

# **Tram Project Board**

14 April 2010

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# Agenda



- Utilities Update
- Project Pitchfork
- Project Director's Report
- Overview of current progress
- Change requests and risk drawdown (pages 21/22)

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### Utilities



- Generally steady progress in the period.
- Clancy Docwra expect to complete the utilities diversions in the Haymarket area during April.
- Clancy Docwra have completed the relocation of utilities out of Lindsay Road (minor snagging complete this month). GEO cable diversion works has been completed in Period 13 and BT works are being completed within the month.
- Broughton St opened fully to traffic on 1st April 2010
- Clancy Dowry continue to progress well on the private utility diversion works in Edinburgh Park area.
- Farrans utilities diversions in Section 1A continue to programme, with construction completion anticipated in mid May.



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### **Utilities Completion**



- Scheduled Utilities Construction Completion Date
  - Completion of civil engineering works and utility asset replacement such as ducting, chambers, replacement pipes & valves.
  - This allows the significant access to be returned to the City and stakeholders.
- Statutory Utility Works Remaining (e.g. BT)
  - Cabling, testing and commissioning of utility apparatus including necessary outages with customers to complete the commissioning of the new assets.
  - Local traffic & pedestrian management only.

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Section	Contractor	Scheduled Utilities Construction Completion Date	Statutory Utility Works Remaining (e.g. BT)	Clifton Terrace Section available as planned 31/1/10		
Haymarket Lothian Road	Clancy Dowcra	27/4/10 Complete	Cabling, Commissioning & Transfers 5/6/10  Cabling, Commissioning & Transfers 30/4/10			
York Place – Annandale Street	Clancy Dowcra	28/4/10	Water commissioning 15/5/10 Cabling & Transfers 1/8/10	Phased availability expected in advance of August 10		
St Andrew Square	·	Complete other than defect correction (completion by 30/4/10)	Cabling, Commissioning & Transfers 1/10/10	Phased availability expected from June 10		
Princes Street – West Register Street	*	Complete	Cabling, Commissioning & Transfers 1/6/10			
Leith Walk		Complete	Cabling, Commissioning & Transfers 19/7/10	Phased availability from Feb 10		





Section	Contractor	Scheduled Utilities Construction Completion Date	Statutory Utility Works Remaining	Residual work deferred from October 2009	
The Mound	BSC (Lothian Utilities)	Valve replacement Start June 10	Water commissioning Start June 10		
Constitution Street (excluding Baltic Street)	Land Engineering/ Frontline	1/6/10	Cabling, Commissioning & Transfers 1/7/10	Side entry manholes	
Baltic Street	Competitive tender	September 2010	Cabling, Commissioning & Transfers: November 2010	Extreme congestion design now being signed off with Utilities	
Lindsay Road	Clancy Dowcra	Complete	Cabling, Commissioning & Transfers 2/5/10	Available for Infraco Works from End March 10	
Lindsay Road – Ocean Drive	Farrans	10/5/10	Cabling, Commissioning & Transfers 30/6/10	Phased availability expected in advance of May 10	

## **Utilities % Completion**



- Original estimated work scope ~ 27000m of utility diversions.
- Current volume complete ~ 46000m
  - (170% of original scope)
  - (94% of revised expected scope)
- Expected final volume ~ 49000m
  - (181% of original scope)



## Option Identification - Reminder

- Selected 3 sub-options to develop in detail :
  - (1) We terminate the Infraco Contract
  - (2) Bilfinger Berger complete Airport Haymarket, then we complete the project without them
  - (3) Carry on exactly as we are now
  - (4) Carry on but with a modified arrangements to address the key issues

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### Key Issues



- No/slow progress in areas where there are disputes (clause 80/65/34 issue) – Change, Compensation, Instructions
- What is or is not include in the price (schedule part 4/BDDI-IFC issue)
- No agreed programme
- No agreement for working on-street
- No positive change in behaviour becoming more entrenched, e.g. Letter to CEC



### Actions from last TPB - see paper

- Mobilise action on Clause 80 & 34 earliest date October 2010
- Seek conclusion to MUDFA Rev 8 and new programme
- Respond to OSSA and clause 65
- · Refine SDS arguments
- Omnibus approach to BDDI-IFC earliest date October 2010
- Prelims
- Airport Edinburgh Park (Siemens 25)
- · Collaborative working
- · Incremental delivery options

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### Programme



- BSC proposed Revision 3 (Jan 2014)rejected by tie
- tie continues work to look at realistic programme – see paper
- Await:
  - adjudication for MUDFA Rev 8
  - Clear response on Clause 80
  - On-street agreement





 Total Notices by BSC
 635

 Deleted/withdrawn/superceded
 (103)

 TOTAL
 532

Estimates Submitted 255 Estimates Outstanding (min) 268

tie Change Orders issued 13

ESTIMATES SUBMITTED BUT NOT AGREED 100

Outstanding BSC Actions 67
Outstanding **tie** Actions 13
Disputed as Change 27

Value of agreed changes £16.3 m [65%]
Original submission £25.7 m

### DRP



- 14 items put into DRP to date
- 11 referred by tie, 3 by BSC
- 2 resolved by negotiation
- 3 resolved through Mediation Princes St, Prelims % and EOT1
- 4 decisions made by Adjudication
- 2 awaiting referral to adjudication by BSC MUDFA Rev 8 and Depot Access Bridge
- 1 awaiting referral to adjudication by tie Baird Drive Retaining Wall
- Section 7 Drainage and Tower Place Bridge in adjudication and expect decisions by 6/05/10 & 23/05/10 respectively



### The Way Forward (next steps)

- Continue to exert Clause 80 pressure
- QC opinion on Pricing Assumption1 (BDDI IFC)
- On street proposal Clause 65
- · Continue to develop view of realistic OFRS date
- Incremental delivery options
- Report back to TPB/CEC by end May 2010.
- · Timescales & Governance

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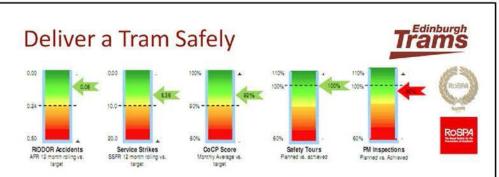


# Tram Project Board



- HSQE (S Bell)
- Building the Tram (S Bell)
- Preparing for Operations (A Richards)

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- There have been no reportable accidents during Period 13. The rolling 13 period AFR is 0.06 well below the target of 0.24 for the project. BSC are reporting Zero AFR, as are Clancy and Farrans.
- The frequency for Service Strikes has decreased for the Period and for the 13 period rolling. It stands at 6.36 against a target of 10 strikes per 10,000hrs worked.
- Following the installation of temporary traffic lights on York Place where the power supply cables
  were not installed to the correct standard for surface mounted cable, i.e. cables to be ducted
  and coils of cables to be housed in wooden boxes, tie have produced and issued guidance to all
  contractors on acceptable methods of installation.
- tie Ltd, Edinburgh Trams have been awarded the RoSPA Gold Award for Occupational Health and Safety. Gold Award winners have achieved a very high level of performance, demonstrating well developed occupational health and safety management systems and culture, outstanding control of risk and very low levels of error, harm and loss.

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### Deliver a Safe Tram

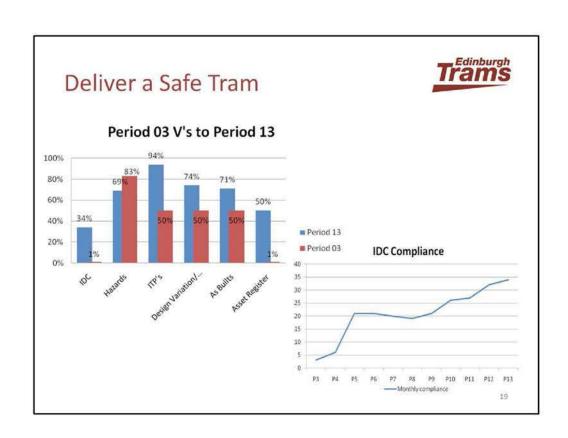


Section	Activity	Data Checked						
		ŏ	Hazards	ITP's	Design Variation /Change	As Builts	Asset	
Gogarburn Bridge	Structures East Abutment	0.5	On Hold	3	1	4	N/A	
Depot	Roof & Wall Cladding	0.5	On Hold		3	0.5	N/A	
Haymarket Viaduct	Earthing & Bonding	0.5	On Hold	- 1	0.5	0.5	N/A	
Carrick Knowe	Earthing & Bonding	0.5	On Hold	1	,	0.5	N/A	
PD	Total (y)	2	0	4	3.5	2.5	0	
	Max Possible Total (y)	4	0	4	4	4	Ö	
Total	Percentage P12	32%	89%	93%	72%	73%	50%	
	Percentage P13		69%	94%	74%	71%	50%	

 $\underline{\mathsf{Key}} - \mathsf{Y} = \mathsf{Evidence} \ \mathsf{exists} \ (1) \ \mathsf{N} = \mathsf{No} \ \mathsf{evidence} \ \mathsf{exists} \ (0) \ \mathsf{NA} = \mathsf{Not} \ \mathsf{applicable} \ (-) \ \mathsf{P} = \mathsf{Part} \ \mathsf{evidence} \ \mathsf{in} \ \mathsf{place} \ (0.5)$ 

- Four metrics inspections were carried out during Period 13 Gogarburn Bridge, Depot, Haymarket Viaduct Carrick Knowe. It is noted that all areas inspected received 100% for the Inspection and Test Plan System bringing the overall period average up to 94%. Again an increase is noted in the percentage from 72% to 74% for Design Variation/Change.
- IDR/IDC action tracker issued by BSC, no formal dates for closure of actions detailed, however all actions will be closed upon completion of IDR's (End May 2010). AFC drawings should follow on from the completion of the IDR/IDC process.
- Inspection and Test Plan for Building Fixings formally requested from BSC, works currently taking place with no formal Inspection and Test Plan issued to tie
- BSC have advised Princes Street documentation including interim 'as builts' will be ready for review end March. Informal audit arranged for 7th April 2010.

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### Edinburgh Code of Construction Practice—Period 13 ■ Compliances # breaches # Breach ■ Compliance There has been an improvement in compliance with the following areas -Sites working out with CoCP hours Tram 0800/ timescale notices Noise control on site Control of works near water There has been minimal decrease in compliance in the following areas -· Notification of works Waste Water run off Parking out with the site Litter and general housekeeping STRICTLY PRIVATE AND CONFIDENTIAL 20

### Infraco



#### Progress in Period 13:

- Progress in the Period for INFRACO works reflects a total cumulative completion of 16.1%, an increase of 1.8% against a plan of 4.4%
- Building Fixings to the majority of identified buildings on Constitution St, St Andrews Square & Shandwick Place were completed (30/39);
- Works on Tower place bridge and Lindsay Road RW 1A & 1C commenced;
- Russell Road bridge preparatory works for trial soil nails;
- Wanderers Club house works ongoing;
- Carricknowe Bridge progressing well since beams installed;
- Guided Busway works progressing with outline completed with 85% concreted (total length 1360m). Works have commenced on inline sleepers and rails – expect completion in mid May;
- A8 Piling works to Phase 2 completed 10th March. Phase 4 underway prior to Phase 3;
- Burnside Road works complete and additional traffic lights installed and commissioned, but some operational issues are in the process of being worked through with BAA.

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### Spend to Date



- Outturn costs for 2009/10 were £113.8m compared to the original budget of £150.1m and the reforecast of the past few periods of £114.5m
- Total costs to date on the project are now £347.9m including £159.3m on vehicles and infrastructure
- Forecast costs for 2010/11 £143m submitted to TS which is subject to a high degree of uncertainty given absence of programme agreed with BSC
- CEC and TS officers are provided with detailed and regular briefings on the status of cost estimates and profile of expenditure

## City Centre Traffic Management



- Currently more than 3000m of MASS Barrier (on hire) and several hundred signs deployed across the City accommodating both local and strategic Traffic & Pedestrian Management measures and diversion routes
- Utilities diversions approaching completion (P1 Haymarket; P2 York Place)
- If BSC do not start on-street works imminently, then steps are being investigated to return the City to normality (within what is practicable)
- Alternative kerbing and temporary guardrail systems being considered







## Traffic Regulation Order



- TRO1 was put to Public Deposit on 22 February 2010 and the 28 day public consultation was completed on 22 March 2010.
- There have been 426 objections received, of these:
  - 250 no. relate to a banned right turn into Blenheim Place (59%);
  - 146 no. relate to the anticipated increases in traffic flow on West End streets as a consequence of the Tram TRO (34%);
  - The remainder (30 no.) relating to various specific kerbside measures proposed as part of TRO1 (7%).
- A detailed report relating to these objections is being prepared, this document scheduled for submission to Council for consideration in July 2010.

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# Change Requests and Risk Drawdown (page 21)

- To the end of Period 12, £29.2m had been drawn down from the original risk allowance of £30.3 at Financial Close.
- In Period 13, an additional £7,167,077 has been drawn down; these 15 changes reported in the TPB papers.
- Following the delegated authority from TEL to the TPB authorising the use
  of the £545m funding envelope, tie is seeking approval to increase the
  budget to £530m.
- This additional funding of £17,982,993 would be added to the Project Risk Allowance.

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### **Trams Progress**



- 23 trams now completed or in production;
- 8, 9, 10 and 11 in finishing area;
- 7<sup>th</sup> about to start and 6<sup>th</sup> tram undergoing factory acceptance test;
- 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> trams completed factory acceptance test ready for delivery;
- 2<sup>nd</sup> tram at test track in Wildenrath undergoing final ride quality tests;
- 1<sup>st</sup> tram planned to be delivered April 2010 from Wildenrath to Edinburgh;
- ICP and HMRI(ORR) no objection and letter of comfort for tram vehicle.

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## **Operational Readiness Report**

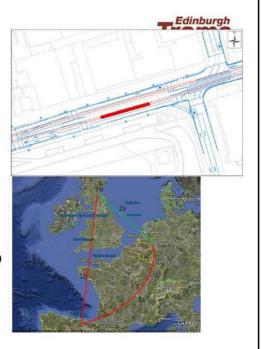
### March

- Terms and conditions for employment of main operations staff
- Mock-up located at airport
- Ops Mobilisation Coordinator seconded
- Detail planning for first tram delivery and exhibit
- ICP and HMRI(ORR) no objection for tram



### · First Tram Location

- Princes Street on the Westbound carriageway;
- Permits and feasibility tests completed;
- Savings over returning the tram to the factory from the test-track;
- Leader to take ownership on behalf of CEC on the 27<sup>th</sup> April.



### **Operation Preparedness**

Trams

- · BROR committee held
  - Schedule, financial report and progress reviewed;
  - Organisation principles and plan reviewed;
  - Peer review process initial discussion held.
- Revenue collection system
  - Shortlisted candidates dialogue sessions held and Stage 1 submissions received and evaluated.
- Depot
  - Preparation and coordination underway for initial fit out and testing in depot expected Autumn 2010;





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#### February

Shortlist ticket equipment suppliers; Achieved
Appoint operations mobilisation coordinator; Achieved
Final tram branding decision; Achieved
Location for first tram delivery and exhibit; Achieved
Tramstop shelter design review presentation; Achieved

#### March

Organisation and terms and conditions for operations staff;
 Commissioning power provider selection;
 Mock-up located at the airport;
 Tramstop shelter design comments sent back to BSC;

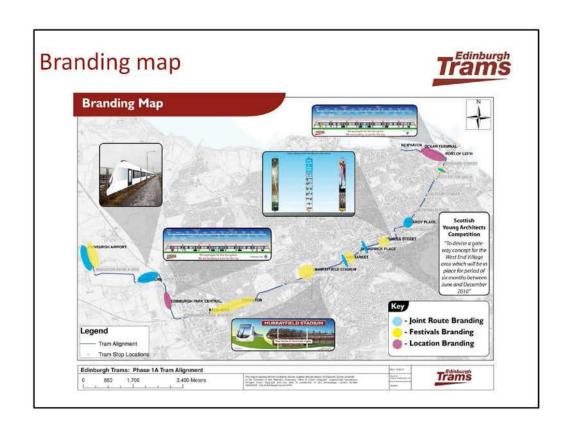
Achieved
Achieved

#### April

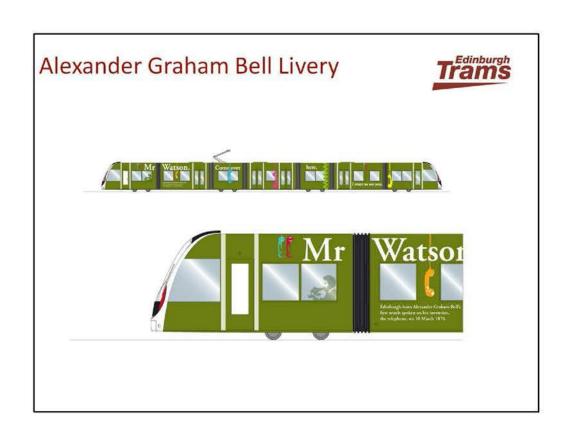
- Ticket equipment final tender pack ready for issue;
- First tram delivered to Edinburgh for public display;
- No objection from ICP and letter of comfort from HMRI for tram;

#### May

- Approve tramstop shelter and furniture design;
- Organisation and terms and conditions agreed;
- Depot and tram testing coordinated plan agreed.









End