



Utilities Working Party Meeting

Date: 3 May 2006

Time: 13.00

Venue: Grosvenor Hilton Hotel, Edinburgh

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In attendance	Allan Hill	AH	tie (Chair)
	Phil Douglas	PD	tie
	Alasdair Slessor	AS	tie
	John Low	JL	tie
	Richard Hookham	RH	tie
	Jem Gillie	JG	tie
	Alan Dolan	AD	SDS
	David Phuse	DP	SDS
	Simon McCarroll	SMc	SDS
	David Simmons	DS	SDS
	Paul McQuade	PMcQ	SDS
	Roger Jones	RJ	Transdev
	Chris Horsley	CH	DLA Piper
	Kevin McMonagle		Atkins Telecoms (for C&W)
	Eric Lyall		Thus
	Bob Ford		NTL/Telewest
	John Lynch		NTL/Telewest
	Alex Wright		SGN
	Tony Simons		SGN
	Roger Ferguson		SGN
	Ian Kerr		Forth Ports
	Michael Spence		McGrigors
	Rowland Lunam		BT Open Reach
	David Finnie		BT Open Reach
	Alan Renton		BT Open Reach
	Jamie Byrne		SP Power Systems
	Ed Irvine		Scottish Water
Apologies	NTL, BAA, Easynet, Derek Swenson (SDS)		
Additional	David Ramsay (tie), Sharon Fitzgerald (DLA), Gary Easton		
Circulation	(TSS), Les Brunton (SDS)		

**ACTION
BY**

Note

1 Introduction

1.1 AH welcomed all to the meeting and emphasised that this was to be a working meeting to address the issues common to all utilities in relation to delivery of the MUDFA process.

2 Update on MUDFA process

JL gave a resume of the current status:

- Tender return date is currently 15 May 2006
- Tender Assessment/Negotiation – June/July

	<ul style="list-style-type: none"> • Pre-construction services – start in late July/August with work on site starting in January 2007. • Construction programmed from January 2007 to April 2008. • Series of meetings are taking place with bidders: <ul style="list-style-type: none"> - TTROs and design - Commercial • To date: 68 queries have been received from bidders – information has been sought from utilities where appropriate. 	Note
2.2	<p>Technical question from bidders:</p> <ul style="list-style-type: none"> • JL to copy TQs included in tender documents to all utilities, FPA and BAA. • Utilities/FPA/BAA to advise JL of any questions they would like to be asked during the negotiation period. 	JL Utilities/ FPA/BAA
3	<u>Design Process</u>	
3.1	DS explained the current scope of design work, which now excludes the section between Newhaven Rd and Granton Square.	Note
3.2	<p>Design Process Charts: Copies of the design process charts for preliminary and detailed design were handed out to all present (see attached). DS explained the process.</p> <p>It is planned to issue formal preliminary designs by the end of June for all sections. At this stage, utilities may consider strategic solutions eg abandoning apparatus affected by enhancing utility network elsewhere.</p> <p>The overall aim of the process is to minimise the amount of work to be done.</p> <p>SDS expects substantial feedback on detail at this stage.</p> <p>By mid-Autumn, the new road layout, tramway pole positions, the track bed alignment and cross-sections along the full length will be known.</p>	Note
4	<u>Programme</u>	
4.1	A table showing key programme dates was handed out to all present (see attached)	Note
4.2	DS explained that the ITN periods are not “nailed” down but the emphasis will be on completing section 1 – Haymarket-Ocean Terminal. The programme depends on how much CEC will allow the MUDFA Contractor to carry out at any one time and what they need from tie in terms of information for the TTROs.	Note
4.3	The key parts to the design programme are: preliminary design, detailed design, process of strategic inputs, formal approval from the utilities/BAA/FPA and TTRO delivery.	Note
4.4	Feedback from some of the utilities is that the programme is very tight, and will be difficult to achieve.	Note
5	<u>Design Criteria</u>	
5.1	<u>Trackform</u>	
5.1.1	A drawing showing typical track-forms used in tramway construction was handed out to all present.	Note

5.1.2 PMcQ explained the merits of the various systems and that the chosen track-form will potentially enable access to utilities below the track whilst the track is in operation, with the appropriate safeguards in place. The track has the potential to span voids of 1m-6m span, depending on ground conditions. **Note**

5.1.3 For the purposes of the utility preliminary design, it is assumed that utilities less than 1.2m deep will potentially be within the envelope of the track. This is considered to be worst case and the track envelope is likely to be much less (650mm deep) depending on the finished road levels and track-form chosen. **Note**

5.2 Stray Current

5.2.1 To put the risk of stray current into context, AD explained that he had asked 3 designers of tramway systems if they had any claims for stray current. All had said that they had not received any claims and the evidence from existing tramway operators is that stray current is not a manifest problem. **Note**

5.2.2 For the Edinburgh Tram Network, 2 reports have been produced to date:

- Stray current management, Position Report: Covers how any current levels of stray current can be identified prior to the tramway coming into operation. Before and after site readings would be taken to establish if there are stray current problems with the new tramway.
- Code of practice for stray current corrosion levels.

Both documents will be used by the design team to identify potential problem areas and put measures in place to mitigate against stray current corrosion.

The Stray Current Management, Position Report will be issued to the Utilities/FPA/BAA in due course after acceptance by tie.

5.2.3 Stray Current Working Party: tie has instigated a Stray Current Working Party led by Les Brunton who has experience of leading 4-5 similar designs within the UK.

Utilities/FPA/BAA to nominate nominees to take part in the Working Party too. JL (Post meeting note: FPA and BAA should advise Phil Douglas by 12 May 2006).

Utilities/
FPA/BAA

JL and PD to advise Les Brunton of nominees.

JL/PD

First meeting of the Working Party, with the new nominees, will take place within the next month.

LB

It was noted that sacrificial anodes may be used as a solution to stray current impact.

Note

5.3 Swept Path

5.3.1 For background, RJ gave a resume of typical procedure for utilities working in hazard zone for the tramway:

- Trams are driver-controlled, and are driven on line of sight (similar to buses).
- The tram network will have a defined hazard zone.
- If utilities need to do anything within the hazard zone, they would need to contact the tram operator for clearance. Reasons for this are restrictions on working close to the

	<ul style="list-style-type: none"> • swept path, and working in vicinity of overhead power cables. • The tram operator will have a working permit system in place. • Particular measures such as diverting pedestrian and vehicular traffic would be implemented on a site-specific basis. 	Note
5.3.2	tie propose that a criterion for positioning diverted utility apparatus is that the edge of the trench for the apparatus should be no less than 1m from the swept path. This accords with chapter 8 provisions for tramways. SGN put forward the view that this distance should be 1.4m.	Note
5.3.3	All present agreed to take part in a working party to fully assess the issues and agree a minimum distance for each of the utilities. AS to lead.	AS
5.3.4	Utilities to nominate nominees to take part in working party by 12 May to John Low. FPA and BAA to advise Phil Douglas	Utilities/ FPA/BAA
5.3.5	RJ to produce specimen methodology for permit to work system for discussion.	RJ
5.4	Common Trenching	
5.4.1	DS explained that design would incorporate common trench where it is feasible. During the design process, designers need feedback from the utilities on their criteria on vertical and horizontal positioning so that a consistent approach can be adopted.	Note
5.4.2	It was noted that there is NJUC guidance on utility spacing, but this applied to ideal situations. There may be a need to deviate from this, with utility's agreement.	Note
5.4.3	SGN pointed out that there is a specification clause within the SGN/tie MUDFA agreement, regarding positioning of SGN apparatus to ensure SGN can gain access to work without affecting other utilities.	Note
6	<u>Optioneering</u>	
6.1	DP gave a resume of optioneering that will be carried out as part of the design process: <ul style="list-style-type: none"> • Objective is to produce a safe and efficient system for all parties. • Only if essential, should there be a requirement to abandon existing apparatus and divert to another location. • Utilities investment programmes will be sought so that the bringing forward of renewals and enhancements can be considered. • Protection of apparatus below the tramway will be considered. (SGN pointed out that the problem with this is that the protection can restrict access to the apparatus for repairs/maintenance.) • Slewing/lowering of ducts to shared nests will be considered. • The utilities future needs can be taken into account in any proposals. 	Note
6.2	Trial pits: SDS confirmed that trial pits will be carried out to corroborate radar survey results as appropriate.	Note
6.3	Radar survey visit: SDS invited utilities/FPA/BAA to visit the site whilst a radar	Utilities/

- survey is being carried out. Utilities should contact John Low and BAA and FPA should contact Phil Douglas if they wish to visit. FPA/BAA
- 7 NRSWA Process**
- 7.1 A paper outlining the NRSWA Process was handed out at the meeting (see attached). Note
- 7.2 JG took the meeting through the paper. Options were discussed for cost share in relation to each utility's costs associated with common trenching and the MUDFA works as a whole. It was agreed that these issues required a separate working party to resolve.
- 7.3 Cost Share Working Party**
- 7.3.1 JG to lead working party JG
- 7.3.2 Utilities to advise John Low of nominees by 12 May 2006. Utilities
- 7.3.3 Working party meeting to be arranged shortly afterwards. JG
- 8 Any Other Business**
- 8.1 SW expressed their concern about potential administration costs associated with access during tram operation. Note
- 8.2 Some of those present found it difficult to hear the discussions clearly (due to background noise). Venue seating, etc, to be reviewed. AH
- 9 Closing Remarks**
- PD thanked all for their input, and asked for their ongoing input and cooperation in delivering the MUDFA strategy.
- 10 Next Meetings**
- Please note the following dates for future meetings.
- Wednesday 21 June 2006, 12.30pm, location to be announced.
 Wednesday 23 August 2006, 12.30pm, location to be announced.
 Wednesday 11 October 2006, 12.30pm, location to be announced.
 Wednesday 22 November 2006, 12.30pm, location to be announced.