

external costs to CAF arising from these ~~matters/lease/sale negotiations~~ are not for the account of CAF.

12. Other terms

The Parties agree to negotiate in good faith to make such other amendments to the Infraco Contract, the TSA, the TMA and related documents, as are necessary or appropriate (i) to give effect to the principles agreed between them at the Mar Hall mediation over the period from 7 to 11 March 2011 and (ii) to give effect to these Heads of Terms (iii) to reflect the change in parties to the various documents and the change in contractual structure (iv) as a consequence of delays to the date of implementation of these Heads of Terms (v) to address any other changes to the ETN project that may become apparent that impact on the works and services to be carried out and provided by CAF under the TSA and/or the TMA (vi) as a consequence of the shorter Edinburgh Tram Network and (vii) as a consequence of the need for fewer Trams or the Trams achieving a lower mileage on the shorter Edinburgh Tram Network.

Date	To:	CC:
10 December 2009	Meeting to discuss Tram Inspector and Tram Testing with: Martin Foerder, Miguel Berozpe, Kevin Russell, Alejandro Urriza, Steven Bell and Alastair Richards - Slide showing the mini-test track presented by AR.	
7 January 2010	Operational Readiness Meeting with: David Lowe, Elizabeth Parkes; Sinead Scott; Edward Inglis, Clare Norman; Margaret Bayne - Established initial stages of testing including Stage 3 the Mini- test track	Steven Bell; Richard Jeffrey; Mandy Haeburn-Little; Stewart McGarrity; Claire Logan; Susan Clark; Kenneth McLeod
11 February 2010	Operational Readiness Meeting with: David Lowe(C), Elizabeth Parkes; Sinead Scott; Edward Inglis(S), Clare Norman; Margaret Bayne -	Steven Bell; Richard Jeffrey; Mandy Haeburn-Little; Stewart McGarrity; Claire Logan; Susan Clark; Kenneth McLeod
8 March 2010	Operational Readiness Meeting with: David Lowe(C), Elizabeth Parkes; Sinead Scott; Edward Inglis(S); Mathias Hecht(S); Norbert Wunder(S); Margaret Bayne	Steven Bell; Richard Jeffrey; Mandy Haeburn-Little; Stewart McGarrity; Claire Logan; Susan Clark; Kenneth McLeod
12 April 2010	Operational Readiness Meeting with: Edward Inglis(S), David Lowe(C), Mathias Hecht(S), Bernd Nieswand(S), Norbert Wunder(S), Kevin Keating, Elizabeth Parkes, Sinead Scott, Clare Norman, Margaret Bayne, Andrew Scott	Alastair Richards
10 May 2010	Operational Readiness Meeting with: Edward Inglis(S); DLowe@caf.net; 'mathias.hecht@siemens.com'; bernd.nieswand@siemens.com; 'Wunder, Norbert(S)'; Kevin Keating; Elizabeth Parkes; Sinead Scott; Clare Norman; Andrew Scott; alastair.scott@civil.bilfinger.co.uk; james.cowie@civil.bilfinger.co.uk; Margaret Bayne - Started to discuss the OHLE arrangements	Alastair Richards; Bob Cummins; Steven Bell; Richard Jeffrey; Susan Clark; Frank McFadden; AUrriza@caf.net; mberozpe(S)
17 June 2010	Operational Readiness Meeting with: Edward Inglis(S), David Lowe(C), Mathias Hecht(S), Bernd Nieswand(S), Norbert Wunder(S), Kevin Keating, Elizabeth Parkes, Sinead Scott, Clare Norman, Margaret Bayne, Andrew Scott - Limit constraints of Depot Access Bridge and	Bob Cummins, Steven Bell, Susan Clark, Frank McFadden, Alejandro Urriza(C), Miguel Berrozpe(S)

	Gogarburn tramstop discussed	
6 July 2010	<p>Operational Readiness Meeting with: Inglis, Edward(S); DLowe@caf.net; 'mathias.hecht@siemens.com'; bernd.nieswand@siemens.com; Wilken, Michael(S); 'Wunder, Norbert'; Kevin Keating; Elizabeth Parkes; Sinead Scott; Clare Norman; Andrew Scott; alastair.scott@civil.bilfinger.co.uk; james.cowie@civil.bilfinger.co.uk; Margaret Bayne; Riley, John(S) - Progress Update</p>	Bob Cummins; Steven Bell; Susan Clark; Frank McFadden; AUrriza@caf.net; Berrozpe, Miguel(S)
4 August 2010	<p>Operational Readiness Meeting with: Inglis, Edward(S); DLowe@caf.net; 'mathias.hecht@siemens.com'; bernd.nieswand@siemens.com; Wilken, Michael(S); 'Wunder, Norbert'(S); Kevin Keating; Elizabeth Parkes; Sinead Scott; Clare Norman; Andrew Scott; alastair.scott@civil.bilfinger.co.uk; james.cowie@civil.bilfinger.co.uk; Margaret Bayne; Riley, John(S) - Progress Update</p>	Bob Cummins; Steven Bell; Susan Clark; Frank McFadden; AUrriza@caf.net(C); Berrozpe, Miguel(S)
13 August 2010	<p>Meeting with: Frank Wenzel(S), Andy Scott and Alastair Richards To discuss the extent of OHLE for the mini-test track and interface with Edinburgh Gateway Project.</p>	
13 September 2010	<p>Operational Readiness Meeting with: Alastair Scott(B), Edward Inglis(S), David Lowe(C), Kevin Keating, Clare Norman, Elizabeth Parks, Sinead Scott, Andrew Scott, Margaret Bayne, Mathias Hecht(S), Bernd Nieswand(S), Norbert Wunder(S), Michael Wilken(S) - Main focus was OHLE following previous meeting.</p>	
7 October 2010	<p>Operational Readiness Meeting with: Alastair Scott(B), Edward Inglis(S), David Lowe(C), Kevin Keating, Clare Norman, Elizabeth Parks, Sinead Scott, Andrew Scott, Margaret Bayne, Mathias Hecht(S), Bernd Nieswand(S), Norbert Wunder(S), Michael Wilken(S) - Section B to Airport discussed after mini- test track</p>	Alejando Urriza(C), Miguel Berrozpe(S), Martin Foerder(B)

26 November 2010	Operational Risks During Testing and Commissioning Workshop 'alastair.scott@civil.bilfinger.co.uk'; Inglis, Edward; DLowe@caf.net; Clare Norman; Andrew Scott; 'mathias.hecht@siemens.com'; Wilken, Michael(S); bernd.nieswand@siemens.com; Norbert.Wunder@siemens.com; Riley, John(S); Gary.Roper@Siemens.com; Sheena Smith; Colin Kerr; Alastair Richards; Kevin Keating; Sinead Scott - Detailed analysis of the risks associated with each stage of testing.	
---------------------	---	--

**NOTES OF BRIEFING MEETING HELD ON MONDAY 14TH MARCH 2011
AT BBS CONSORTIUM OFFICE, EDINBURGH**

Appendix 5

ATTENDEES:

Martin Foerder (MF)	Bilfinger Berger UK Limited	martin.foerder@civil.bilfinger.co.uk
Alfred Brandenburger (AB)	Siemens	Alfred.Brandenburger@siemens.com
Colin Smith (CS)	for City of Edinburgh Council	csmith@hg-group.co.uk

DISTRIBUTION:

Attendees plus:		
Dave Anderson	City of Edinburgh Council	Dave.Anderson@edinburgh.gov.uk

ACTION**1.0 INTRODUCTIONS**

- 1.1 CS advised that he has been asked by City of Edinburgh Council to assist them with the project to completion.
- 1.2 CS is to provide references on project experience from Schoenstatt, East Dunbartonshire Council and The Millennium Commission (Glasgow Science Centre) **CS**
- 1.3 CS to review figures on existing funding to BBS to ensure priority works commissioned stay within existing approvals. **CS**

2.0 KEY DATES DISCUSSED

Draft Project Delivery Plan, plus attachments. Draft papers for Principals meeting	31 st March 2011
Principals meeting	7 th April 2011
Minute of Variation for Prioritised Work	15 th April 2011
Target date for site start priority works	3 rd May 2011
Siemens material mobilisation and first mobilisation payment BB and Siemens – payment figure to be agreed (certified 7 th April 2011)	21 st April 2011
Second mobilisation payment for BB and Siemens – payment figure to be agreed (certified 3 rd May 2011)	17 th May 2011
Individual start/finish dates for Priority Works	To be agreed
Minute of Variation of the Off-Street Works (other than Prioritised Works) and On-Street Works on or before	1 st July 2011
Mini test track – Target date	15 th October 2011
Next briefing meeting	18 th March 2011
Commencement of Design, Risk, Programme and Finance meetings on site	22 nd /23 rd March 2011

3.0 PRIORITY WORKS

- 3.1 Programme to be prepared and agreed for each element noted below:
- Depot Access Bridge
 - Depot (Civils and Systems)
 - Mini test track (Civils and Systems)
 - Haymarket yards
 - Princes Street remedial works
- Revised, simplified payment schedule shall be agreed.

**NOTES OF BRIEFING MEETING HELD ON MONDAY 14TH MARCH 2011
AT BBS CONSORTIUM OFFICE, EDINBURGH**

	ACTION
3.2 CS proposed that Preliminaries to be detailed per NBS CESMM – CS to provide model document. This may not be possible since both Bilfinger Berger and Siemens have their origin in Germany and this may result that different methods to calculate Preliminaries may apply. Preliminaries will be part of the revised, simplified payment schedule. Both parties to embrace the intention and to consider the methodology to achieve a workable solution.	CS/BBS
3.3 Preliminaries to be valued and paid monthly in accordance with agreed payment schedule. Formal detail to be considered and agreed.	ALL
4.0 SIEMENS MATERIALS	
4.1 Materials available for title transfer to be listed.	AB
4.2 Certificate to be prepared for 7 th April; payment by 21 st April 2011.	CEC
5.0 MANAGEMENT STRUCTURE (SEE DIAGRAM)	
5.1 CS to request that all tie contractual correspondence is passed to him for initialling.	CS
5.2 Dave Anderson, City of Edinburgh Council (“CEC”) Director, to be CEC Project Director.	ALL
5.3 Informal communication links from CEC and to Bilfinger and Siemens offices in Germany to be established.	ALL
5.4 MF and AB advised that Kevin Russell and Axel Eickhorn are their deputies and can be communicated with fully on all matters.	ALL
6.0 MEETINGS MANAGEMENT	
6.1 Meetings to be held on site (Depot site office if possible, if not another site location to be found) on a weekly basis.	
6.2 Meeting to be chaired by CS.	
6.3 Attendees to be agreed by MF, AB and CS.	
6.4 Notes to be taken by CS.	
6.5 Topics to be covered: Risk, Programme, Design/Consents, Finance/Commercial	
7.0 PROGRAMMING	
7.1 Meetings to be held weekly, chaired by CS. Agenda is to be pre-circulated and minutes are to be taken by CS.	ALL/CS
7.2 Programme access and software agreed as Primavera.	NOTE
7.3 Look ahead programmes are to be utilised.	ALL
8.0 CAF MINI TEST TRACK	
8.1 All parties are to consider and use reasonable endeavours to deliver the mini test track by 15 th October 2011, which is a key date for CAF. A mini test track draft programme is to be issued for the first programme meeting on 22 nd March 2011.	MF/AB

**NOTES OF BRIEFING MEETING HELD ON MONDAY 14TH MARCH 2011
AT BBS CONSORTIUM OFFICE, EDINBURGH**

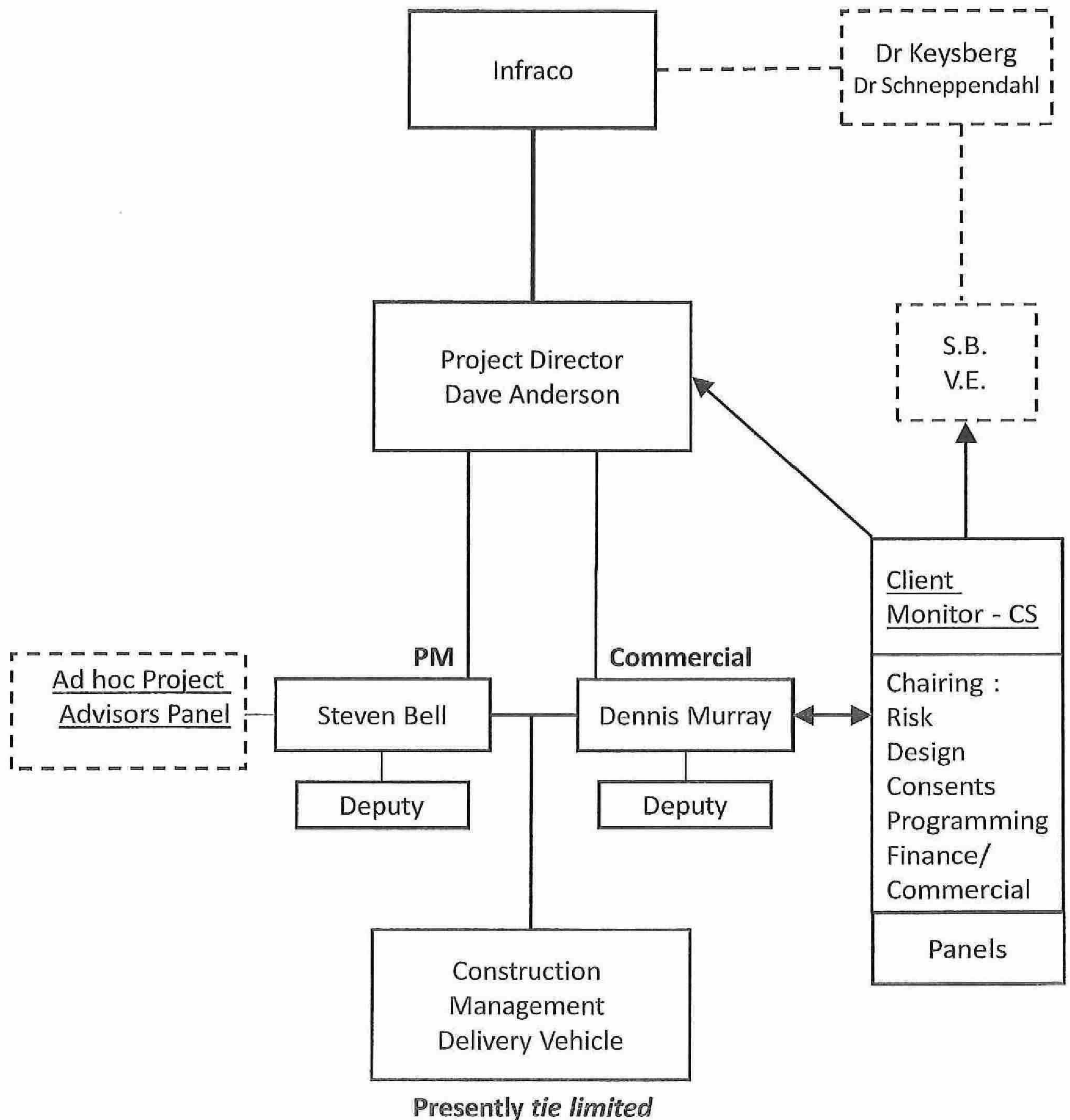
	ACTION
9.0 PROGRESS GENERALLY	
9.1 Progress tracker to be prepared and controlled by CS. In the event of failure to meet a deadline once, that item will be red flagged and reported to David Anderson.	ALL
9.2 Design, gatekeeper process established (MF/AB/CS).	ALL
9.3 Schedule of outstanding consent applications to be copied and passed to CS by 18/03/11.	MF
10.0 EDINBURGH GATEWAY	
10.1 Requirement for this to be designed and priced by September 2011.	ALL
11.0 UTILITIES	
11.1 Key dates to be discussed at first programme meeting to consider interface with client utilities package for the On-Street Works.	ALL
12.0 DESIGN	
12.1 Design to be prioritised on the basis of: (1) Priority Works (including Edinburgh Gateway) and remaining Off-Street Works (2) Haymarket to St Andrew Square (3) St Andrew Square to Newhaven	
13.0 CEC STATUTORY CONSENTS	
13.1 CS to invite Roads, Planning, etc. officers on site (through Dave Anderson) for weekly meetings	CS
14.0 COMMUNICATIONS	
14.1 CEC to prepare and instigate any required statement, thereafter to be passed to MF and AB for approval. MF and AB are required to forward to relevant company head quarters for final approval and release.	ALL
14.2 No outside agency required from BSC point of view.	NOTE
15.0 WORKS PACKAGES	
15.1 Haymarket to St Andrew Square (On-Street Works)	
(a) Consideration to be made, though agreed in principle that Preliminaries and work done is to be valued on a progressive basis (monthly), based on unit quantities or equipment pieces, etc. against agreed rates. Consideration to be given on the well developed On-Street Supplemental Agreement (OSSA).	ALL
15.2 Remedial Works – Princes Street	
(a) Construction detail programme and consents to be discussed and agreed on 23/03/11, thereafter a project delivery plan is to be created.	ALL
(b) Consideration of lifting the summer embargo on programme.	CS/CEC

**NOTES OF BRIEFING MEETING HELD ON MONDAY 14TH MARCH 2011
AT BBS CONSORTIUM OFFICE, EDINBURGH**

	ACTION
16.0 RISK REGISTER	
16.1 Risk register to be jointly managed, populated and valued. Risk review to take place weekly.	ALL
17.0 LEGAL INPUT	
17.1 CS to pass copy of key issues from CEC/CAF agreement for this meeting group to ensure that obligations are met.	CS
17.2 MF/AB/CS to agree instructions to ensure clear briefing (perhaps joint briefing) of solicitors to avoid duplication/miscommunication.	ALL
18.0 DATES FOR NEXT MEETING	
18.1 Friday 18 th March 2011, 9.30am – MF/AB/CS	
18.2 Tuesday 22 nd March 2011, 1.00pm – Tie/BSC Office	
18.3 Tuesday 22 nd March/Wednesday 23 rd March 2011 – times and order to be agreed	

Governance Structure

RGS/11.03.11/v2



**NOTES OF BRIEFING MEETING HELD ON FRIDAY 18TH MARCH 2011
AT BBS CONSORTIUM OFFICE, EDINBURGH**

ATTENDEES:

Martin Foerder (MF)	Bilfinger Berger Civil UK Limited	martin.foerder@civil.bilfinger.co.uk
Kevin Russell (KR)	Bilfinger Berger Civil UK Limited	Kevin.Russell@civil.bilfinger.co.uk
Bob McCafferty (BMcC)	City of Edinburgh Council	Bob.McCafferty@edinburgh.gov.uk
Axel Eickhorn (AE)	Siemens	axel.eickhorn@siemens.com
Colin Smith (CS)	for City of Edinburgh Council	csmith@hg-group.co.uk

DISTRIBUTION:

Attendees plus:		
Dave Anderson (DA)	City of Edinburgh Council	Dave.Anderson@edinburgh.gov.uk
Alfred Brandenburger (AB)	Siemens	Alfred.Brandenburger@siemens.com
Steven Bell (SB)	Tie Limited	Steven.Bell@tie.ltd.uk

ACTION

1.0 NOTES OF THE MEETING HELD ON 14TH MARCH 2011

- 1.1 The notes of the meeting held on 14th March 2011 were adopted.
- 1.2 CS provided references from East Dunbartonshire Council and the Glasgow Science Centre; reference from Schoenstatt to follow **CS**
- 1.3 CS is reviewing figures on existing funding to BBS to ensure priority works commissioned stay within existing approvals. **CS**
- 1.4 CS confirmed that the Governance paper was virtually complete. CS confirmed his advice that CEC should retain an "arms length" development company. **CS**
- 1.5 CS to obtain names of deputies to Steven Bell and Dennis Murray. **CS**

2.0 KEY DATES DISCUSSED

- 2.1 It was noted that the Principals Meeting previously scheduled for 7th April will now be taking place on 8th April.
- 2.2 **Mini Test Track** - Early programming suggesting worst case January 2012. Earlier start (4 April 2011) may improve this to December 2011, however, BBS to be paid from 4 April 2011 (already included in price, but to be paid for during the Prioritised Works period). Further discussion to endeavour to get this as close as possible to October 2011. This matter is to be discussed further at the meeting scheduled for 23rd March. **ALL**
- 2.3 **Depot** – Scottish Water issue around pipe specification. CS to address with CEC to assist to close out objections from SW by next meeting. **CS/ BMcC**
- MF suggested that in order to take advantage of available resources, BBS would start Depot works earlier (4 April 2011), however, BBS to be paid from 4 April 2011 (already included in price, but to be paid for during the Prioritised Works period).

- 2.4 CS is to issue a simple Priority Works tracker. **CS**

3.0 MEETINGS

- 3.1 Forthcoming meeting dates and attendees were discussed and agreed. CS is to issue invites. **CS**

**NOTES OF BRIEFING MEETING HELD ON FRIDAY 18TH MARCH 2011
AT BBS CONSORTIUM OFFICE, EDINBURGH**

ACTION

3.2 Design / Consents Meeting - Tuesday 22/3/11 at 2.30pm

Venue – BBS Meeting Room 2

Attendees: BBS - SNe / SDe / AEi / KRu
CEC - Bob Mc McCafferty or nominee
Tie - Steven Bell or nominee
Hg - Colin Smith

Maximum of 8 attendees

Agenda:

Agreement on Princes Street remedial work and programme

Review of matters outstanding and prioritisation in line with works programme

AOB

3.3 Programme Meeting - Wednesday 23/3/11 at 10.30am

Venue: Depot Site Office Meeting Room

Attendees BBS - SSh / MHe / ABr / KRu
Tie - Susan Clark
CEC - Ritchie Somerville
Hg - Colin Smith

Maximum of 8 attendees

Agenda:

Prioritisation works

Test Track target date 15th October

Look aheads

AOB

3.4 Risk Meeting - Wednesday 23/3/11 at 12.30pm

Venue: Depot Site Office Meeting Room

Attendees BBS - NHi / MHu / ABr / KRu
Tie - Steven Bell or nominee
Hg - Colin Smith

Maximum of 8 attendees

Agenda:

Creation of Risk register for Priority Works

Risk owners

Risk quantum

Risk mitigation

AOB

3.5 Financial / Commercial Meeting - Wednesday 23/3/11 at 2.30pm

Venue: Depot Site Office Meeting Room

Attendees BBS – DGo / AEi / ABr / KRu
Tie - Dennis Murray
CEC - Alan Coyle
Hg Colin Smith

Maximum of 8 attendees

Agenda:

Certificates 7th April and 3rd May

Prelims

Milestones and build up of same

Rates

AOB

**NOTES OF BRIEFING MEETING HELD ON FRIDAY 18TH MARCH 2011
AT BBS CONSORTIUM OFFICE, EDINBURGH**

ACTION

4.0 CORRESPONDENCE

- 4.1 Contractual matters per Heads of Terms to be in abeyance. CS to issue letter to BBS and Tie.

Post meeting note: A draft letter was circulated at the lawyers meeting on 21st March.

CS

5.0 PRIORITY WORKS

- 5.1 MF issued a draft programme for Priority Works for review prior to the programme meeting to be held on site on 22/03/11.

- 5.2 Scope of work to St Andrew Square was discussed. There is a possibility that the most cost effective solution would be to extend the termination point to York Place (as currently designed).

Post Meeting Note: It was agreed between the Parties on 22/03/2011 and confirmed by CEC that the Termination Point shall be at York Place – this needs to be formalised to BBS.

CS

- 5.3 Consideration is to be given to timing of CEC Public Realm Works at St Andrew Square.

BMcC

6.0 LEGAL MATTERS

- 6.1 Minute of Variation – MF proposed that the lawyers meet on Monday 21st March to avoid duplication and wasted effort. CS agreed with this. Meeting invites are to be issued by CS; meeting to be held at Hg, 20 Lynedoch Crescent, Glasgow at 10.00am

CS

- 6.2 Redacted copy of CAF agreement to be forwarded to BBS

CS

7.0 ANCILLARY WORKS TO ASSIST PROGRAMME

- 7.1 MF/KR suggested matters to be considered (already included in price, but to be paid for during the Prioritised Works period):

- (1) Tree removal
- (2) Murrayfield testing of ground conditions
- (3) CBR testing of On Street

8.0 TRANSPORT SCOTLAND

- 8.1 MF enquired if Transport Scotland were being advised of progress. CS confirmed that they would be updated regularly.

9.0 SCOTTISH WATER

- 9.1 Scottish Water consents lapse after six months. It was noted that CS would follow this up on behalf of CEC. Choice of pipe material at depot is an issue with SW. BSC have laid GRP; SW insist on ductile.

CS to check with CEC building control (George Findlay) and Andrew McBride (Transport Development Control) to establish if CEC have a similar policy on this. If not then CS to take up with SW on behalf of CEC.

CS

**NOTES OF BRIEFING MEETING HELD ON FRIDAY 18TH MARCH 2011
AT BBS CONSORTIUM OFFICE, EDINBURGH**

		ACTION
10.0	PRINCES STREET	
10.1	Lifting of Summer embargo and 28 day notification to Stakeholders to be reviewed by CEC.	BMcC
10.2	BBS to review traffic management on this basis and to consider full closure or central closure allowing traffic to remain on Princes Street.	BBS
10.3	Consideration is to be given to two other developments (2 cranes) and SGN works at west end of Princes Street (expected completion in October 2011)	BBS
11.0	FORTH PORTS	
11.1	Copy of correspondence passed to CS for client discussion	CS
12.0	TRAM STOP	
12.1	Superimposed letters on roof to be removed. CS to confirm.	CS
13.0	COMMERCIAL	
13.1	MF explained that the balance due to BBS will be the total value agreed at Mar Hall less amounts certified to 31 March 2011. This balance will be distributed into the simplified milestone schedule. CS required transparency into the build up of the amounts to be able to administer the certification of milestones and Preliminaries.	
13.2	Prioritised Works milestones are to be agreed then same principles to be used to establish overall milestone schedule. Details to be discussed at the 23 March Commercial / Financial Meeting.	
13.3	CS tabled NBS / CESM and RICS documents for BBS consideration on Preliminaries.	
13.4	MF advised that Preliminaries will be included in the milestone schedule and the amounts are to be certified on a monthly basis.	ALL
14.0	SIEMENS MATERIALS	
14.1	List of Materials and values to be provided and location to be identified (Broxburn / Leith / other). Details to be discussed at the 23 March Commercial / Financial Meeting.	AE
15.0	EDINBURGH GATEWAY	
15.1	Draft options report to be provided to tie/Network Rail regarding retaining wall and SW pipe. Option 4 is BBS preferred option and this will be discussed in detail at a meeting to be held on 22 March 2011. Once a solution has been identified, the design can be completed and a cost for the construction can be prepared	ALL
16.0	ON-STREET SUPPLEMENTAL AGREEMENT (OSSA)	
16.1	A copy of the OSSA was passed to CS for review.	CS
17.0	STATUTORY CONSENTS	
17.1	A schedule of outstanding consent issues was passed to CS for review.	CS

**NOTES OF BRIEFING MEETING HELD ON FRIDAY 18TH MARCH 2011
AT BBS CONSORTIUM OFFICE, EDINBURGH**

ACTION

17.2 Difference in scope and programme for agreement of consents and approvals was noted. Both parties agreed to close out all consents and approvals from Airport to Newhaven by 30 April 2011. Priority will be given to close out between Airport and SAS.

BSC also noted that they would self certify compliance with Employer's Requirements.

ALL

18.0 PUBLIC RELATIONS

18.1 BBS involvement with CEC to Stakeholders

ALL

18.2 MOP (taxi drivers) open day to promote project to be considered

ALL

19.0 DATES FOR NEXT MEETING

19.1 See schedule of meetings under item 3.0.

19.2 CS is to attend the Infraco Progress Meeting to be held at 1.00pm on 22nd March 2011.

HoT s Key actions Programme

ID	Task Name	Resource Names	March 2011	April 2011	May 2011	June 2011	July 2011	August 2011	September	October 2011
1										
2										
3										
4	Management Structure									
5										
6	Baseline commitment commencement date	All		14/03						
7	Management process briefing meeting for period March to September	MF AB CRS		14/03						
8	Revising management structures & governance profiles	All	03					06/04		
9	Principals meeting to affirm HOTs actions & progress	Principals					08/04			
10										
11	Project Delivery									
12										
13	BBS and Tie interface processing employers requirements	BBS Tie	03							01/09
14	BBS and CEC consents approval process	BBS CEC	03							01/09
15	BBS and Tie management of Risk , finance , programme	BBS Tie	03							01/09
16	CAF and Tie Tram provision	CAF Tie	03							14/10
17	Remaining Planning and Roads issues to be notified to BBS	CEC					31/03			
18	Programme									
19										
20	Prepare Priority Works programme and agree with CEC key dates	AB MF CRS	03				31/03			
21										
22	Priority Projects Project Delivery									
23	<u>Haymarket Yards, Princes Street Remedial Works</u>									
24	<u>Mini Test Track - Civils and Systems</u>									
25	<u>Depot Bridge Access, Depot Civils and Systems</u>									
26										
27	Agreed Priority Projects costings	BBS DM SB CRS	03				07/04			
28	Agreed Priority Works programme	BBS SC CRS	03				07/04			
29	Agreed Priority Works risk register	BBS CRS	03				07/04			
30	Agreed Priority Works design and consents	BBS CEC	03							03/05
31	Agreed Prelims and value of Priority Works	BBS DM CRS	03				07/04			
32	Design Gate Keeper monitoring	MF AB CRS	03							30/09
33										
34	Edinburgh Gateway									

Project Edinburgh Trams
Date: Tue 05/04/11

Task		Rolled Up Task		External Tasks	
Progress		Rolled Up Milestone		Project Summary	
Milestone		Rolled Up Progress		Group By Summary	
Summary		Split		Deadline	

CEC02087170_0071

Appendix 6

HoT s Key actions Programme

ID	Task Name	Resource Names	March 2011	April 2011	May 2011	June 2011	July 2011	August 2011	September	October 20	
35											
36	Agree scope, design, cost and programme for the works	BBS CEC	/03	[Task bar from March to 01/09]							01/09
37											
38											
39	Progress review										
40	<u>Design Consents, Programme, Risk, Commercial</u>										
41											
42	Progress review meeting	CRS BBS CEC Tie		22/03							
43				22/03							
44	Tripartite site meetings chaired by CRS	invitees by hg		23/03							
45	Tripartite site meetings chaired by CRS	invitees by hg									
46	Tripartite site meetings chaired by CRS	invitees by hg									
47	Tripartite site meetings chaired by CRS	invitees by hg									
48	Tripartite site meetings chaired by CRS	invitees by hg									
49	Tripartite site meetings chaired by CRS	invitees by hg									
50											
51											
52											
53											
54											
55											
56											
57											
58											
59	Heads of Terms key dates										
60											
61	Priority works per BBS programme to end of year 2011 TBA	All									
62	Principals meeting										
63	Minute of variation progress meeting - Priority Works	Principals / lawyers		15/03							
64	Minute of variation progress meeting - Priority Works	Principals / lawyers		21/03							
65	Minute of variation progress meeting - Priority Works	Principals / lawyers		24/03							
66	Completion of minute of Variation - Priority Works	Principals / lawyers									
67	Completion of CAF Minute of Variation	Principals / lawyers	5/03								
68											

Project Edinburgh Trams
Date: Tue 05/04/11

Task		Rolled Up Task		External Tasks	
Progress		Rolled Up Milestone		Project Summary	
Milestone		Rolled Up Progress		Group By Summary	
Summary		Split		Deadline	

CEC02087170_0072

HoT s Key actions Programme

ID	Task Name	Resource Names	March 2011	April 2011	May 2011	June 2011	July 2011	August 2011	September	October 20
69	Minute of Variation - off street works and on street works	Principals / lawyers		08/04	[Blue bar]			01/07		
70										
71	<u>Mobilisation</u>									
72										
73	Staff and materials mobilisation	BBS			21/04					
74	On site mobilisation and photo opportunity	BBS All					03/05			

Project Edinburgh Trams Date: Tue 05/04/11	Task		Rolled Up Task		External Tasks	
	Progress		Rolled Up Milestone		Project Summary	
	Milestone		Rolled Up Progress		Group By Summary	
	Summary		Split		Deadline	

CEC02087170_0073

ETN Risk Register

Risk ID No	Discipline	Category	Event/Tide	Cause	Further Description and Impact	Owner	Unmitigated Impact					Mitigated Impact												
							Probability	Capex Cost	HSE	Reputation	Environmental	Ranking	Probability	Capex Cost	HSE	Reputation	Environmental	Ranking						
R001	Construction	Safety	Fire in Depot Building	Failure to control fire hazards during construction or commissioning	Fire in depot building causes damage to structure, frame or central room equipment, delaying system operation	BBS	2	5	3	3	2	2	3	2	1	1	3	2	1	1	1	1	6	
R002	Construction	Safety	Death, injury or damage to third parties (people or property) during construction	(1) Failure to supervise works correctly (2) Failure to erect or maintain guarding, lighting, signage, TM, temporary roads and paths (3) Failure to inform third parties of works	Construction incidents causing death or injury, damage to works or adjacent infrastructure, delay and/or additional costs, involvement in investigation process, legal penalties or insurance issues, reputation damage.	BBS/le	2	4	4	3	1	2	4	3	1	1	2	3	2	1	1	1	1	3
R003	Construction	Environment	Construction Noise limit exceedances	Construction methodology, including use of plant and equipment on-site, results in CoCP or statutory noise level exceedances	Failure to plan works methodology or plant utilization to minimise noise impact, or failure to implement mitigation measures, results in noise level exceedances, work stoppage, delay and/or additional costs, penalties, reputation damage.	BBS	3	2	3	3	2	3	2	2	1	2	1	2	1	1	1	1	1	4
R004	Construction	Quality	Damage to Utility Apparatus	(1) Failure to locate apparatus prior to excavation (2) Failure to excavate carefully around known apparatus	(1) Safety hazard to workers or public (gas release) (2) Interruption to supply - impact on third parties and/or reputation damage	BBS/le	2	2	4	3	3	14	2	2	4	3	1	1	2	1	1	1	1	5
R005	Construction	Environment	Hydrocarbon Spill during filling/discharge	(1) Failure to protect apparatus during works or (2) Spillage from discharge pump during fueling (3) Leakage from storage tanks	(1) Penalties and/or compensation claims (2) Hydrocarbon contamination of the ground, groundwater and watercourses, resulting in ecological damage, penalties, legal action delay and/or clean-up costs	BBS/le	2	1	3	3	3	11	2	1	3	3	3	1	1	1	1	1	1	2
R006	Construction	Environment	Death or injury of protected wildlife or damage to plants and/or damage to wildlife habitats	Failure to prevent death or injury of protected birds, amphibians etc and/or excavated material placed on/in watercourse or embankment, destruction of nesting sites, damage to wetland areas	Failure to identify presence of protected wildlife and take appropriate mitigation measures, or failure to implement/maintain agreed measures for wildlife or ecological protection. Can delay works. Breaches to licence conditions - prosecution if found reckless	BBS	2	3	2	4	4	14	2	3	2	4	4	2	2	2	2	2	2	6
R007	Engineering	Quality	Failure of Designer to verify works completion in accordance with design	(1) Failure by designer to carry out verification inspections (2) Failure of site team to ensure verification inspections are carried out properly and monitor results	(1) Verification not Assured & Evidence Provided as such, resulting in delay to handover to system contractor or operator. (2) Use of ICP not given suitable level of confirmation that the works have been completed to required standards.	BBS	2	4	4	3	3	14	2	4	4	3	3	3	3	3	3	3	3	5
R008	Construction	Environment	Release of pollution from contaminated land	Excavation, piling and digging on contaminated land releases contamination to receptors - land, air, water	Failure to plan for runoff, or failure to maintain control measures, leads to silt runoff. Breaches to licence conditions - prosecution if found reckless	BBS	2	1	3	3	3	11	2	1	3	3	3	3	3	3	3	3	3	5
R009	Construction	Environment	Release of pollution from contaminated land	Excavation, piling and digging on contaminated land releases contamination to receptors - land, air, water	Failure to identify contamination, or failure to implement agreed measures: procedures for known contamination, results in breach of accelerated environment legislations, especially water legislation if released to the water environment, results in work stoppage, delay and/or additional costs, penalties, reputation damage.	BBS	2	1	3	3	3	11	2	1	3	3	3	3	3	3	3	3	3	5
R010	Proj Mgt	Commercial	Client budget non-compliance to complete project	(1) Cost growth due to delay or change (2) Loss of contributions for third parties (3) Political change	(1) Client unable to fund increased or delayed scope of works (2) Contractor unable to recover entitlement to payment arising from deferred resolution of change issues etc.	le/BBS	4	5	5	5	5	24	4	5	5	5	5	5	5	5	5	5	5	5
R011	Construction	Quality	Failure of Contractor / Sub-Contractors to self-verify completion & closing out of NCRs	(1) Failure by site staff to follow TPs and relevant quality procedures.	(1) Self Certification of Works not Assured & Evidence Provided as such, resulting in delay to handover to system contractor or operator (2) Use of ICP not given suitable level of confirmation that the works have been completed to required standards.	BBS	2	4	4	2	2	14	2	4	2	2	2	2	2	2	2	2	2	5
R012	Engineering	Management	Delay in acceptance of infrastructure by ICP/HMRF	Failure to follow defined procedure of progressive assurance with ICP and/or HMRF, leaving issues unresolved at start-up	Failure to complete ROGS process, including assurance/verification and evidence of risk assessment/mitigation in design/construction/operation/maintenance, results in refusal of permission to open for Passenger service, resulting in delay, rework or documentation costs and possible penalties/LADS	BBS/le	2	3	4	3	3	14	2	3	4	3	3	3	3	3	3	3	3	6
R013	Construction	Environment	Damage to wildlife habitat	Excavated material placed on watercourse or embankment, destruction of nesting sites, damage to wetland areas	Accidental damage to unforeseen wildlife habitat, or failure to prevent damage to known habitat (Owl, Badger, brood, water vole, amphibians). Breaches to licence conditions - prosecution if found reckless	BBS/le	1	1	3	3	3	6	1	1	3	3	3	3	3	3	3	3	3	4
R014	Engineering	Quality	Construction Information Control	Lack of QA control of construction information	Failure to implement rigorous QA control of information for construction leads to avoidable errors, rework, delay and/or cost	BBS	1	3	3	3	3	6	1	3	3	3	3	3	3	3	3	3	3	1
R015	Construction	Management	Traffic Management scope growth	TM requirements become more extensive or onerous than expected.	Non approval of TM proposals, or impact of changes/programme delay, results in more extensive and costly TM	BBS	2	3	3	2	2	11	2	3	3	2	2	2	2	2	2	2	2	12
R016	Engineering	Management	Delay in Design Approval	(1) Late or incomplete design submission (2) Failure to design to requirements (3) Extended design approval periods	(1) Failure by BBS to make competent design submissions (2) Failure by BSC to ensure design submissions are competent (3) Failure by approvers to meet approval response programme (4) Failure by Tio to ensure approval/acceptance timescales are achieved	BBS	2	3	3	3	3	11	2	3	3	3	3	3	3	3	3	3	3	1

Appendix 7

ETN Risk Register

31/03/2011

Risk ID No	Discipline	Category	Event/Title	Cause	Further Description and Impact	Owner	Unmitigated Impact					Ranking	Measure	Timescale	Current Status: 31-Mar-2011	Mitigated Impact					Ranking		
							Probability	Capex Cost	Programme	HSS	Reputation					Environmental	Programme	Capex Cost	HSS	Reputation		Environmental	
R017	Construction	Commercial	Client/Third parties require use of additional or premium hoarding/fencing	External pressure to provide additional or more costly hoarding fencing than is necessary for construction safety.	Client/public perception of Hoards type fencing is poor and could lead to pressure to provide premium fencing (eg Princess Street, or Edinburgh Park) for project image reasons, resulting in extra cost.	BBS/lie	2	2	1	3	1	1	1	Open	2	2	1	1	1	1	1	5	
R018	Proj Mgt	Safety	Security Incident	Terrorism, Vandalism, Trespass, Arson	Delay to works due to time lost or damage caused as a result of a security incident. Environmental impact and adverse publicity	BBS/lie	3	3	2	2	2	2	2	Open	1	2	2	2	2	2	2	2	4
R019	Construction	Environment	Archaeological or Human Remains	Discovery of unexcavated archaeological or human remains during excavation	(1) Delay to works due to access restrictions or reduced output (eg concrete placing in prolonged cold weather) (2) Damage to work in progress - rework	lie	1	3	3	3	3	3	3	Open	1	4	3	3	3	3	3	3	6
R020	Proj Mgt	Management	Exceptional adverse weather	Extreme weather: outwith normal weather pattern	(1) Delay to work due to access restrictions or reduced output (eg concrete placing in prolonged cold weather) (2) Damage to work in progress - rework	BBS/lie	3	2	2	2	2	2	2	Open	1	1	2	2	2	2	2	2	4
R021	Construction	Management	Industrial Action	Strikes in site labour force or suppliers affect works progress or delivery	Lost time due to strikes or delivery delays	BBS	1	2	2	2	2	2	2	Open	1	1	2	2	2	2	2	4	
R022	Train Supply	Management	Delayed delivery of key components	Material Scheduling Issue	Free issue equipment (lie)	lie	1	1	1	1	1	1	1	Open	1	1	1	1	1	1	1	1	1
R023	Train Supply	Management	Power not available to re-commission first train	Scheduling Issue	Fully booked test tracks, dynamic test issues	CAF	1	3	3	2	1	5	5	Open	1	3	3	2	1	1	1	1	8
R024	Train Supply	Management	Power not available to re-commission first train	Scheduling Issue	TPDS, radio, pantograph, wheel interface - faulty, unavailable, signals, free issue equipment not tested (lie)	BBS	4	4	5	3	1	24	24	Open	2	3	2	2	2	2	2	2	11
R025	Train Supply	Management	Delay due to interface problems discovered	Design Issue	TPDS, radio, pantograph, wheel interface - faulty, unavailable, signals, free issue equipment not tested (lie)	lie/BBS/CAF	3	4	4	1	1	10	10	Open	2	2	2	2	2	2	2	2	5
R026	Train Supply	Production	Delay due to train production rate inconsistent	Manufacturing	Strikes, materials, delivery schedule impact	CAF	1	2	2	2	1	4	4	Open	1	2	2	2	2	2	2	2	4
R027	Construction	Design & Installation	Reduced system envelope of TRW system (less than 1200mm) on street	Height available for BBS system and its substructure is less than 1,200 mm due to crossing of utilities or other underground obstacles	Indication of numerous locations with system envelope less than 1,200 mm in the in-street alignment. Problem: MUJFA, as-built drawings are not yet available. Currently there are 3 (three) locations in focus and under discussion. These locations are: Leith Walk Railway Bridge; 275 KV cable Leith Walk; Scottish Power Tunnel at Leith Walk. This leads to necessity of special Trackform solutions.	BBS/lie	3	3	3	3	3	12	12	Open	2	2	2	2	2	2	2	2	5
R028	Train Supply	Management	Train Storage	Delay of Depot	Lack of available/suitable storage	CAF	5	4	4	3	3	25	25	Open	2	4	4	4	4	4	4	4	23
R031	Train Supply	Environment	Delay to delivery of train 2 to 20 due to shipment problem	Scheduling Issue	Bad weather, availability of shipping containers	CAF	1	3	3	2	1	6	6	Open	1	3	3	3	3	3	3	3	6
R032	Construction	Management	Utilities works	MUJFA utilities not diverted by lie	Mudfa works not complete. Mudfa works obstructing access to work areas	lie	4	3	5	5	5	20	20	Open	2	1	3	3	3	3	3	3	13
R034	Installation	Management	Delayed NR approvals as applicable	Lack of early applications/discussions with NWR	Delayed start of works, Disruptions to off-street works	BBS	2	4	3	1	1	14	14	Open	2	2	2	2	2	2	2	2	6

NARRATIVE TO ACCOMPANY THE PROGRAMME PREPARED FOLLOWING THE MEDIATION ON 8 to 12 MARCH 2011 Revision 2.

Prioritised Works

All works to commence on 3 May 2011 following the signing of the MOV for the Prioritised Works by 15 April 2011, with the exception of the mini test track and the Depot external works which are programmed to recommence on 4 April 2011.

Princes Street

There is no allowance in the programme for dealing with utility works or delay resulting there from.

Scope

1. Princes Street Road/Rail Joint – Enhanced Design

The works involve the removal and replacement of bituminous surfacing on Princes Street to accommodate a concrete shoulder running strip adjacent to the rails. The concrete/surfacing works are limited to the tram lanes only. All road markings, road studs and areas of Antiskid/Coloured Surfacing within the areas that are affected by the works will be replaced / reinstated. The length of the works is as detailed below.

Inbound Track (East Bound Carriageway)

- Section 1C Chainage 121,370 - Chainage 121,976
- Section 1D Chainage 130,000 - Chainage 130,380

Outbound Track (West Bound Carriageway)

- Section 1C Chainage 121,374 - Chainage 121,980
- Section 1D Chainage 130,000 - Chainage 130,380

The Programme is based on the programme assumption that the whole of Princes Street shall be available and that there will be no interruption of a summer Embargo, i.e. Full Closure of Princes Street from 3 May 2011 until end November 2011.

2. OLE Works & Street Lighting

OLE Foundations within the section from Hanover Street to Waverley Junction (7 nr) and South Charlotte Street to Lothian Road (4 nr) will be completed. Note there are utility/basement/design conflicts associated with these foundations that require resolution. All OLE poles will be erected and street lighting installed.

3. Tram Stop

The tramstop finishes will be completed but no furniture including the shelter, PID, bins etc will be installed.

4. Scottish Water

Completion of works from the original phase of construction works and includes provision of additional crossing due to OLE conflict. The pipework is in place and only the connection has to be completed. Notifications and SW requirements may affect the actual start date.

5. BT

BT remedial works in the area of South St David Street will be completed.

6. Chambers

The remedial works will commence on 3 May 2011 and be completed.

7. Finishes

All outstanding works to footways, pedestrian barrier, signs and track drainage will be completed.

Haymarket Viaduct

The Track is to be constructed from the tangent point at the end of the straight section of track at the eastern end of Haymarket Viaduct to the tangent point at inbound track Chainage 200,260 and the tangent point at outbound track Chainage 200,207 and the road fully reinstated. Prioritised Works to Haymarket Viaduct is restricted to that necessary to lay the tracks including the concrete infill of the Rheda City track construction. (N.B. construction work on track curves must start and finish at tangent points).

Although the track bed is constructed in the second phase of traffic management, a third phase of traffic management is required (that can only take place after phases 1 & 2) to complete the outbound track (Chainage 200,207 to 200,260) that runs in Haymarket Yards. This third phase is not part of the Prioritised Works.

Depot Access Bridge

Construction continues and is anticipated to be complete in April 2011.

The Depot

Internal work on the Depot Building continues. External works are programmed to recommence on 4 April 2011. The Depot Building will be available to take delivery of up to the first five trams from 15 October 2011 following the issue by tie of a partial completion certificate in respect of the Depot Building. The trams will be unloaded on track 15 and stabled inside the Depot Building. The unloading and shunting activities of each tram into the Depot Building shall be limited to the hours between 18h00 on the delivery date and 07h00 on the following day. The Programme assumes that tram delivery will not interfere with the Prioritised Works.

The works in the Depot area to the east of the Depot Access Bridge that become redundant once the Edinburgh Gateway is instructed have been deleted from the Programme and hence "Section A" needs to be redefined. The Depot (excluding area east of Depot Access Bridge) will be available to take delivery of any further trams from 16 December 2011 following the issue by tie of a completion certificate in respect of Section A. Note warrantee period commences with the issue of the completion certificate. This will involve handover of Depot and commencement of handover procedures with the Operator.

To create a Programme that represents a complete scope of works, provisional activities have been added to represent what may require construction under the

Edinburgh Gateway. The duration and logic applied to these activities is provisional only. The actual impact of the Edinburgh Gateway on the Programme can only be determined once the works are instructed and the appropriate IFC drawings are available.

Mini Test Track

To achieve the shortest programme period the mini test track constitutes a single track on the inbound track from chainage 531,230 to 531,800. These locations are determined by the OHLE design. This track will be connected to the depot via the depot west entrance switch. A temporary Overhead Catenary System will be installed using the final back stay at chainage 531,749 at the west end and a new back stay to be installed around chainage 531,260 in the east end of the mini test track. This will result in an energised and usable track of about 400m. The period reflected in the programme includes a 2 week period for energisation tests. A temporary Overhead Catenary System will be designed and implemented on the east side of the Depot Access Bridge to enable all tracks within the Depot to be energised. The additional costs associated with implementing this temporary Overhead Catenary System to accommodate energisation of the mini test track will need to be agreed. This temporary Overhead Catenary System will be replaced at a later time with the permanent Overhead Catenary System when the Edinburgh Gateway has been designed and constructed.

The Edinburgh Gateway works also prevent the installation of the final radio mast in time to be available for the operation of the mini test track.

The programme considers that for all works adjacent to the mini test track and the final works on the mini test track area will be executed under normal construction conditions, without any restrictions. Therefore this track cannot be permanently used for testing purposes until the final installation is completed.

A8 Underpass

Phases 1, 2 and 4 are programmed to recommence on 3 May 2011.

Auxiliary Items

The Programme includes for the following auxiliary items:

- Additional Testing in Murrayfield Corridor
- Water of Leith Sewer Lining Works
- Demolition of Plots 97/102
- Testing of Contamination
- Advanced Site investigation Works in Section 1C/1D

Remaining Off Street Works

The remaining off street works are programmed to commence on or about 2 September 2011 following the signing of a MOV by 01 July 2011.

The CAF works no longer form part of the programme however periods have been allowed for their works as previously advised by CAF to allow calculation of the dates for Section Completion A and Section Completion B.

General

The data date of the programme is 31 March 2011. For work activities currently under construction their anticipated actual progress at 31 March 2011 has been taken as the start point of the programme.

The programme for the works recognises the allowed working hours stated in the Code of Construction Practice of 0700 to 1900 Monday to Friday and 0800 to 1300 on a Saturday. However a 40 hour effective working week has been used to calculate the duration of activities to take account of rest breaks, un-exceptional weather delays and travel between work sites. Construction work will be required outside the hours stated in the Code of Construction Practice for Rail Possessions, work on busy road junctions, stringing catenary cables etc. The necessary approvals will be sought in advance for such works in accordance with the tender documents and the programme assumes that such approval will be granted as necessary to maintain the programme.

Assumptions and factual statements upon which the programme has been prepared are as set out in this document. General assumptions are as follows.

The programme assumes that all outstanding drawings have been issued at IFC status by the 31 March 2011 (excluding "Roseburn Viaduct" [the structures at Roseburn Street] (20 June 2011) and the redesign of S21B, C and D (16 May 2011))

The programme assumes that all Third Party approvals / licenses will be in place for these works to commence and proceed as shown.

Detailed programmes are available for all structures. The programme shows summaries of these programmes.

The construction works in general are subject to Network Rail approval. An eleven week period has been assumed for all Network Rail WPP and form C approvals, which includes a three week "cooling off period" for the WPP. The Programme generally shows the latest dates for these approvals.

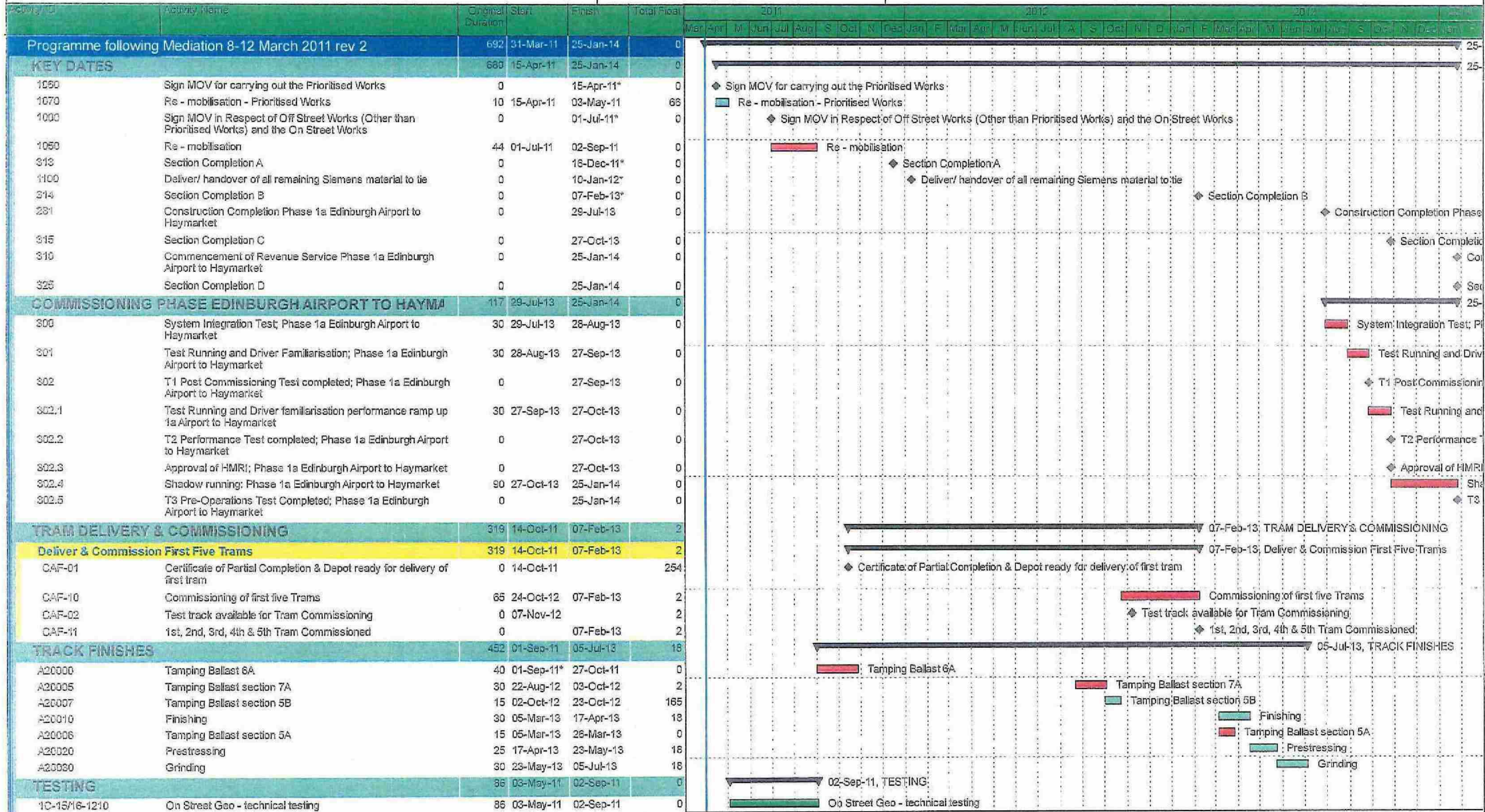
Programme following Mediation

on 8 - 12 March 2011 (110331)

EDINBURGH TRAM NETWORK



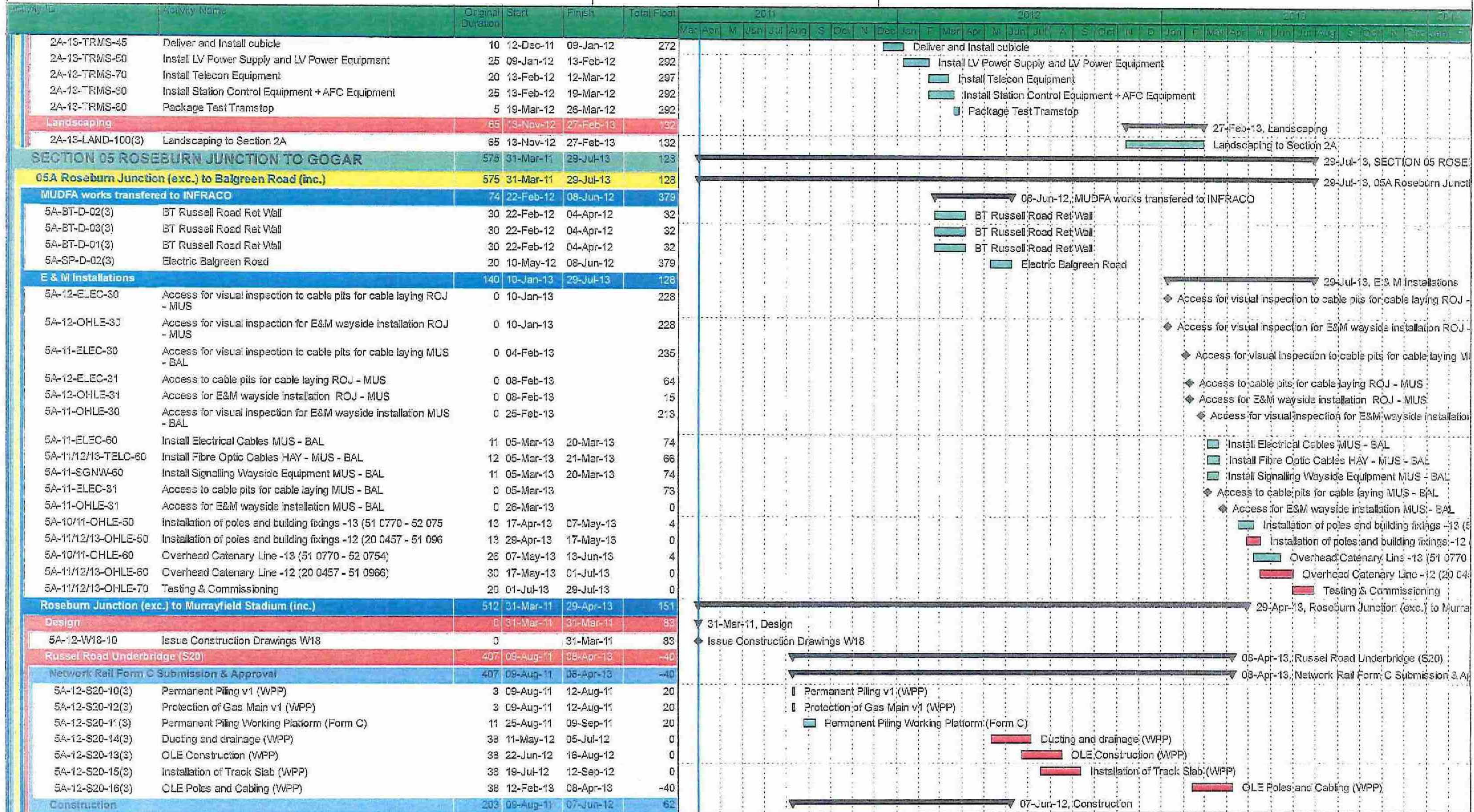
31-Mar-11 16:40



Date	Revision	Checked	Approved
17-Mar-11	Revision 0	SCS/MHE	BSC
21-Mar-11	Revision 1	SCS/MHE	BSC
21-Mar-11	Revision 2	SCS/MHE	BSC

■ Remaining Level of Effort ■ Critical Remaining Work
■ Actual Work ◆ Milestone
■ Remaining Work ▼ Summary

CEC02087170_0081

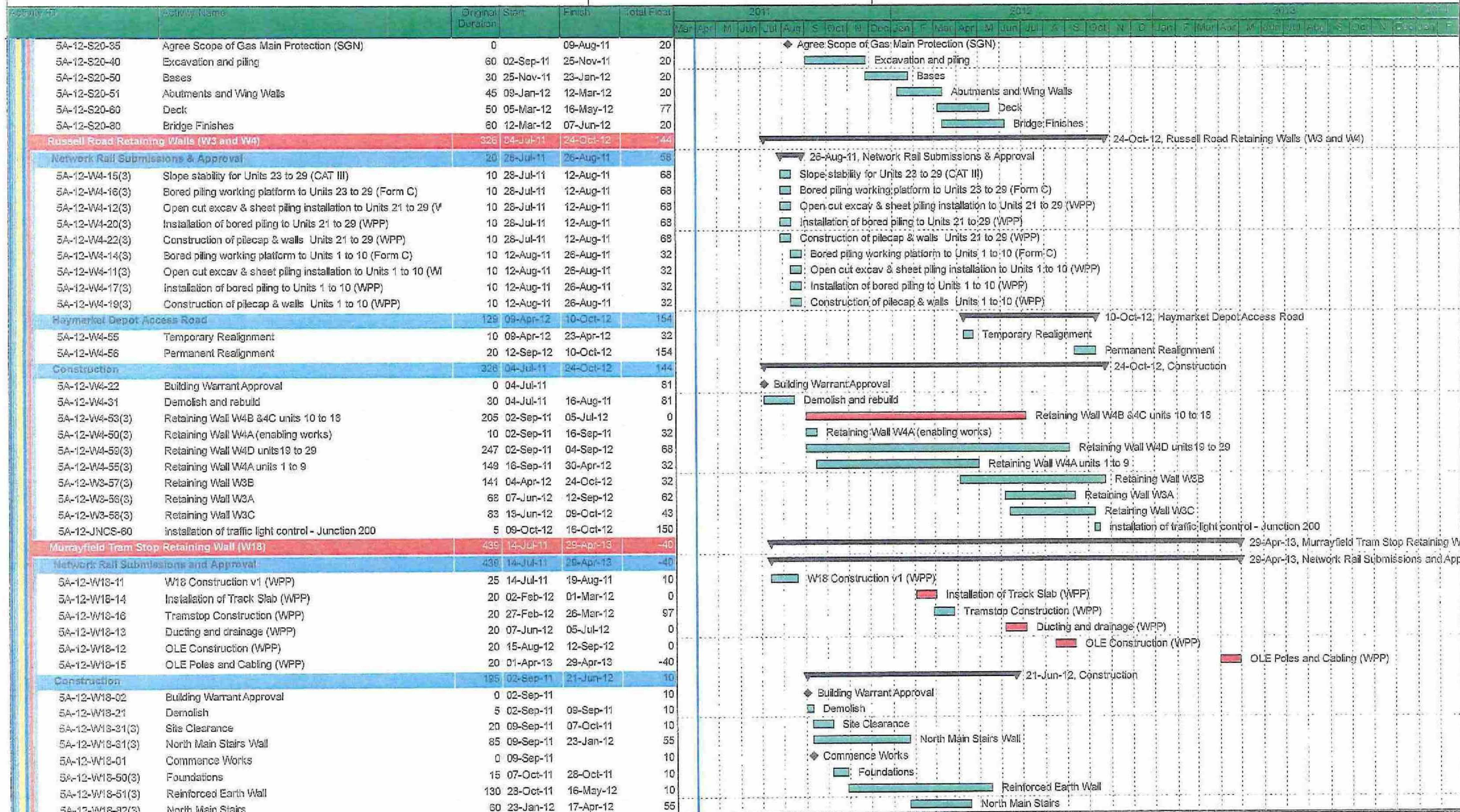


Date	Revision	Checked	Approved
17-Mar-11	Revision 0	SCS/MHE	BSC
21-Mar-11	Revision 1	SCS/MHE	BSC
31-Mar-11	Revision 2	SCS/MHE	BSC



CEC02087170_0089

EDINBURGH TRAM NETWORK



Legend for Gantt chart symbols:

- Remaining Level of Effort (Green bar)
- Actual Work (Blue bar)
- Remaining Work (Light Green bar)
- Critical Remaining Work (Red bar)
- Milestone (Diamond)
- Summary (Arrow)

CEC02087170_0090

Date	Revision	Checked	Approved
17-Mar-11	Revision 0	SCS/MHT	BSC
27-Mar-11	Revision 1	SCS/MHL	BSC
31-Mar-11	Revision 2	SCS/MHE	BSC

