1 near miss/unsafe condition). See Appendix A for details.

The rolling 13 Period AFR is at 0.20, better than the benchmark KPI of 0.23 for the project.

CoCP compliance was recorded at 93% during Period 6. See Appendix B for details.

80% of planned PM joint inspections have been carried out during Period 6.

100% of planned safety tours were carried out during Period 6.

Record: CR8235.3





Project Report - Period 6

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	10
Number achieved	1	8

HSQ&E KEY ACHIEVEMENTS

The rolling 13 Period AFR is at 0.20, better than the benchmark KPI of 0.23 for the project.

Key Issues - Points to Note

During the last period Turner & Townsend have been working to implement a number of initiatives regarding health and safety on the project. These have comprised:

- Undertaking targeted monitoring. A continued emphasis on housekeeping has been undertaking, with a focus on sites where there is joint occupancy by contractors.
- The recruitment of additional support to the health and safety team has been progressed with a review of prospective candidates' CVs followed by the interview of two suitable candidates. A recommendation regarding the preferred candidate has been provided to The City of Edinburgh Council.

ENVIRONMENTAL SUMMARY

List any significant environmental events, initiatives, breaches etc

There were no environmental incidents reported during this period.

An 'Air Raid' shelter was identified during works at the east end of York Place. This is thought to be part of the old tram structure. John Lawson (CEC Archaeological Services) and a representative from Guard visited site and agreed that a photographic record; to be produced by the site team would be adequate. As this find is just outside the work area this find will not have any impact upon the works.

The Conan Doyle Monument has now been reinstated, by CEC. It is noted that the stonework has not been clean and the plaque is missing from the front.

An environmental inspection was carried out with McNicholas on the 5th September 2012. The inspection covered all McNicholas worksites. No major issues where identified. It was noted that there are now a number of wheelie bins in place at the York Lane compound for the storage of special waste prior to removal as controlled waste. When necessary McNicholas will use additional storage space at the old Leith Bus Depot, the waste will be held until there is enough to make a load. A number of site operatives were spoken to during the inspection with regard to the need to address issues of litter on site.

Record: CR8235.3



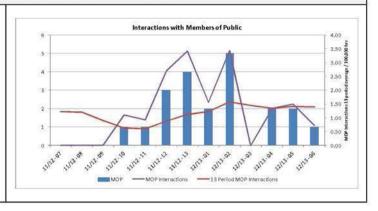
Project Report - Period 6

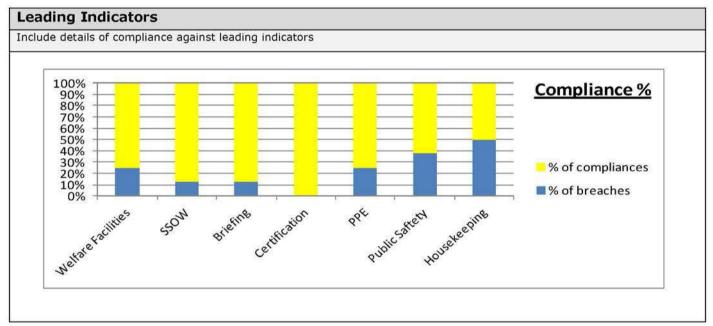
Member of Public Interaction Summary

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

There was one incident which involved the member of the public.

This comprised an incident where a pedestrian slipped on a temporary walkway.





CDM Compliance

List any significant quality events, initiatives, breaches etc

The Construction Phase Plan developed by McNicholas has been reviewed to confirm that the revised management arrangements that have been developed following the incident investigation relating to the overturned excavator have been included and responsibilities allocated.

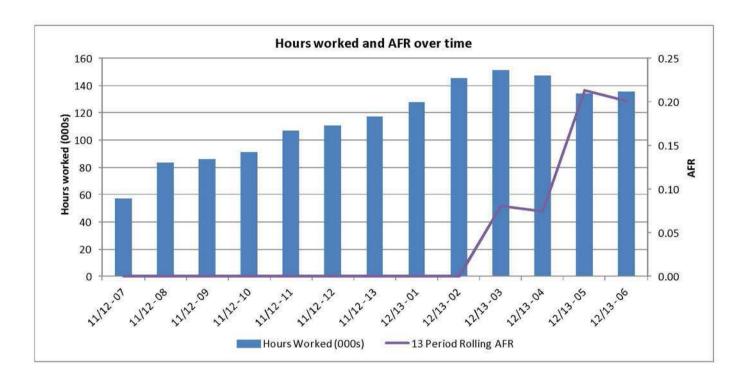
Record: CR8235.3

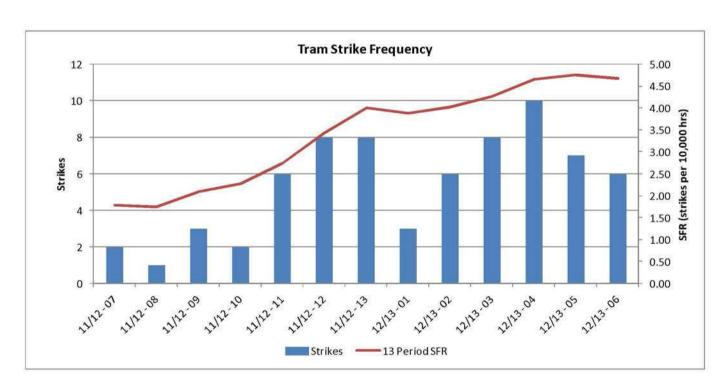




Project Report - Period 6

GRAPHS





Record: CR8235.3





Project Report - Period 6

APPENDIX A

There have been 9 incidents in total since the issue of the last DtTS.

AIR number	Period	Date of event	Location description	Initial description	Contractor involved
AllR01746	12/13 06	23/08/12	Princes Street	Damage to traffic signal cable at Waverley junction	Crummock
AllR01748	12/13 06	24/08/12	Princes Street	Damage to traffic signal cable at Waverley junction	Crummock
AllR01751	12/13 06	27/08/12	St Andrew Square	Member of public slipped on temporary access bridge - bruising to knee	Crummock
AllR01752	12/13 06	27/08/12	Hope Street/Queensferry Street	Damage to 2 no BT cables. BT confirmed cables are not in use	McNicholas
AllR01753	12/13 06	27/08/12	Lothian Road/Shandwick Place	Damage to fibre optic cable serving DLA Piper Collins House	McNicholas
AllR01755	12/13 06	04/09/12	South St Andrew Street	BBS have now confirmed that they have punctured the basement of KFC (adjacent to McDonalds). Brian Donnelly has spoken with KFC and confirmed BBS will be carrying out a temporary repair just now with a permanent repair to follow. BBS will be issuing an incident report as required confirming how the incident occurred, outcomes, proposed remedial works and lessons to prevent further occurrence	BBS
AllR01756	12/13 06	07/09/12	Roseburn Street	Construction vehicle caught the wing mirror of a car	Grahams
AllR01758	12/13 06	31/08/12	Murrayfield Underpass	Use of sewer prior to passing air test, change in method of work ref overpumping, deconstruction of Scottish Water manhole without ATC in place	Grahams
AllR01760	12/13 06	11/09/12	South St Andrew Street	Site fencing was blown over on South St Andrew street, outside RBS. BBs attended site to re erect fencing item closed that night	BBS

Record: CR8235.3

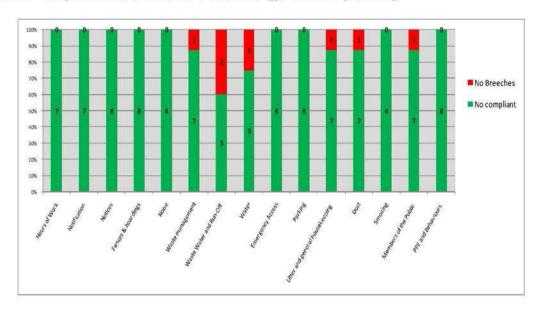


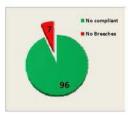


Project Report - Period 6

APPENDIX B - COCP INSPECTIONS

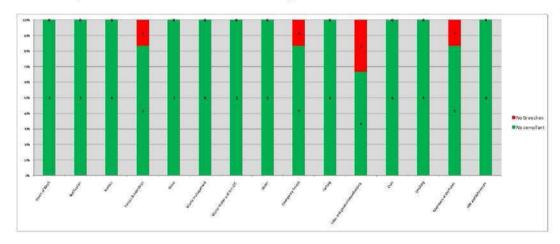
COCP Inspections / Issues Period 5 (previous period)

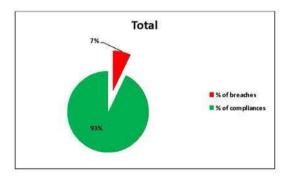




COCP Inspections / Issues Period 6

CoCP compliance was recorded at 93% During Period 6





Record: CR8235.3





Project Report - Period 6

Summary of issues identified during Turner & Townsend CoCP inspections and action taken

Subject	Location	Contractor	Issue detail	Action taken or required to be taken by contractor	Date to rectify or rectified
Fencing and Hoarding	Scotrail Fuel Depot	Grahams	Crowd control barriers require to be repositioned	Crowd barriers re-positioned	07/09/12
Emergency Access	W18 Murrayfield Tramstop Fuel Depot	Grahams	Scaftag out of date for depot access and stairs by 1 day	Scaffold inspected and re scafftagged with ne data. Scaffold now fit for purpose.	23/08/12
Litter and general housekeeping	St Andrew Square	McNicholas	Litter evident around site	Contractor asked to monitor litter around site and make a particular effort to pick up litter that has been there for some time	Contractor started to collect litter while inspection took place. However it is noted that this is an ongoing requirement
Litter and general housekeeping	Edinburgh Park Viaduct	Expanded	Toilet facilities not up to standard for workforce – portaloo requires to be cleaned out	Portaloo requires to be cleaned out as soon as possible	31/08/12
Members of the Public	Section 7 Airport	BBS / Farrans / Celmissa	Mud on road outside CCRC	Phoned BBS who requested a road sweeper asap	Cleaned up within 30 minutes – 23/08/12

Record: CR8235.3



- CONTRACTOR CONTRACTOR		operations				5	J.E	
Agreement Do current	Area of Interest	Items to be addressed in Document	Current Status	Current Activities Plan	Risks if not resolved	Action Owner Ac	Action with	Target Date to Close Out
3rd Party Consents		The statement between the statement of t	The action of Discount account of The Office States of the Constituted as constituted as a constituted to the Constituted as th	The second state one is not at 20 for according to the second state of the second state of the second state of	Township without of a first point in TIC account in the anim. To note the Contrastica soft of a sound and consument	The second second	The state of the s	
Agreement	and the same of th	parmit to work contents along the flaking. Corridor between Haymanket and Edinburgh Park.	Approximate of the book regions of address flucting confined and have included from convention of the processing of the approximate. Although the invined AP has not been executed, but access to the region of the processing the region and the first and the processing the processing of the processing the processing of the processing of the processing the processing of th	The state of the s	personness in the necessary reserves of MG. One reserves as RC may seek to serve and MG. And reserves the MG. And reserves as the MG. And reserves as the MG. And reserves as the MG. The afficient control serves as the MG. The afficient forms and the MG. The afficient forms are the MG. The MG. The afficient forms are the MG. The MG. The Afficient forms are the MG. The MG. The MG. The afficient forms are the MG. The MG. The MG. The MG. The MG. The afficient forms are the MG. The MG. The MG. The MG. The MG. The Afficient forms are the MG. The MG. The MG. The MG. The MG. The Afficient forms are the MG.			Tindho
Substation Waleswes - Haymanet	Contractors	Substation leave agreement between CEC and least-holder of NR owned land.	No physical trackers to the substation construction. Decements now under review by all parties.	GEC by exten into lease drawsfown with 145 and then suches let SP. Vioceting their agreed with SPD.	Potential BBS design change and dulay to conditiction End teselved.	Albutar Sim Br	otfistr Power	21488
Substation Washings - Cultivated	Construction		Final FC1 seared by BBB. CEC can now progress authorized vitin SPD.	Üraft kassa agreenwat ooya weth SP-D.	Design debe rise if not resolved.	15	9	Sep.12
Network Rial - Etidge Agreement	Operations	Agreement to define responsibilities in relation to the Cantick Knows and Estimburgh Park Bridges	This agreement is cut entry on hole. CRC have concerns in legant to an unfinited inclusioning which are required within the current effolds. CRC have contribeted progressing cermunity alons with ORR to seek advi-	CEC to se areage with NR, using the TSANK bridge Aprenient terminary as a starting position. HBJ-OW have been appoint to storide advise.	4B cannot operate paceage: services without an excubatiods a general (Carnix Knove and Edinburg). Park)	A Nebar Sen CE	EG	Ann to move negotations fervard during G1, 2012
Network Rail - Operating Agreement	Operations	An agreement setting out key lines of communication and responsibilities between the	er inn virgere rescure forty an half. Of there conceins in regard to an untimited to dementies which are A frie agreement is source of the first of the conceins the second of the conceins the connection of the	Action on CEC to re-drauge with NR.	LB cariott operate passenget services without an executed operating Agreement	Alasdar 8m No	shork Rall	in to move regolations funeral during Q.1. 2012
hashook Rail - EMC and irrountsaton approval	6				LE canni operate passenger services without an hopwork Rasi Appoint	Colin Kerr BE	35 Michael Wilson	Med 2013
Edminish Avaor Lid - EMC approva			Yesting and report to be insured on completion.		-	Coss Kerr Bi	SS Michael Wasen	Med 2013
Network Flad & First Scott all Car Paris Compensation Agreements	Compensation	Payment to indemnify FSR and NR against loss of car parting at Haymarkot Station Car Park.	Wittin available budget allowances. No of painting spaces affected is agraed with NR and FSR	The matrix cannot be comparely copied out actif 853 corrected the works and the Environ enerthmich compensation appear can be determined. The programms in most its morths overtion in this area.	No construction risk as this is a compensation mading	Albedair Sen.	03	nanown at this point. Continuedon programme not agneedicompleted
Network Rat - Servicios	CARG	Various servicude arrangementation as entered into His between CEC and NR. These are all agreed and	NEL-CVV appointed, works an get underway in registering these serribuses.	HISL-GVY are ready to publish documents to NR- awarding Potbert Life to confirm NR largel Advisor	HBJ-COV have forwarded sendude documents to NIV's logal advisor	Alastar Sm. m	Bearli Rail	Mad 2012
Gogarbam Transitip Cests (RBS)	Construction	Agree design and condition cods with RBS for the Societies Transition	BBS extinues submitted to RBS and are currently under review.	Awat RBS response and move to a commercial settlement on that basis.		A laption Sen. Aft	88	Cleses
Companishos - N.L.		Compensation as a result of CPO of land	Negotiations underview between the former landowner and CEC	CEC have intriductine CAAD process in West Editiourgh.	No project nak as this is a compensation matter.	Alabair Sm CE	9	Unknown - depends on claimant
3 No. suesting faings Section 21 Agreements - SW - Harmacket	Centifuttion	Medinal busing forms agreements for 15 Princes St. 18 Princes St and House of Fisser. Scotlish Wilder appring	And these appearances have below models with this content, currently with the recovery owners sponsors have and a rentwo and tools for algorithm. One was the content of the study of the study of required. The results of the study of the s	Avvailing tropholes from Dubbling Owners, agreement immaste. Doet women grief produce of the Communication of the	filozo readoved, CRC owi solve a biterfil scout deresión. Ciedar lo firmal agerdo al frem Scotlach iveléti	Atastar Sim SV	WASH	Mid August 12
Tochnical Informatives	of Mos	-		yes takensi of semi-meter on the book of the second agreement.				
Effert ognage location	Desgr	Lucation drawings to be provided	(commod 4686	This informable and the closed section by section. Meeting to be amorphic week. (On April to appred section 7.	if nat agreement wal not be obtained if not received:	Rosin Geodern Bit	SB Michael Vrisyon	4,525.4
35 Dublin Street steps	Design	Out as of steps, cycle raine and guardrathadrail inquirements to be reviewed in consultation with QEC.	Certinent 9700 to be chaind.	Geogy, with 50% it mostes, Lated building processy 50% to state technical design by 13,3um 2011, prompate submission process, trovers fatther momenton dua 10,3uh 2012.	Construction below flair find resolved:	Frobin Goodwin, Br	38 Simon Nesbill	Sep-12
11 Earthrop and Bending betals	Decum	Full details of any earthing and banding in equivolent that impact on CEC intrastitution faces to be provided for review and approval.	Germant 11500 to be closed Comment 11500 to be closed	Coago veril Cife, cer, to all from terms maillanding to Consisters, aminous tripoid as gover to Pintras state features. Coago veril Cife, cer, to all from terms maillanding to Consisters, aminous tripoid as gover to Pintras state features maillanding the section of the coago coa coago coa coago coago coago coa	Contraction only risk End reserved	Robin Geodwin Bi	SE MICHAEL WINGS	Sep 12
Planning, Conser	Planning, Consents, Variations & Informatives	rmatives			_	\$1 -33		
417 (846)	Edinburgh Pais Overchings		d stputates use of a line with original co ngs between natura	PROS to provide confirmation of materials defeat to compay with planticing treatments.	Constructor aking if not readwerf.	Frances Newton Bit	BS Smor Netbill	Sep-12
請	Roseburn Street Bridge/Retaining wall - Amended design	Charge to the dignment of ottaining wall to have account of utilities	ISOS serios d'exed (or Flacky, vaidon filònico desgn'i charges - charge shuus le bonaloes sinci let condituten IBIS to codem timescales.	of uther details from BBS have been provided CEC for review and close.	Gerion delite if not resident	Frances Newton Ci	EC Andrew Renwick	866-12
107,00%	Shandwick Place Trim Stop	200	Lether making to detailed design proposal for the walls signed of the CEC Planning, 21/07 FL Lether expusitive that Method Statement Condition Survey to be spowded by BSC, information to as spowded by cover also allow to walls, require and contrigency antinegements in event of demagnical page.	88	Constitution deby if not resolved.	Frances Newton Fr	anc es Newton	panels
ury	Shandwick Place train stop	remore changes to OLE locations and additional building foregs			Ovigo delar el ral resoned	-	ances Newton	869-12
116	NEW* St Andrew Square – Futor, Neam Usgrading	Design development to Stage E. Full Planning required. After requires road approval.	2009 9 to estudio contracting captures and CEC Protection to be contracted. Consists to be presented to Council to the contraction of the council to the raised BBS is address CEC contraction.	CEC to comment on the submission previous.	Carlogn socials of not resolved	Frances Newton CE	EC Andraw Records	Stp.12
Planning variations	Desgn	Researn Detta	Proposarity be constructed by BBS, further agreement may be negured by CEC.	ргобве work have commences		Franços Newton St	Manay Mushet	Sep-12
Other Approvals	- Sedirenteson							1000000
Notice also of Development	Final Salah Autho	Caffer to be sound to their purity	SCHOOLS TO BE DEVELOPED TO SCHOOLS	CEC to grow the software SRR for 21 fbr 3	Chainer to constitutionen Chainer for hands hand reasonant	Analy Conway P7	Tances howellen	Sep-12 Sec-12
Poste Approvate	Road Safety Auditi			CEC to review submission than BB 6 and complete accepton report by 21/59/12	Delay to hand bush and opening) III	BB Smoo Netbill	23-08
Reads Approvals	TRO'S	System witte	Terms to be closed by CEC.	The current TRO's explor in Orbiber 2012, a new date needs to be agreed with CEC and the application expected	Deliar to Jopening	0	EC bub McCaffeth	Sep-12
Pr Lives				peaks as a placed	operational number	Andy Comeny CE	EC bob McCafferfr	May-13
Legal Agreements	State 28.7 dam at Part F of Schedule Part 8 and Aspendix 8 of Schedule Part 44)	Callagest warrantes are to be granted from each of the granted from each of the general refers sitted in Schedule Park 38. The santies entitled or receive sub-controlled collateral warrantee are "to CEO. EM. TEL and inde	THE JOHN GRAWM GROUNDELTD AND EXPANDED LTD WARRANTEES ARE BEING FRYALUSED TORS BIGINNG. THERE IS MAY ROUNDED COBLIGATION BON WERKACO TO GREAT SIDE-CONTRACTOR TORS REPORTED. THE STATE BANK MAY RESERVED THE STATE AND WARRANTEES FOR MAY GREEN SHEET, BE STATE STATE WAS ALTERED TO MAD AN ORDER.	CEC must review the collected warmsteles. Submissions reviewed them, Lygan, Serves Bers Piller, Jehn Conham (Diversive) tild, Farnise (Confluctive); Lil, El papel d. Commont Revisiol, LLX Ber missing.		Key Sub- Contractor, influco and penedician	Ments Russell	S(p.12
		Park	CONTRACTORS, (II) PELMO CONTRACTORS, (I) OROUND STABLISATION SPECIALISTS, (II) PREPAIRST TELECOMSTONING WAS ARROWNED STORY TESTNO AND COMMISSIONING SPECIALISTS MAD CITY EAM MISTALLERS, THESE SHOULD BE OBTIVATED AS NEW SUB-CONTRACTS ARE PROCURED, Struksie of warmaties to be provide by 889:					
Program Software Encrow Agrosmen	cause 102.15	within 38 days of the accepting the programs that withstoom by private under the infrince of cells as, where must place the correct code is estimenable to the DCC operate of Machinesea. Technologies for		Soument to prior 80 states of appreciated for April 12. No upolate received		CE.C. Infraco and escrew provider	Patrick Scully	64.12
TSA Foliability Bont	On the certification of the twenty secentific Certificate of Tren Commissioning CAF must powel as reliability bend for \$% of the Agreeped Train Pine (appenix £2,789,681 ±5).	The Charge 44 3 and part A of Schedule 10.	Janus C	His rider to be selecent to CEC before 20th November 2012, will date agreed at Manual scienting to Elopprogramme (ny 2 15 US 10, rider in an alternatidate and the agreed	THIS BOAID SHOULD BE PROVIDED ON THE ISSUE OF THE TWENTY SEVENTH CERTIFICATE OF THAT COMMISSIONAND.	CEC, CAF and except provided	Asianaro Uriga	1604-12
TSA Tran Supplier Collaboral	A collideral viornativity be by granted by the Train Supplier to 56, CEC, Trainsport Scotland, TEL, and any other reasonable		The Control and the control an			CEC, CAF and escree provides	030	0452
Warranty	party at the reguest of the client.	Clause 44.5.	CAF, TeVCEC, Transpott Scotlans, TEL and any other parties receiving the collateral warrants.	Contactual decument signed by CAF on may 2009.	STATUS OF THE COLLATERAL WARRANTIES TO BE CONFIRMED BY CECUTAL	3	-	



		specificals				,	UNE	
AgroementDocument	Area of Interest	flems to be addressed in Document	Current Status	Current Activities Plan	Risks II not resolved	Action Owner	Action with	Target Date to Close Out
SA Excrow Agreement	Vittin 30 days of to all cepting antware provised by CAF under the TABL CAF. The state that TABL CAF and the TABL CAF CAF and the TABL CAF	Chapter 55 1 18.2 and Schooling 8	ONT. INVECTOR AND INC.	Proster despise from Aris and Stope Awards, answer from Sarbas IFT Perster and society.	TO BE BONED WITHIN 3D DAY OF TE BACKETTION BUT THANKE FROM DAT. BEE PREVIOUS NOTE.	ESCOR provides	Alejandro Linga	00:)3
5	Specification (see the Tran Employer's Requirement) indicates that is Sub- Contractor Direct Agreement in sequined. The CAF many school is Sub-Contract Oresis.	Chanse 69 8 and Synadole 18	Sub-contractor, natices, and car	Our mode is shown to exist ago 1. In 2012, with the process prince to view to proceed with outstanding SCEPDCRT OX SIGCONTRACTION JABBANCE BETTS. TATTO COVERN WHAT IS SPECIFIED IN PROCEED IN SIGNOR MAY IS SPECIFIED IN		CEC, CAF and escreme provided	CEC	0¢452
TMA Performance Bond	in the event that any part of the TMA is a signary, norshed or otherwise transferred by the bis after the date of commencement of this operation of the trains by Tannative (see Train Mantenance Program).	Clause 46.1 and part 1 of Schedule 23.	NAA	Not appealing to be theired.	DNOÓNIG OBLUATION, CEPENCIEM ON RELEVANT ASSOCNATION OCCURRANO, TECCE, TO HOTE INTER-EVANT ASSOCIATION OCCURRANO, TECCE, TO HOTE INTER-EVANT ASSOCIATION OCCURRANO, TECCE, TO HOTE		090	0442
MA Tram Maintainer Collocoral Marranty	Collaborativescribes to be granted at the lie's request by CAF in harvor of CEC, Transport Scriband, TEL and any other party reasonably requested by the lat.	46, 4 and part 2 of Schedule 23	OF INVECTINGED Scribni, TEL and any struct patter receiving the collaboral washing.	. 1982 жылы веспым відее М. Ост октер. 2008	STATUS OF THE COLLATERAL WARRANTES TO BE CONFRINED BY CEDITET	CEC, CAF and excess prosides	CEC	04912
TMA E scrow Agroeners	Willim 30 days of fine accepting alm programs produced by CAF underthing. TMA, CAF must place the source code in: Clause 59.2 access—with the NCO droup of Max helpfoldpreamed.	1 and Subedue 8 (of the Trans Supply	(OMF, INVERCIMENT WICE	see TGA	TO BE BIONED WITHIN 30 DAYS OF THE ACCEPTING SOFTWARE FROM CAF. SEE PREMIOUS NOTE. ON THIS BISHE RELATIVE TO THE INFRACCIÓ CONTACT.	CEC, CAF and escribe provided	Alejandro Derza	Nov-12
Agramm	render the Train Martinace specification (see the Train Employer's Requirement) indicates that a Sub-Certiable Direct Appearant is required, the CAF must	and Schedule 5.	Sub-contracts, rai/CEG and CAF	See TSA	DEPENDENT ON SUBCONTRACTIVO JARGANGEMENTS. TAT TO COMPRIM WHAT IS SPECIFED IN THE TRAM EMPLOYERS REQUIREMENTS.	CEC, CAF and etcrow provider	Alejandro Unica	800-12