

Our ref: **25.1.201/EKi/6682**

11 September 2010

tie limited
CityPoint
65 Haymarket Terrace
Edinburgh
EH12 5HD

**Bilfinger Berger–Siemens– CAF
Consortium**

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Edinburgh Park
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Phone:

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For the attention of Steven Bell – Tram Project Director

Dear Sirs,

**Edinburgh Tram Network Infraco
Project Carlisle – Revised Infraco Full and Final Proposal**

We refer to our letter dated 29th July 2010 ref. 25.1.201/EKi/6338 and your letter dated 7th September 2010 ref. INF CORR 5990.

Following the lengthy discussions between tie and Infraco representatives regarding the initiative known as Project Carlisle (a Guaranteed Maximum Price Proposal based on a reduced scope and accelerated programme in an effort to allow tie to obtain a cost effective and revenue generating tram network) we herewith enclose our revised full and final proposal.

We have incorporated, where possible, the requirements of tie although we are fully cognisant that not every tie desire has been incorporated, and as a matter of clarity not every Infraco cost has been included.

You will be aware of a number of promises and commitments made by your representative to resolve the considerable number of outstanding issues in respect of Third Party Approvals to enable us to reduce our exclusions/caveats. Unfortunately not a single one of these commitments has been met and thus our exclusions/caveats must remain.

As we previously offered, we remain willing to discuss how our Full and Final Offer has been established with the Gordon Harris Partnership. We are not however, prepared to entertain any further discussions around the tie 'Counter Proposal' received by us on 8th September 2010 as we consider tie's "Counter Proposal" to be wholly and totally unrealistic both in terms of it's pricing structure and level of risk transfer back to Infraco.

In conjunction with Gordon Harris Partnership and our civil works Subcontractors, we have now been able to fully review and reduce our previous submission in an effort to reach an agreement on Project Carlisle. We are confident that these Sub-Contractors have given all that they possibly can.

Due to the protracted negotiations in respect of Project Carlisle, key construction activities on the critical path have slipped resulting in an overall slippage of the completion date by some 5 (five) weeks.

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The Guaranteed Maximum Price has therefore been developed in the light of the above as described in the attached proposal and pertains to the attached scope and programme. For the avoidance of doubt, this Proposal relates solely to the scope and corresponding programme of the Project Carlisle Initiative and is wholly without prejudice to our rights and remedies under the Contract until such time as it is incorporated by a tie Change Order to that Contract, upon which time it shall supersede all estimates and proposals in relation to the Edinburgh tram Network.

No party may rely on any statement, declaration or representation contained herein whether express or implied, in any court proceedings, arbitration, adjudication, mediation or any other form of determination or negotiation without the express written permission of the Infraco. This Proposal shall not constitute an offer or create any legally binding obligation on the Infraco.

As always, we will avail ourselves to meet at your convenience to discuss this Revised Proposal.

Yours faithfully,


M Foerder
Project Director
Bilfinger Berger Siemens CAF Consortium



Encl: Revised 'Project Carlisle' Proposal

cc: R. Walker – Bilfinger Berger
M. Flynn – Siemens
M. Berrozpe – Siemens
A. Brandenburger - Siemens
A. Campos - CAF
A. Urriza - CAF

INFRACO "PROJECT CARLISLE" PROPOSAL

Revised 12 September 2010

**INFRACO CONSIDERS THIS PROPOSAL TO BE
CONFIDENTIAL INFORMATION AND SUBMITS IT
WITHOUT PREJUDICE**

**INFRACO RESERVES THE RIGHT TO REVISE,
RESUBMIT, AND/OR WITHDRAW THIS PROPOSAL
AT ITS CONVENIENCE**

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PREFACE

This Revised Infraco "Project Carlisle" Proposal takes into account its predecessor, dated 29 July 2010, and tie's letter dated 7 September 2010 (INF CORR 5990). tie's letter of the 7 September 2010 and accompanying documents fall considerably short of our threshold for acceptance. The overarching theme of the document presents a picture of the contract tie wishes they had executed with Infraco, and from a perspective that Infraco have no rights. As you are well aware, Infraco enjoys the express and implied rights and remedies of the executed Infraco Contract.

We have no intention to further use this document to convey our disappointment or to correct the many inaccurate statements in your letter. Based upon the report we have received from our Mr. Kitzman, regarding his discussions with your Messrs. Rush and Molyneux, it seems that several issues still remain to be reconciled between the Parties, specifically the scope, programme, and pricing.

In an attempt to pursue a reasonable solution to the Project, we have reassessed these items and have updated our Proposal accordingly.

With regard to the revised scope, as discussed, this Revised Proposal does not include the works east of Haymarket.

To clarify, it is tie who do not want Infraco to undertake the works east of Haymarket. In the event that tie would require the E&M installation works (train control, traffic control, SCADA, Communication, electrification and Over Head Line systems) to be completed east of Haymarket, Siemens would be willing to enter into discussions with tie and provide a quotation to tie in response to a clear scope of work, programme, and a standard set of terms and conditions issued by tie, in which Siemens would be a subcontractor to tie.

The transfer of substantial risks, as outlined in your letter, many of which are not quantifiable, cannot be accepted without Infraco substantially increasing its cost. We have taken on the risk for items that we believe are quantifiable, and have noted as much later in this document. tie must retain the risk for the other items simply due to the fact that tie have full control to avoid the additional costs. To clarify, the majority of the remaining risk issues are associated with various items that have continued to remain in flux due to tie, CEC, or other third parties, in spite of numerous commitments to resolve these matters. Tie and CEC could simply avoid all of these additional costs by committing contractually to the GMP Drawings previously provided by Infraco.

In respect of programme, we have reviewed the Sectional Completion Dates identified in your letter, however we do not believe they represent a realistic reflection of the works yet to complete. The Programme, included in Appendix 5, has been exclusively developed for the implementation of Project Carlisle works. This programme is challenging but achievable and Infraco is fully committed to delivering it. The estimated price to complete the work from Airport to Haymarket is roughly £405.5Mio plus €6Mio, as detailed in the attached price build up. We have no interest in further discussing and debating the price. This Revised Proposal is Infraco's Full and Final Offer to complete the works defined herein.

For the avoidance of doubt this Revised Proposal relates solely to the scope and corresponding programme of the Project Carlisle initiative and to that extent shall supersede all estimates and proposals provided in relation with the Edinburgh Tram Network (ETN) once implemented by a tie Change Order acceptable to Infraco. This proposal is submitted without prejudice to Infraco's whole rights and remedies and no party may seek to rely on any statement, declaration

or representation contained within this proposal, whether express or implied, in any court proceedings, arbitration, adjudication, mediation or other form of determination or negotiation without the express written content of Infraco. This proposal shall not constitute an offer or create any legally binding obligation on Infraco.

EXECUTIVE SUMMARY

Introduction

Further to your request, this Revised Proposal is Infraco's Full and Final Offer to complete the works defined herein.

The GMP Scope

We have revised our Proposal to reflect the scope Infraco will be able to agree on. In essence, we will carry out the works shown on the GMP Drawings for scope of work between the Airport and Haymarket, and the enabling works.

Our Pricing Assumptions

As a result of the above, we are able to offer our Guaranteed Maximum Price on the basis of a minimal number of Pricing Assumptions. We would like to take this opportunity to assure you that we have looked to minimise the number of Pricing Assumptions to provide greater certainty to both Parties and for the benefit of the Project as a whole.

The main items are summarised as follows:

1. Infraco will build to the GMP Drawings subject to the qualifications set out in Appendix 4 of this Revised Proposal. The GMP Drawings will not be amended and Infraco will not be required to construct anything other than the GMP Drawings other than by way of a tie Change
2. tie will lend all available assistance to ensure CEC will approve the GMP Drawings in expedient fashion and in accordance with the Programme.
3. Infraco will assume the risk of dealing with known quantities of contaminated ground (including by invasive species), as outlined later.
4. Infraco will not take any risk associated with the discovery and/or replacement of utilities
5. Infraco has accepted the risk to remove and replace soft materials to the extent identified on the GMP Drawings
6. Infraco will not take the risk on obstructions or voids being discovered below the original ground level
7. Infraco and tie shall agree a revised Milestone Payment Schedule acceptable to both Parties,
8. CEC will grant all consents and technical approvals for the Integrated Trackform design shown on the GMP Drawings

The GMP Programme

Our proposed Programme is set out at Appendix 5. This shows Sectional Completion Dates of:

1. Section A – 9 June 2011
2. Section B – 20 December 2011
3. Section C – End of construction 21 June 2012 - End of Testing & Commissioning 19 September 2012
4. Section D – 18 December 2012

The Programme which was exclusively set up for the implementation of Project Carlisle is challenging but achievable and Infracore is fully committed to delivering it.

The Guaranteed Maximum Price

In light of the above, we are able to offer a 'Guaranteed Maximum Price' of £405,531,217 and €5,829,805. We believe this is a fair and reasonable offer which we hope, when seen as part of this Revised Proposal, will prove acceptable to tie.

A detailed breakdown is provided at Appendix 1.

Revised Change Mechanism

We believe that Project Carlisle offers an excellent opportunity to remedy what has previously been a major source of contention on the Project - namely Clause 80. Our proposal will commit Infracore to working whilst Estimates are agreed subject to payment being received for works carried out during that period.

The revised mechanism would operate as follows:

1. tie will be required to issue a tie Notice of Change upon the occurrence of a change event, or upon Infracore notifying it of such an occurrence.
2. Failure to issue a tie Notice of Change will result in the matter being referred to DRP.
3. Infracore to prepare an Estimate within existing contractual timescales, following receipt of a tie Notice of Change.
4. A finite period to be allowed for agreement of the Estimate failing which the matter will be referred to DRP.
5. Infracore will commit to carrying out the works associated with the tie Change in advance of agreement or determination of the Estimate, and where necessary, in advance of the production of an Estimate in accordance with the Programme.
6. Infracore to be paid, on an interim basis in line with the Estimate.
7. Note that as set out above, Infracore will continue to build the design set out in the GMP Drawings until it receives a tie Notice of Change instructing otherwise.

It is our firm belief that the above changes offer an equitable solution for both Parties, allowing uninterrupted progress of the Works to continue and a swifter delivery of the ETN.

Priority of Project Carlisle

Given the innovative nature of Project Carlisle and the impact of our Revised Proposal on the existing Infraco Contract, both Parties would be required to accept that the product of this Revised Proposal will take precedence over any conflicting existing Infraco Contract obligation.

Conclusion

We believe that our proposal provides an excellent opportunity for both sides to move forward in a positive direction. The key aspects of our proposal can be summarised as follows:

1. A Guaranteed Maximum Price based on a well-developed design
2. A fully optimised Programme providing the most sensible and expedient method of delivering the Project
3. A significantly reduced number of Pricing Assumptions
4. A simplified Change mechanism which allows progress to continue while Clause 80 runs its course.

Whilst we anticipate that much time and work will be required to align the Infraco Contract with the changes brought about by Project Carlisle, not least to the Employer's Requirements and Infraco Proposals, there is an immediate need to resolve outstanding issues relating to the approval of form to Sub Contract for key Sub-Contractors and the Permits to Commence work in order to demonstrate the benefit of Project Carlisle to the general public.

We also believe that the success of the Project could be ensured by the appointment of a mutually acceptable full time mediator by tie to resolve differences, and continually engage both Parties in constructive dialogue.

NOTE: In an effort to simplify your review of this Revised Proposal we have maintained the previous Sectioning.

DEFINITIONS USED IN THIS PROPOSAL

"Project Carlisle Change Order" for the purposes of this Revised Proposal, refers to the issue by tie of a Change Order to incorporate the 'Project Carlisle' initiative and associated Minute of Variation.

"GMP Drawings" means the GMP Drawings, Specifications and Schedules, listed in Appendix 3 of this Revised Proposal.

"Guaranteed Maximum Price" means, on the basis of the scope and assumptions referenced in this Revised Proposal, the sum set out in Appendix 1 as the same may be varied in accordance with the principles set out in this Revised Proposal and the remaining terms of the Infraco Contract.

"Actual Cost" means all direct and indirect cost/expenditure incurred whether on or off Site including overheads, finance, and other charges and allowances allocable thereto.

"Estimated Actual Cost" means, a reasonable estimate of Actual Costs, based upon the available information, terms, and conditions known at the time of estimation. It is anticipated that Estimated Costs may vary from the Actual Costs.

"Programme" means the Programmes contained in Appendix 5

APPENDIX 1

GUARANTEED MAXIMUM PRICE

The Guaranteed Maximum Price is comprised of the following Infraco Prices (further detailed in Appendix 1.1 – 1.4 respectively), exclusive of Value Added Tax and in Pounds Sterling and Euro:

Bilfinger Berger Civil UK Ltd.	£215,300,646
Siemens	£118,601,221
CAF	£55,781,634
and	€5,829,805
SDS	£15,847,716
Total	£405,531,217
and	€5,829,805

APPENDIX 1.1

Bilfinger Berger UK Ltd - Guaranteed Maximum Price Breakdown

Appendix 1.1 - BB – GMP Breakdown

For clarity, the BB GMP Price now includes for previous GMP Exclusions / Qualifications for the following items (as detailed in Appendix 4):

- Known quantities of contaminated ground,
- Protection of Services,
- New Ingleston Limited Future Proofing,
- CEC Planning Requirements at Roseburn Viaduct.

Bilfinger Berger Civil UK Limited : GMP Summary

10/09/2010

1. Direct Cost

Item	Description	Prelims and Method Related Charges		Construction Works			Risk / Opportunity	Grand Total
		to 30 June 2010	to Completion	Original Subcontract Work	Change	Construction Works Total		
(1)	(2)	(4)	(5)	(6)	(9)	(10)	(12)	(13) = (8)+(9)+(12)
	Original SubContract Order			67,320,859				
	Total for Direct Cost	9,930,764	18,287,295	50,483,975	30,012,384	27,896,323	2,611,433	139,985,701
* At the 30th June 2010								8,058,450
Previous GMP Exclusions / Qualifications now priced								8,058,450

2. SDS Provider

Item	Description	Scope Works			Risk / Opportunity	Grand Total
		Original Work	Change	Total (excl Risk & Opportunity)		
(1)	(2)	(3)	(6)	(8) = (3)+(6)	(9)	(10) = (8)+(9)
	Original Order					
	Total for SDS Provider	4,983,815	1,358,918	4,698,059		15,847,716
* At the 30th June 2010						15,847,716

3. In Direct Cost

Item	Description	Indirect Cost
(1)	(2)	(3)
	Total for In Direct Cost	41,209,008

4. Summary of Direct, SDS and Indirect Costs

210,134,874.76			
14,709,441.23	7%	Overheads	
6,304,046.24	3%	Profit	
231,148,362.23		GMP Grand Total	

Item	Description	Original SubContract Order	Prelims and Method Related Charges		Construction Works				Risk / Opportunity	Grand Total
			to 30 June 2010	to Completion	Original Subcontract Work	Change	Construction Works Total	(11)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1A	Mickean & Co	2,620,066	671,292	1,333,140	1,628,076	879,730	42,003	2,598,759	447,000	7,600,000
1B	Crummock (Scotland) Ltd		184,430	12,500	392,622			5,313		594,865
1C	Not Required									
1C/1D	MacKenzie Construction Ltd						7,707,463	228,828		9,913,397
	Princes Street Supplemental Agreement	1,977,106					2,502,544	4,917		2,507,461
	Class One						345,950	29,298		375,248
	Others						69,796			69,796
	Totals	1,977,106			1,977,106	10,625,753	263,043	263,043		12,865,902
	Other Work in 1C/1D (non PSSA)	447,095			447,095		1,668,717			2,115,812
	1C/1D Totals	2,424,201			2,424,201	12,294,470	263,043	263,043		14,981,714
1D	Mckenzie Construction Ltd	3,871,941	40,144	174,856	3,355,254	(2,865,126)	(490,128)			215,000
On	Other On Street Works	3,327,111	1,295,098	459,759	1,618,345	(1,252,666)	77,053		47,350	2,244,939
ON Street Summary		12,243,319	2,190,964	1,980,255	9,025,876	(2,845,440)	11,923,398	2,867,115	494,350	25,636,518
2A	John Graham (Dromore) Ltd	15,853,507	1,678,000	7,393,252	9,683,666	85,790	1,366,830	3,092,707	225,000	23,525,245
5	Expanded Ltd	12,207,596	2,462,979	2,858,254	9,198,668	73,794	12,284,125	1,003,128	1,466,383	29,347,351
6	Barr Limited	12,588,218	1,643,983	830,413	10,451,039	1,232,033	1,006,610	720,220	305,700	16,189,998
7A	Farrans Ltd	5,583,816	1,198,653	1,897,641	4,291,048	2,117,351	3,431,421	4,191,386	120,000	17,247,500
Off	Other Off Street Works	8,844,403	756,184	3,327,480	7,833,658			16,121,767		28,039,089
OFF Street Summary		55,077,540	7,739,799	16,307,040	41,458,099	3,508,968	18,088,986	25,129,208	2,117,083	114,349,183
OVERALL SUMMARY		67,350,859	9,930,764	18,287,295	50,483,975	663,527	30,012,384	27,996,323	2,611,433	139,985,701

* At the 30th June 2010

PROGRAMME INFORMATION											
Item	Description	Subcontract Order Start Date	Subcontract Contract Period (wks)	Subcontractor Mobilised and On Site	Actual Start Date on Site	Programme Status at 30/6/10	Subcontract Contract Period Revised (wks)	Additional Duration (wks)	Carlisle Programme Subcontract Completion	Weeks from 01/07/10	
1A	McKean & Co	19-Jun-09	96	23-Nov-09	09-Mar-10	9 wks BH	104	8	20-Jun-11	50	
1B	Crummock (Scotland) Ltd	06-Oct-08	n/a	01-Oct-08	13-Oct-08	n/a	n/a	n/a	n/a	n/a	
1C	Not Required	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
1D	McKenzie Construction Ltd	05-Jan-09	88	05-Jan-09	05-Jan-09	n/a	n/a	n/a	n/a	n/a	
2A	John Graham (Dromore) Ltd	01-Feb-10	65	23-Nov-09	23-Nov-09	21 wks BH	111	46	21-Mar-12	89	
5	Expanded Ltd	27-Oct-08	85	27-Oct-08	27-Oct-08		157	72	03-Nov-11	69	
6	Barr Limited	03-Nov-08	68	02-Feb-09	17-Aug-09	On Prog	110	42	16-Dec-10	24	
7A	Farrans Ltd	08-Sep-08	56	11-Sep-08	11-Sep-08		152	96	11-Aug-11	57	

Edinburgh Tram Network
Project Carlisle : "Guaranteed Maximum Price"
Subcontractor GMP Summary
Subcontractor : McKean & Co (Glasgow) Ltd
Section 1A : Enabling Works

Item	Description	Original SubContract Order	De-Scope for Project Carlisle	Balance of Original SubContract Order	Prelims and Method Related Charges		Construction Works				Risk / Opportunity	Grand Total	
					to 30 June 2010	to Completion	Original Subcontract Work	Already Submitted* and Agreed	Change	Construction Works Total			
		(P)	(M)	(S)	(R)	(T)	(R)	(R)	(R)	(R)	(R)	(R)	
1	Preliminaries & General Items	1,679,780	687,790	991,990	671,292	1,333,140						567,000	2,571,432
2	Method Related Charges	18,800	18,800										
3	Track and Formation	1,063,265	1,014,910	48,355			48,355				48,355		48,355
4	Tramstops	448,537	448,537										
5	Accommodation Works	2,050	200	1,850			1,850		8,300	59,224	69,374		69,374
6	Highways	841,184	841,184						1,866	1,200,509	1,202,375		1,202,375
7	Buildings - Substation	26,276	26,276										
8	Structures	1,777,120	199,249	1,577,872			1,577,872	879,730	25,921	320,739	2,804,262		2,804,262
9	OHLE	88,214	88,214						5,916		5,916		5,916
10	Lindsay Road Realignment									953,286	953,286		953,286
11													
12													
13	Risk Review Transfer / Deletion									65,000	65,000	(120,000)	(55,000)
14													
	Total	5,945,227	3,325,161	2,620,066	671,292	1,333,140	1,628,076	879,730	42,003	2,598,759	5,148,568	447,000	7,600,000

* At the 30th June 2010

Section 1B: Leith Walk

Item	Description	(2)	(3)	Prelims and Method Related Charges		Construction Works				Risk / Opportunity	Grand Total
				(4)	(5)	(6)	(7)	(8)	(9)		
1	Preliminaries & General Items	184,430	12,500								196,930
2	Method Related Charges										-
3	Track and Formation					392,622		5,313			397,935
4											-
5											-
6											-
7											-
8											-
9											-
10											-
11											-
12											-
	Total	184,430	12,500			392,622		5,313			594,865

* At the 30th June 2010

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GRAND TOTAL											
Item	Description	(2)	Prelims and Method Related Charges		Original SubContract Order	Construction Works				Risk / Opportunity	Grand Total
			(4)	(5)		Original Subcontract Work (6)	Change	(8)	(9)		
			to 30 June 2010	to Completion		Already Submitted* and Agreed (7)	Already Submitted* and Not Agreed (8)	New Submission	Construction Works Total (6 to 9)=(10)	(11)	
1	Preliminaries & General Items	-	-	-	-	-	-	-	-	-	-
2	Method Related Charges	-	-	-	-	-	-	-	-	-	-
3	Mackenzie Construction Ltd	-	-	-	-	-	7,707,463	228,828	9,913,397	-	9,913,397
4	Crummock Scotland Ltd	-	-	-	-	-	2,502,544	4,917	2,507,461	-	2,507,461
5	Peek Traffic	-	1,977,106	-	-	-	57,135	-	57,135	-	57,135
8	Siemens Traffic Controls	-	-	-	-	-	12,661	-	12,661	-	12,661
9	Class One Traffic Management	-	-	-	-	-	345,950	29,298	375,248	-	375,248
					Total	1,977,106	10,625,753	263,043	12,865,902	-	12,865,902

* At the 30th June 2010

Section 1D reduced to West End of Princes St

Item	Description	Original SubContract Order	Prelims and Method Related Charges		Original Subcontract Work	Construction Works			Construction Works Total	Risk / Opportunity	Grand Total
			to 30 June 2010	to Completion		Change	Already Submitted* and Agreed	Already Submitted* and Not Agreed			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(6 to 9) = (10)	(11)	(12)
1	Preliminaries & General Items	516,687	40,144	174,856	-	-	-	-	-	-	215,000
2	Method Related Charges	-	-	-	-	-	-	-	-	-	-
3	Accommodation Works	-	-	-	-	-	-	-	-	-	-
4	Highways	1,584,666	-	-	1,584,666	(1,464,329)	-	-	120,337	-	120,337
5	Landscaping	-	-	-	-	-	-	-	-	-	-
6	Overhead Electrics	110,047	-	-	110,047	(96,642)	-	-	13,405	-	13,405
7	Sub-stations	-	-	-	-	-	-	-	-	-	-
8	Trackwork	1,054,934	-	-	1,054,934	(742,455)	-	-	312,479	-	312,479
9	Tramstops	158,803	-	-	158,803	(158,803)	-	-	-	-	-
10	Drainage	156,500	-	-	156,500	(112,593)	-	-	43,907	-	43,907
11	Traffic Signal Ducting	111,068	-	-	111,068	(111,068)	-	-	-	-	-
12	Street Lighting Ducting (less original bill items)	104,572	-	-	104,572	(104,572)	-	-	-	-	-
13	Tactile Paving at Crossings	22,833	-	-	22,833	(22,833)	-	-	-	-	-
14	Bus Stop Shelters	25,421	-	-	25,421	(25,421)	-	-	-	-	-
15	CBR Testing on Trackbox	26,410	-	-	26,410	(26,410)	-	-	-	-	-
16	Deduct - 380m completed under PSSA	-	-	-	-	-	(490,128)	-	(490,128)	-	(490,128)
17	Risk Review Transfer / Deletion	-	-	-	-	-	-	-	-	-	-
	Total	3,871,941	40,144	174,856	3,355,254	2,865,126	490,128	-	0	-	215,000

* At the 30th June 2010

Item	Description	Original SubContract Order	Prelims and Method Related Charges		Construction Works				Risk / Opportunity	Grand Total
			to 30 June 2010	to Completion	Original SubContract Work	Change	Construction Works Total	(6 to 9) (10)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	RD Anderson					1,441			1,441	
2	Lothian and Borders Police					2,845			2,845	
3	Hunter Demolition					14,500			14,500	
4	Raeburn					368			368	
5	Harper Generators					330			330	
6	Daver Steels (Bar & Cable Syst					2,412			2,412	
7	Scottish Water					755			755	
8	Harper Generators					1,800			1,800	
9	Gallagher Groundworks Ltd/					1,110			1,110	
10	Instalcom Ltd					4,550			4,550	
11	Stanger Testing Services Limit					1,510			1,510	
12	Beattie Chalmers Limited/					8,854			8,854	
13	Traffic Signs under estimate Section 1A						16,067		16,067	
14	Traffic Signs under estimate Section 1C3/1D						60,986		60,986	
15	On Street TM	1,646,163	1,206,410	410,429						41,600
16	Substation Housing Design (Portastor)	37,337	37,337						74,517	
17	Tram Stop Shelter and Ancillary Equipment Design (RWS)	51,351	51,351	897						
18	Street Lighting	1,592,260	-	48,433					250,687	5,750
	Total	3,327,111	1,295,098	459,759	1,618,345	(1,252,666)	77,053	-	442,732	47,350

* At the 30th June 2010

Section 2A and 5A (part)

Item	Description	Original SubContract Order	Prelims and Method Related Charges		Construction Works				Construction Works Total	Risk / Opportunity	Grand Total
			to 30 June 2010	to Completion	Original Subcontract Work	Change	Already Submitted* and Agreed	Already Submitted* and Not Agreed			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(6)+(7)+(8)+(9)	(11)	(4)+(5)+(6)+(9)+(11)
1	Preliminaries & General Items	6,169,841	1,678,000	7,393,252						225,000	9,296,252
2	Method Related Charges										
3	Section 1D - All Works	64,076			64,076			(64,076)			
4	Haymarket Viaduct	1,139,067			1,139,067	41,790	76,455	146,276	1,403,587		1,403,587
5	2A Trackwork inc Drainage etc	1,083,745			1,083,745	44,000	556,477	446,022	2,130,243		2,130,243
6	Haymarket Terrace Sub-Station	116,191			116,191			21,964	138,156		138,156
7	Haymarket Station Tramstop	174,548			174,548			27,900	202,448		202,448
8	S20 - Russell Road Underbridge	828,643			828,643		333,542	196,931	1,359,116		1,359,116
9	Russell Road Sub-Station	73,459			73,459			(73,459)	(0)		(0)
10	W18 Retaining Wall	790,597			790,597			317,985	1,108,582		1,108,582
11	5A Trackwork inc Drainage etc	623,008			623,008			805,493	1,428,501		1,428,501
12	Murrayfield Tramstop	284,529			284,529		130,000	75,900	490,429		490,429
13	Roseburn Viaduct	2,853,229			2,853,229			84,447	2,937,676		2,937,676
14	S21B - Murrayfield Ret Walls	1,462,165			1,462,165			615,128	2,077,293		2,077,293
15	S21C - Murrayfield Underpass	190,409			190,409		270,357	12,014	472,780		472,780
16	Schedule 4 Notified Departures							480,182	480,182		480,182
	Total	15,853,507	1,678,000	7,393,252	9,683,666	85,790	1,366,830	3,092,707	14,228,992	225,000	23,525,244

* At the 30th June 2010

Section 5 : Structures

Item	Description	Original SubContract Order	Prelims and Method Related Charges		Construction Works				Risk / Opportunity	Grand Total
			(4) to 30 June 2010	(5) to Completion	Original SubContract Work (6)	Change	Construction Works Total (6 to 9)+(10)	(11)		
		(3)	(4)	(5)	(6)	(7) Already Submitted* and Agreed	(8) Already Submitted* and Not Agreed	(9) New Submission	(10)	(11)
1	Prelims Section 5	1,521,273	376,281	2,753,544						3,129,825
2	Prelims Edinburgh PK Bridge	891,811	1,618,258							1,618,258
3	Prelims Carrick Knowe	427,285	316,754	84,724						401,478
4	Prelims W4	168,539	151,686	19,986						171,672
5	Risk								1,466,383	1,466,383
6	S27 Edinburgh Park Bridge	3,388,189			3,388,189		460,456	60,214	3,908,859	3,908,859
7	S23 Carrick Know Bridge	789,453			789,453		160,567	87,978	1,037,998	1,037,998
8	W3 Russell Rd RW						1,736,747	(120,863)	1,615,884	1,615,884
9	W4 Russell Rd Phase 1						430,590	123,675	554,265	554,265
10	W4 Russell Rd Phase 2						3,453,820	10,830	3,464,650	3,464,650
11	S22a&b Balgreen Rd Bridges						1,228,944	(68,734)	1,160,210	1,160,210
12	S32 Depot Access Bridge	1,554,606			1,554,606		1,412,146	350,628	3,317,380	3,317,380
13	A8 Underpass	1,034,444			1,034,444		788,674	29,259	1,852,377	1,852,377
14	S26 South Gyle Access Bridge	632,202			632,202		803,516	77,927	1,513,645	1,513,645
15	S21E Water of Leith Bridge	717,787			717,787		41,767	62,046	821,600	821,600
16	S21D Murrayfield Tp RW	415,965			415,965		462,244	(19,979)	858,230	858,230
17	W8 Baird Drive RW	479,832			479,832		586,866	174,217	1,240,915	1,240,915
18	W9 Balgreen Rd	32,722			32,722		220,117	30,225	283,064	283,064
19	W11 Bankhead Dr RW	81,334			81,334		423,711	(20,038)	485,007	485,007
20	W19 Tramstop RW	209,110			209,110		192,663	13,526	415,299	415,299
21	Service Diversion/support					73,794		229,665	303,459	303,459
22	Discount Exc S27&S23				(136,956)		(118,703)	(17,448)	(273,107)	(273,107)
Section A - Total		12,207,596	2,462,979	2,858,254	9,198,688	73,794	12,284,125	1,003,128	22,559,735	1,466,383

* At the 30th June 2010

Item	Description	Original SubContract Order	Prelims and Method Related Charges		Construction Works				Construction Works Total	Risk / Opportunity	Grand Total
			to 30 June 2010	to Completion	Original Subcontract Work	Change	Already Submitted* and Agreed	Already Submitted* and Not Agreed			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Preliminaries & General Items	2,137,178	1,643,983	830,413							2,474,396
2	Method Related Charges										-
3	Earthworks	92,000			92,000	43,843	20,120		155,963		155,963
4	Sub-structure - Depot Building	1,116,433			1,116,433	90,385	86,150		1,292,968		1,292,968
5	Sub-structure - Sub Station Building	57,983			57,983				57,983		57,983
6	Sub-structure - Power Building	55,155			55,155				55,155		55,155
7	Frame	1,160,334			1,160,334	376,398	131,484		1,668,216		1,668,216
8	Upper Floors	102,651			102,651				102,651		102,651
9	Cladding	1,206,649			1,206,649		42,620		1,249,269		1,249,269
10	Stairs	8,800			8,800		22,403		31,203		31,203
11	External Blockwork	108,406			108,406	16,613	75,000		200,019		200,019
12	Internal wall and Partitions	241,098			241,098		17,500		258,598		258,598
13	Internal Doors	146,900			146,900		28,508		175,408		175,408
14	Wall Finishes	117,785			117,785				117,785		117,785
15	Floor Finishes	202,247			202,247				202,247		202,247
16	Ceiling Finishes	93,242			93,242		3,000		96,242		96,242
17	Decoration	35,926			35,926				35,926		35,926
18	Fittings and Furnishings	62,182			62,182				62,182		62,182
19	M&E	2,302,000			2,302,000	72,560	158,412	134,805	2,398,167		2,398,167
20	BWIC Services	25,000			25,000				25,000		25,000
21	Site Work	2,880,802			2,880,802	483,198	345,198		3,709,198		3,709,198
22	Sub Station Building	123,035			123,035				123,035		123,035
23	Power Building	109,846			109,846		650		110,496		110,496
24	Sundries	202,565			202,565	149,036	75,565	55,338	371,828		371,828
25	Risk Register									1,216,063	1,216,063
26	Risk Review Transfer / Deletion							910,363	910,363		910,363
	Total	12,588,217	1,643,983	830,413	10,451,039	1,232,033	1,006,610	720,220	13,409,902	305,700	16,189,998

GRAND TOTAL

* At the 30th June 2010

Section 5C(part) and 7A

Item	Description	Original SubContract Order	Prelims and Method Related Charges		Construction Works				Risk / Opportunity	Grand Total
			to 30 June 2010	to Completion	Original Subcontract Work	Change	Construction Works Total			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Preliminaries & General Items	524,460	477,638	683,880						1,161,518
2	Method Related Charges	768,308	721,015	1,213,761						1,934,776
3	Enabling Works	112,091			112,091	593,681	1,339,427		2,045,199	2,045,199
4	Track and Formation	1,661,460			1,661,460	253,766	1,592,870	(50,963)	3,457,133	3,457,133
5	Tramstops	363,026			363,026				363,026	363,026
6	Tramstop Equipment	30,209			30,209				30,209	30,209
7	Drainage					1,011,137	127,226	18,868	1,157,231	1,157,231
8	Ducting	379,295			379,295		69,391	(38,554)	410,132	410,132
9	Highways	101,853			101,853		233,054		334,907	334,907
10	7A Ingliston P&R Substation	50,586			50,586	1,430			52,016	52,016
11	7A Gogarburn Bridge 529	885,140			885,140	123,010	48,772	36,670	1,093,592	1,093,592
12	7A Gogarburn Culvert 1 S30	54,653			54,653	21,145	15,931		91,728	91,728
13	7A Retaining Walls	337,396			337,396		4,750	3,940,366	4,282,512	4,282,512
14	7A Culvert 2 S31	113,053			113,053	(22,294)			90,759	90,759
15	7A Culvert 3 S32	73,408			73,408	6,345			79,753	79,753
16	OHLE	128,878			128,878	129,131			258,009	258,009
17	Risk Review Transfer / Deletion							285,000	285,000	405,000
	Total	5,583,816	1,198,653	1,897,641	4,291,048	2,117,351	3,431,421	4,191,386	14,031,206	17,247,500

* At the 30th June 2010

Edinburgh Tram Network
 Project Carlisle : "Guaranteed Maximum Price"
 Subcontractor GMP Summary
 Subcontractor : Various

Item	Description	Original SubContract Order	Prelims and Method Related Charges		Construction Works				Construction Works Total	Risk / Opportunity	Grand Total
			to 30 June 2010	to Completion	Original Subcontract Work	Change	Already Submitted* and Agreed	Already Submitted* and Not Agreed			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(6 to 9)+(10)	(11)	(4)+(5)+(9)+(11)
1	Preliminaries & General Items			1,212,264							1,212,264
2	Method Related Charges			50,000							50,000
3	Track and Formation	2,908,517			2,908,517			3,816,945	6,725,462		6,725,462
4	Tramstops	1,414,483			1,414,483			197,573	1,216,910		1,216,910
5	Utilities works							279,660	279,660		279,660
6	Highways	2,837,172			2,837,172			2,731,149	5,568,321		5,568,321
7	Buildings	291,299			291,299			27,570	318,869		318,869
8	Accommodation Works							73,480	73,480		73,480
9	OHLE	382,187			382,187			75,662	457,849		457,849
10	S27 Edinburgh Park							1,164,295	1,164,295		1,164,295
11	A8 Underpass							1,753,699	1,753,699		1,753,699
12	S26 Sth Gyle Access Bridge							125,456	125,456		125,456
13	S21E Water of Leith							430,000	430,000		430,000
14	W4 Russell Rd RTW							1,061,011	1,061,011		1,061,011
15	Other Structures							391,844	391,844		391,844
16	Miscellaneous							2,814,775	2,814,775		2,814,775
17	Off Street TM	1,010,745	756,184	2,065,216				-	-		2,821,400
18	Depot							1,350,497	1,350,497		1,350,497
19	Depot to Airport							223,298	223,298		223,298
	Total	8,844,403	756,184	3,377,480	7,833,658	-	-	16,121,767	23,955,425	-	23,955,425

* At the 30th June 2010

Edinburgh Tram Network
Project Carlisle : "Guaranteed Maximum Price"
Subcontractor GMP Summary
Subcontractor : Parsons Brinkerhoff

Design

Item	Description	Original SubContract Order
1	PH III Detailed Design Deliverables	2,204,792
2	PH IV Construction Phase	1,104,023
3	Extended Construction Support	1,000,000
4	Design Support Team	675,000
5	Changes	-
6	Additional Technical Resources (ATRs)	-
7	Incentivisation	
8	Prolongation	
9	Design Coordination and Support	
10	Disruption Claim	
	Total	4,983,815

* At the 30th June 2010

Grand Total	Scope Works					Risk / Opportunity
	Original Subcontract Work	Change		Scope Works Total		
		Already Submitted* and Agreed	Already Submitted* and Not Agreed			
2,204,792				2,204,792		
1,104,023			466,926	1,570,949		
1,000,000	672,897		2,180,425	3,853,322		
675,000	41,423		141,912	858,335		
-	3,189,303	271,977	1,082,493	4,543,772		
-	158,301		150,000	308,301		
				-		
	250,000	541,890	176,302	968,192		
	495,000			495,000		
			1,045,052	1,045,052		
4,983,815	4,806,924	813,867	5,243,111	15,847,716	-	

APPENDIX 1.2

SIEMENS - Guaranteed Maximum Price Breakdown

Appendix 1.2 - Siemens GMP Breakdown

		Carlisle
Siemens UK	UK Project Management	13,324,667
Siemens UK	UK System Engineering	3,001,626
Siemens UK and BAM	Trackwork	43,471,285
Siemens UK	UK Depot Workshop	2,028,342
Siemens UK	UK Electrification	6,003,202
Siemens UK	Infrastructure	3,185,035
Siemens UK	Insurance, Bonds and Financial Guarantees	1,712,358
Siemens UK	Control & Information	5,111,939
Siemens UK	Communications	5,009,483
Siemens AG	Electrification, Automation and Depot Equipment	29,688,648
	Change Orders	5,123,140
	Additional Carlisle Components	941,496
Overall Project	Total	118,601,221

APPENDIX 1.3

CAF - Guaranteed Maximum Price Breakdown

Appendix 1.3--CAF GMP Breakdown

CAF cost associated with Project Carlisle

Assumptions:

- The Delay Costs below are generated by delays incurred by the project and formalized with Project Carlisle. They include the claims presently held by CAF for other delay claims (MUDFA, ETN, etc.). There would be no double recovery, so if Project Carlisle would be retained by Tie, the other claims for delay generated costs would be settled with these amounts.
- To obtain the total amount that would be due to CAF, we add two components: Delay Costs, as explained above, and normal Contractual Payments pending as of 23 July 2010 (certified milestones or not, all payments until completion of TSA).
- CAF has assumed Tie will continue to pay Tram Delivery Milestones as it is doing today. CAF has assumed the Commissioning Milestones will not be paid until the infrastructure allows Commissioning tests to occur, and therefore they will be delayed, incurring Delay Costs.
- CAF has analyzed the Infrastructure availability during the Commissioning, and presently understands that the rate in the Contractual Programme (three trams per month commissioned) cannot be sustained under the precarious conditions associated with Infrastructure availability at the first stages of Project Carlisle. We understand that the rate must be a maximum of 2 tramways per month, and the Programme would need to be updated to reflect that rate. Nevertheless we estimate that enough trams can be commissioned so no delay is introduced in the start of service for that reason. As required by the Consortium in P. Carlisle, these delays in tram commissioning should not generate LDs to CAF (as the tramways are being delivered to date and are available for commissioning as contractually required).
- The cost of the maintenance of tramways will decrease due to less kilometres of service per year, while the line is not completed. We estimate the number of kilometres will amount to a quantity smaller than what is foreseen in the TMA, and therefore needs to be agreed, logically the cost per kilometre will be higher than the costs agreed, although the total Maintenance Cost according to the TMA will be smaller. CAF has not the information to estimate that TMA price reduction (year – kms targeted by Tie under P. Carlisle), and it is not included in the amounts below.
- The Delay costs have been estimated according to the Programme Project Carlisle Revision 00, (100729).

Delay costs:

OVERALL COST	COSTS	
Warranties	698.317,75	euros
Technical office	104.000,00	euros
Consultancy firms	77.328,00	euros
Project Management	254.338,28	euros
Maintenance	448.283,33	euros
Financial impact	600.991,79 €	euros
Foreign Exchange	67.199,51	euros
Legal Department	46.800,00	euros
Comercial Department	46.800,00	euros
TOTAL 1	2.344.058,67	euros
Cost at CAF IRUN for UT3-UT14	COSTS	
Parking at CAF IRUN	813.713,27	euros
Security for the trams	21.276,00	euros

Insurances	45.742,40	euros
Additional Couplings & Uncoupling	0,00	euros
Normal Maintenance	4.520,00	euros
Long Term Maintenance	292.428,00	euros
Total 2	1.177.679,67	euros
Costs at RENFE IRUN for UT3-UT14	COSTS	
Parking at RENFE IRUN	622.079,58	euros
Security for the trams	217.618,46	euros
Insurances	258.956,34	euros
Additional Couplings & Uncoupling	48.738,00	euros
Normal Maintenance	25.588,57	euros
Long Term Maintenance	0,00	euros
Total 3	1.172.980,95	euros
COST at CAF IRUN for UT15-UT27	COSTS	
Parking at CAF IRUN	0,00	euros
Security for the trams	69.738,00	euros
Insurances	324.476,11	euros
Additional Couplings & Uncoupling	0,00	euros
Normal Maintenance	32.062,86	euros
Long Term Maintenance	316.797,00	euros
Total 4	743.073,97	euros
Grand Total (1+2+3+4) Delay Costs	5.437.793,27	Euros

TSA Pending payments:

TSA pending payments as of 27th July 2010: £13.074.780,34

APPENDIX 1.4

SDS - Guaranteed Maximum Price Breakdown

Appendix 1.4 - SDS GMP Breakdown

Summary

SDS ref:	Type	Description	Comments	Fee to Complete	Certified to Date*	Overall Fee
ULE90390A	Core Scope			£ 220,013.00	£ 1,984,779.00	£ 2,204,792.00
ULE90390A	Changes			£ 1,892,768.34	£ 2,651,004.06	£ 4,543,772.40
ULE90485A	DC - Design Coordination			£ 141,428.57	£ 353,571.43	£ 495,000.00
ULE90391A	Phase IV			£ 875,961.43	£ 694,988.00	£ 1,570,949.43
ULE90393A	DS - Design Support			£ 141,911.57	£ 716,423.63	£ 858,335.20
ULE90392A	ECS - Extended Construction Support			£ 2,180,425.00	£ 1,672,897.00	£ 3,853,322.00
ULE90392A	ATR			£ 150,000.00	£ 158,301.00	£ 308,301.00
ULE90390A	Disruption			£ 1,045,051.00	£ -	£ 1,045,051.00
ULE90474A	Prolongation			£ 768,192.46	£ 200,000.00	£ 968,192.46
ULE90390A	Incentivisation			£ -	£ -	£ -
				Total £	7,415,751.37 £	£ 15,847,715.49

Assumptions:

* Certified on 13/07/10 for works up to 19/06/10

Fee for MUDFA/Utility works associated with the Collateral Warranty in favour of tie from the SDS Provider is not included
 1 in this Summary and is not therefore considered to be included in the 'Overall Fee' for this scope of works.

SDS ref: ULE90393A DS - Design Support

Date from	Date to	Description	Comments	No. of Weeks	Rate	Total
01 July 2010	01 November 2010	Alan Dolan	9.5	18	£ 95.00	£ 15,858.21
01 July 2010	01 November 2010	Mike Coupe	37.5	18	£ 95.00	£ 62,598.21
01 July 2010	01 November 2010	Claire Ferguson	9.5	18	£ 38.00	£ 6,343.29
01 July 2010	01 November 2010	Laurie Mentiplay	15	18	£ 78.00	£ 20,558.57
01 July 2010	01 November 2010	Colin Cromar	37.5	18	£ 38.00	£ 25,039.29
21 June 2010	30 June 2010	See Latest Application				£ 11,514.00
Total						£ 141,911.57

SDS ref: ULE90392A ECS - Extended Construction Support

Date from	Date to	Description	Comments	No. of Weeks	Rate	Total
01 July 2010	01 November 2010	Alan Dolan - Time split with Design Support until 1/11/10	28	18	£ 95.00	£ 46,740.00
01 July 2010	01 November 2010	Claire Ferguson - Time split with Design Support until 1/11/10	28	18	£ 38.00	£ 18,696.00
01 November 2010	25 May 2012	Alan Dolan	37.5	82	£ 95.00	£ 290,598.21
01 November 2010	25 May 2012	Claire Ferguson	37.5	82	£ 38.00	£ 116,239.29
01 July 2010	25 May 2012	Chris Reid	37.5	99	£ 95.00	£ 353,196.43
01 July 2010	27 May 2011	Tom Kelly	37.5	47	£ 95.00	£ 167,946.43
01 July 2010	29 July 2011	Scott Kelland	37.5	56	£ 78.00	£ 164,217.86
01 July 2010	31 August 2012	Jacek Stachowiak	37.5	113	£ 49.00	£ 207,900.00
01 July 2010	01 January 2011	Steve Anderson	37.5	26	£ 78.00	£ 76,885.71
01 July 2010	01 May 2012	Stephen Surtees	37.5	96	£ 95.00	£ 340,982.14
01 July 2010	28 October 2010	Tom Culligan	37.5	17	£ 78.00	£ 49,725.00
01 July 2010	01 May 2011	Kevin McGinty	37.5	43	£ 78.00	£ 127,028.57
As required	2 months	Roads Engineer - Lindsey Road and Depot access road	37.5	8	£ 95.00	£ 28,500.00
01 July 2010	29 July 2011	Structures Engineer	37.5	56	£ 78.00	£ 164,217.86
21 June 2010	30 June 2010	See Latest Application				£ 27,551.50
Total						£ 2,180,425.00

SDS ref: ULE90474A Prolongation

Date from	Date to	Description	Comments	Value
15 May 2008	26 September 2009	PB and Halcrow Prolongation Claim Up to 26th Sept '09 only	£50k of £250k outstanding as per MoU	£ 50,000.00
15 May 2008	26 September 2009	PB and Halcrow Prolongation Claim Up to 26th Sept '09 only	£792k of total Claim minus £250k accepted under MoU	£ 541,890.00
26 September 2009	02 November 2009	PB and Halcrow Prolongation Claim Up to 02nd Nov '09 only	EOT between 26th Sept '09 and 02 November '09	£ 60,252.00
28 February 2010	16 July 2010	PB and Halcrow Prolongation Claim Up to 16th July '10 only	EOT between 28th Feb '10 and 16th July '10	£ 116,050.46
Total				£ 768,192.46

Summary of supporting information
 15 May 2008 to 28 February 2009
 02 March 2009 to 25 September 2009
 Total of above £791,890 for the period May 2008 to 25 September 2009
 26 September 2009 to 2 November 2009
 28 February 2010 to 16 July 2010

Detailed in SDS Contract Additional Management and Supervision Document of 31 May 2009
 Detailed in e mail from Steve Reynolds to martin Foerder on 29/09/2009 13:25
 Detailed on Tab labelled Prolongation 26-9-09 to 2-11-09
 Detailed on Tab labelled Prolongation 28-2-10 to 16-7-10

SDS ref: ULE90390A Incentivisation

Date from	Date to	Description	Comments	Value
15 May 2008	Present	Incentivisation	Issued on time	£ -
15 May 2008	Present	Incentivisation	Delayed due to tie/CEC Delay	£ -
<p>This issue has been removed from the Revised Project Carlisle Proposal, as that it is contracted directly between tie and SDS.</p>				
Total				£ -

EDINBURGH TRAM NETWORK - BSC CHANGE INSTRUCTED

Index	NTC (BSC) Ref to file	Short Title	By BOS			From BBS			DC Change?	Adjustment due to DC	Certified	Fees Remaining	Cost for Drawings
			Change Estimate	Change Order		Change Estimate	Change Order						
Index	NTC (BSC) Ref to file	Short Title	Number	Date	Value	Number	Date	Value	DC Change?	Certified	Fees Remaining	Challenged by file	
DCR0024	VE	North Street Vehicle	DCR0024	03/04/2009	£ 316,619	DCO011	06/02/2009	£ 316,619	£	£ 284,637.10	£ 31,651.90		
DCR0082	76	Super Additional Transit	DCR0082	11/03/09	£ 346,638	DCO055	16/06/2009	£ 346,638	£	£ 282,522.26	£ 78,414.74		
DCR0082A		Super Additional Transit	DCR0082A	20/03/10	£191,814.33	DCO121	24/06/2010	£ 100,877	£	£ 62,609.90	£ 37,937.95	£ 638.00	
DCR0101	270	Wooler Area Electrical	DCR0101	23/02/2009	£ 6,269	DCO059	26/01/2010	£ 4,874	£	£ 5,073.90	£ 1,623.00		
DCR0102	143	20 Fairford Way	DCR0102	23/02/2009	£ 19,163	DCO059	26/01/2010	£ -	£	£ -	£ -		
DCR0101	143	Work made up to adoptable standards	DCR0101	16/07/2009	£ 24,132	DCO071	23/09/2009	£ 24,132	£	£ 30,718.80	£ 3,143.20		
DCR0125	269	TrackMans - ground improvement	DCR0125	29/01/2009	£ 274,686	DCO018	23/02/2009	£ 274,686	£	£ 239,065.10	£ 34,720.45		
DCR0127	244	Building Fixing Owner Agreement	DCR0127	29/01/2009	£ 14,285	DCO080	09/12/2009	£ 14,285	£	£ -	£ 14,285.00		
DCR0131	246	NS - Upper & lower profile	DCR0131	24/02/2009	£ 50,242	DCO059	26/01/2010	£ 50,242	£	£ 31,400.28	£ 6,591.22		
DCR0140	271	Roads construction analysis of	DCR0140	29/01/2009	£ 289,446	DCO090	23/02/2009	£ 289,446	£	£ 88,615.20	£ 200,624.90		
DCR0141	283	Highway Vane gateway	DCR0141	11/09/2009	£ 4,894	DCO081	10/12/2009	£ 4,894	£	£ 1,769.50	£ 3,124.10		
DCR0146	277	Design of canopy and boundary	DCR0146	24/02/2009	£ 42,374	DCO038	15/05/2009	£ 42,374	£	£ 34,059.20	£ 8,514.80		
DCR0147	287	Forti Ports Access rd traffic signal	DCR0147	26/02/2009	£ 7,778	DCO062	28/07/2009	£ 7,778	£	£ 7,000.20	£ 777.60		
DCR0161		Highway Vane gateway	DCR0161	11/09/2009	£ 4,894	DCO081	10/12/2009	£ 4,894	£	£ -	£ 4,894.00		
DCR0166		Highway Vane gateway	DCR0166	17/04/2009	£ 14,632	DCO058	12/06/2009	£ 14,632	£	£ 14,632.00	£ -		
DCR0167	281	Cathedral Lane substation	DCR0167	30/10/2009	£ 119,171	DCO084	10/12/2009	£ 119,171	£	£ 20,000.00	£ 99,171.00	£ 5,625.00	
DCR0168		Highway Vane gateway	DCR0168	23/04/2009	£ 41,304	DCO044	09/06/2009	£ 41,304	£	£ 33,045.60	£ 8,258.40		
DCR0170	270	Road Transit Existing Utility	DCR0170	02/09/2009	£ 9,775	DCO078	03/12/2009	£ 1,655	£	£ 333.00	£ 1,322.00		
DCR0177	377	Highway Vane gateway	DCR0177	21/05/2009	£ 5,811	DCO077	20/06/2009	£ 5,811	£	£ 3,659.00	£ 2,152.00		
DCR0178	379	Highway Vane gateway	DCR0178	21/05/2009	£ 6,266	DCO031	06/02/2010	£ 6,266	£	£ 1,665.00	£ 4,601.00		
DCR0178	379	Highway Vane gateway	DCR0178	21/05/2009	£ 47,262	DCO074	24/06/2009	£ 47,262	£	£ 42,533.80	£ 4,728.20		
DCR0181	202	Super Additional Transit	DCR0181	23/02/2009	£ 46,851	DCO160	26/01/2010	£ 25,130	£	£ 11,713	£ 35,138.00	£ 11,713.00	
DCR0191	310	Super 1 and 8 Scottish Water	DCR0191	05/08/2009	£ 16,284	DCO083	16/12/2009	£ 16,284	£	£ 14,655.60	£ 1,628.40		
DCR0193		Street Lighting Haymarket Terrace	DCR0193	08/12/2009	£ 2,128	DCO105	06/01/2010	£ 389	£	£ -	£ 389.00		
DCR0193	432	Street Lighting	DCR0193	30/07/2009	£ 17,113	DCO064	30/07/2009	£ 20,000	£	£ 10,897	£ 17,113.00		
DCR0198	417	BAA Dussing Future parking	DCR0198	27/06/2009	£ 1,112	DCO088	10/12/2009	£ 1,112	£	£ 788.52	£ 353.48		
DCR0200	450	NSA New Burnside Road	DCR0200	01/10/2009	£ 5,814	DCO089	10/12/2009	£ 5,814	£	£ 2,409.25	£ 2,534.25	£ 875.00	
DCR0202	452	NSA New Burnside Road	DCR0202	10/12/2009	£ 1,791	DCO089	10/12/2009	£ 4,500	£	£ -	£ 4,500.00	£ 457.00	
DCR0203	461	Forti Ports substation re-design	DCR0203	19/12/2009	£ 11,250	DCO086	10/12/2009	£ 10,000	£	£ 1,700	£ 9,000.00	£ 2,783.59	
DCR0205	465	Roadsign of change and slope	DCR0205	10/12/2009	£ 3,282	DCO087	10/12/2009	£ 2,000	£	£ 1,262	£ 2,000.00	£ 1,261.50	
DCR0209	305	Gravelly Tunnel Dismantling	DCR0209	05/02/2010	£ 20,164	DCO101	06/01/2010	£ 18,759	£	£ 1,414	£ 18,750.00	£ 1,414.00	
DCR0212A	476	Workshop - All works	DCR0212A	28/02/2010	£ 116,773	DCO106	06/01/2010	£ 26,250	£	£ 93,523	£ 23,625.00	£ 93,148.00	
DCR0213A	477	Substation Development	DCR0213A	13/11/2009	£ 139,850	DCO111	15/01/2010	£ 67,600	£	£ 72,450	£ 57,725.00	£ 82,215.00	
DCR0214		Provision of 110v Supply to	DCR0214	11/09/2009	£ 11,357	DCO103	06/01/2010	£ 6,518	£	£ 2,939	£ 7,668.20	£ 3,699.50	
DCR0218	482	Workshop - All works	DCR0218	21/12/2009	£ 28,335	DCO109	06/01/2010	£ 18,750	£	£ 20,545	£ 15,937.50	£ 20,597.50	
DCR0219	498	Frederick Street new crossing	DCR0219	25/02/2010	£ 11,293	DCO110	06/01/2010	£ 11,290	£	£ 105	£ 2,300.00	£ 3,894.50	
DCR0220	512	Compressed Air Supply	DCR0220	24/11/2009	£ 10,007	DCO104	06/01/2010	£ 2,250	£	£ 8,217	£ 3,790.00	£ 6,255.50	
DCR0227	376	Circle re design to suit Siemens	DCR0227	06/04/2010	£ 137,948	DCO114	16/03/2010	£ 60,000	£	£ 77,848	£ 54,000.00	£ 83,947.50	
					£ 2,350,284			£ 2,048,628.90		£ 277,581.50	£ 1,451,089.31	£ 66,248.00	
										£ 19,910.50			

ΕΠΙΧΡΗΣΗ TRAM NETWORK - BSC CHANGE ESTIMATED

Index	INTC (BSC) Ref to file	Short Title	Section	By SDS Change Estimate			From BSC Change Order			Certified	Fee Remaining	Cost for Drawings	
				Number	Date	Value	Number	Date	Value				
Index	INTC (BSC) Ref to file	Short Title	Section	Number	Date	Value	Number	Date	Value	Certified	Fee Remaining	Challenged by file	
DCR0062	81	Gogar Surcharge Utilisation	7A	DCR0062	01/06/2009	€ 1,994				€ -	€ 1,994.00		
DCR0196		Internal Consultation IHO Changes	SW	DCR0196	31/07/2009	€ 77,940					€ 77,940.00		
DCR0228		OLE Base Special - Airport	7A	DCR0228	31/03/2010	€ 27,890				€ 5,576.00	€ 22,311.50	€ 297.50	
DCR0229		OLE Pinhs on Structures	SW	DCR0229	08/04/2010	€ 115,526					€ 115,525.75		
DCR0233	520	Gogar Landfill profile re design	7A	DCR0233	10/03/2010	€ 19,675				€ 19,674.50	€ -	€ 263.30	
DCR0235		Special Foundations on Ash Walk Railway Bridge	1B	DCR0235	08/04/2010	€ 8,220					€ 6,226.75	€ 42.50	
DCR0237		Finaling Track Design	SW	DCR0237	08/04/2010	€ 68,510					€ 68,510.00		
DCR0238		Hydraulic Model of Gogarburn Retaining Walls	7A	DCR0238	10/03/2010	€ 57,960					€ 57,960.00		
DCR0241		Topo Survey ScotRail Depot	5A	DCR0241	03/03/2010	€ 1,543				€ 1,542.50	€ -		
DCR0242	167	Changes to Murrayfield Accommodation Works - Wanderers Club House	5A	DCR0242	15/03/2010	€ 692					€ 692.00		
DCR0248		Special Foundations Construction at Shallow Depth obstructions	1	DCR0248	14/05/2010	€ 61,695					€ 61,694.50		
DCR0250		Further to DCR0113 amendments are required to Internal Retaining Wall for Haymarket Viaduct	2A	DCR0250	12/05/2010	€ 3,606				€ 3,606.00	€ -		
DCR0251		Reinstale traffic island on Princes St	1C	DCR0251	04/05/2010	€ 1,140					€ 1,140.00		
DCR0253		Hussell Road Retaining Wall Installation Error	5A	DCR0253	24/05/2010	€ 23,757					€ 23,757.00		
DCR0255		Gloverhill Street 2 Way Change	1D	DCR0255	04/05/2010	€ 49,980					€ 49,980.00	€ 650.00	
DCR0256		Calderhall Lane Substation Measurements	1C	DCR0256	25/05/2010	€ 23,114				€ 20,000.00	€ 3,113.50		
DCR0257		Hussell Road Retaining Wall and exposed ground conditions W3	5A	DCR0257	04/05/2010	€ 7,411					€ 7,411.00		
DCR0259		Special Foundations Construction at Shallow Depth obstructions	1	DCR0259	20/05/2010	€ 16,720					€ 16,720.25		
Estimated but not yet formally submitted/reviewed by BSC													
DCR0134A	358	NL further hubno profiling - OLE changes	7A			€ 4,378					€ 4,378.00		
DCR0245		OLE Special Foundations - Several	SW			€ 105,438					€ 105,437.50		
DCR0283		IQ1853 - Update SB MX file	5B			€ 3,833					€ 3,832.50		
DCR0265	485	Tram Turnback Strategy	SW			€ 80,000					€ 80,000.00		
DCR0271		OLE Review of LAF train - Cost out of OLE analysis and issue of	5W			€ 7,733					€ 7,732.50		
DCR0272		Haymarket OLE Pinhs	2A			€ 1,883					€ 1,882.50		
DCR0274		Murrayfield Stadium Retaining Walls Ground improvement Change - IQ1909	5A			€ 52,400					€ 52,400.00		
DCR0222		Street Lighting new connect - central alignment	1D			€ 6,683					€ 6,682.50		
DCR0230		Cutting inc on Structures - Setters additional requirements				€ 57,600					€ 57,500.00		
DCR0231		Lighting and Bonding Development Workshop Measurements	SW			€ 73,157					€ 73,157.00		
DCR0264		Linked Building Consents for Dalry St	1C			€ 11,250					€ 11,250.00		
DCR0267		Depot Train Wash Equipment	6			€ 26,343					€ 26,343.00		
DCR0268		Depot Revised layout showing service requirements				€ 10,005					€ 10,005.00		
DCR0269		Depot Lighting and Bonding AND Special Sub-stations				€ 14,105					€ 14,105.00		
DCR0270		Tramstop Layout Changes	SW			€ 23,888					€ 23,887.50		
DCR0273	586	Function of the Mount, Princes St and Haymarket St	1C			€ 4,556					€ 4,536.00		
DCR0277		CCRC railway Easting and Bonding	7A			€ 10,000					€ 10,000.00		
DCR0282		Additional Cross Sections for Depot Formation Design	6			€ 8,000					€ 8,000.00		
DCR0283		OLE updates for schedules of Bases - Revision F emailed to SDS	SW			€ 12,000					€ 12,000.00		
						€ 1,682,328				€ -	€ 50,401.00	€ 1,032,127.23	€ 1,453.50

* Only Changes listed above (plus previously instructed) are included in the GMP fee
 * All above changes are estimated relevant to the associated Change Notices/Letters/Email correspondence between SDS & BSC

EDINBURGH TRAM NETWORK - CHANGES MAY OR MAY NOT BE REQUIRED BUT SCOPE YET TO BE CONFIRMED FOR THE PURPOSE OF CHANGE ESTIMATION AND INSTRUCTION

Index	NTC (BSC) Ref to the	Short Title	Full Description	From BBS		By SDS			Certified	Fee Remaining	Comments
				Change Notification Reference	Date	Change Estimate Number	Date	Value			
Index	NTC (BSC) Ref to the	Short Title	Full Description	Reference	Date	Number	Date	Value	Certified	Fee Remaining	Comments
DCR0144		Stage E Landscape Drawings	As per CEC informative and meeting Best						E	-	Scope not yet confirmed
DCR0228		South Uyle Access Bridge Detailed Design	Changes in 300 and W11 detailed design						E	-	No Estimate included in GMP Scope not yet confirmed
DCR0232		Lower Place Bridge - Remove Ramp, Remove concrete Downdart, Revisit GLE Basaplate	See RID:154	RDC154 RDC154A	21/01/2010 02/07/2010				E	-	Scope not yet confirmed - currently thought to be unapprovable. No Estimate included in GMP
DCR0240		Farm Ports Section 1A - Fence	Additional constraints in Casino area						E	-	Scope not yet confirmed No Estimate included in GMP
DCR0243		Advanced Directional Signing for Constitution St	New CEC comment related to the provision of additional signs, not previously discussed						E	-	Scope not yet confirmed No Estimate included in GMP
DCR0244		Lansbury Rd phone mast	New phone mast construction conflicts with proposed structural design						E	-	Scope not yet confirmed No Estimate included in GMP
DCR0252		Mixing of sign frames on busways and bridges	Letter request to review all possibilities						E	-	Scope not yet confirmed No Estimate included in GMP
DCR0291		Roseburn St Viaduct curtain walls	Design of curtain walls required at Roseburn St in lieu of current fencing proposals in the vicinity of each abutment	RDC167	20/05/2010				E	-	Scope not yet confirmed No Estimate included in GMP
DCR0298		Murrayfield Tramstop layout CHANGES	Bollard, Fence and Turnstile Changes						E	-	Scope not yet confirmed No Estimate included in GMP
DCR0276		Older Street Junction	Redesign Junction as requested by CEC	RDC170	06/07/2010				E	-	Scope not yet confirmed No Estimate included in GMP
DCR0278		Pleasance Place Detailed Design	Further to DCR0173 & DCR0221						E	-	Scope not yet confirmed No Estimate included in GMP
DCR0286		Porterston Guardrail Change							E	-	Scope not yet confirmed No Estimate included in GMP
DCR0281		Gogar Interchange - Name Change	Edinburgh Gateway						E	-	Scope not yet confirmed No Estimate included in GMP
DCR0282		Gogar Interchange - A8 Drainage	Relocate combined sewer						E	-	Scope not yet confirmed No Estimate included in GMP
									E	-	E

20/07/2010

EOT between 26th September '09 and 2nd Nov '09

Employee/Supplier	Data	Week							Total
		28/09/2009	05/10/2009	12/10/2009	19/10/2009	26/10/2009			
CHANDLER, JASON ROY	Sum of Quantity	35.5	34.5	37.5	37.5	30		175	
	Average of Contract Rate	95	95	95	95	95		95	
	Sum of Contract Estimate	3372.5	3277.5	3562.5	3562.5	2850		16625	
CHANDLER, Mrs. CARLA (CARLA)	Sum of Quantity	11.5	29	37.5	33.5	32.5		144	
	Average of Contract Rate	78	78	78	78	78		78	
	Sum of Contract Estimate	897	2262	2925	2613	2535		11232	
SHUDALL, KATE	Sum of Quantity	7.5	11.5	12.5	12.5	12.5		56.5	
	Average of Contract Rate	95	95	95	95	95		95	
	Sum of Contract Estimate	712.5	1092.5	1187.5	1187.5	1187.5		5367.5	
	Sum of Quantity	9	11	12.5	12.5	12.5		57.5	
	Average of Contract Rate	95	95	95	95	95		95	
	Sum of Contract Estimate	855	1045	1187.5	1187.5	1187.5		5462.5	
Total	Sum of Quantity	807.5	1045	1187.5	1187.5	1187.5		5415	
	Average of Contract Rate	95	95	95	95	95		95	
	Sum of Contract Estimate	807.5	1045	1187.5	1187.5	1187.5		5415	
Total Sum of Quantity		72	97	112.5	108.5	100		490	
Total Average of Contract Rate		93.45454545	91.6	91.6	91.6	92.34375		92.10077519	
Total Sum of Contract Estimate		6644.5	8722	10050	9738	8947.5		44102	

Halcrow.

Brian McCrear	85
	95
Laurie Mentiplay	8075
	85
	95
	8075

Total £ 60,252.00

Employee	Data	Week	07/03/2010	06/03/2010	15/03/2010	22/03/2010	28/03/2010	05/04/2010	12/04/2010	19/04/2010	26/04/2010	03/05/2010	10/05/2010	17/05/2010	24/05/2010	31/05/2010	07/06/2010	14/06/2010	21/06/2010	28/06/2010	05/07/2010	Total
CHANDLER, ANSON ROY	Sum of Quantity		38.5	37.5	37.5	34	30	29	29	29	29	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	467
	Average of Contract Rate		85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85
	Sum of Contract Estimate		3272.5	3182.5	3182.5	2925	2475	2475	2475	2475	2475	1890	1890	1890	1890	1890	1890	1890	1890	1890	1890	45700
	Average of Contract Rate		102.5	102.5	102.5	102.5	102.5	102.5	102.5	102.5	102.5	102.5	102.5	102.5	102.5	102.5	102.5	102.5	102.5	102.5	102.5	102.5
	Sum of Contract Estimate		3912.5	3892.5	3892.5	3022.5	2972.5	2972.5	2972.5	2972.5	2972.5	2972.5	2322.5	2322.5	2322.5	2322.5	2322.5	2322.5	2322.5	2322.5	2322.5	2322.5
MCDONNELL, KATE	Sum of Quantity		112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5
	Average of Contract Rate		85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85
	Sum of Contract Estimate		9562.5	9562.5	9562.5	9562.5	9562.5	9562.5	9562.5	9562.5	9562.5	9562.5	9562.5	9562.5	9562.5	9562.5	9562.5	9562.5	9562.5	9562.5	9562.5	9562.5
	Average of Contract Rate		112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5
	Sum of Contract Estimate		12625	12625	12625	12625	12625	12625	12625	12625	12625	12625	12625	12625	12625	12625	12625	12625	12625	12625	12625	12625
MARTIN, ALEXANDER	Sum of Quantity		112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5
	Average of Contract Rate		85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85
	Sum of Contract Estimate		9562.5	9562.5	9562.5	9562.5	9562.5	9562.5	9562.5	9562.5	9562.5	9562.5	9562.5	9562.5	9562.5	9562.5	9562.5	9562.5	9562.5	9562.5	9562.5	9562.5
	Average of Contract Rate		112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5	112.5
	Sum of Contract Estimate		12625	12625	12625	12625	12625	12625	12625	12625	12625	12625	12625	12625	12625	12625	12625	12625	12625	12625	12625	12625
Planning Support																						
Planning Support																						
Total Sum of Quantity			38.5	37.5	37.5	34	30	29	29	29	29	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	467
Total Average of Contract Rate			85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85
Total Sum of Contract Estimate			3272.5	3182.5	3182.5	2925	2475	2475	2475	2475	2475	1890	1890	1890	1890	1890	1890	1890	1890	1890	1890	45700

Below

Sum of Quantity	328
Average of Contract Rate	85
Sum of Contract Estimate	27680
Average of Contract Rate	85
Sum of Contract Estimate	27680
Total	171107.46

Management of completion to SDS Phase II works
118651.46

APPENDIX 2

VALUATION OF TIE CHANGES AND PROLONGATION

1 TIE CHANGES

- 1.1 We propose that amendments to the existing Schedule Part 4 Appendix G would be appropriate to simplify the rules concerning valuation of tie Changes and to establish rates for valuation of prolongation.
- 1.2 The valuation of any tie Change will continue to be made in accordance with Clause 80.6.
- 1.3 Where Clause 80.6.3 and/or 80.6.4 applies and to the extent that they apply to a tie Change then the valuation shall be on the basis of Actual Cost or Estimated Actual Cost.
- 1.4 In respect of a valuation of any work under 1.3 above **tie's** Representative shall apply head office overheads and profit percentages to the appropriate elements of Actual Cost or estimated Actual Cost as follows:

(a)	Civil Engineering works	10%
(b)	Systems and Track works	17%

- 1.5 In all cases where a **tie** Change is being valued in accordance with Clause 80.6, Site related overhead (Preliminaries) shall be valued and added as follows:

7.4% to be added to the net valuation of the tie Change to cover the Consortium Preliminaries.

17.5% to be added to the net valuation of the tie Change to cover any other Preliminaries with regard to any **tie** Change associated with Civil Engineering Works, provided that this calculation shall in no case apply to Systems and Trackwork or claims for other Preliminaries in relation to prolongation costs arising from extensions of time or delay.

Site related overhead (Preliminaries) in respect of Systems and Trackwork and in respect of Tram Supply Obligations shall be valued in accordance with paragraph 2 (Prolongation) below.

2 PROLONGATION

- 2.1 Infraco acknowledges that the principle of valuation of prolongation costs arising from extensions of time granted has been established through the mediation process leading to agreement of the Estimate for Infraco Notification of tie Change Number 1. The tie Change Order number 116 reflects the basis of this agreement, which shall be formalised and applied to the valuation of prolongation costs arising from extensions of time. Infraco proposes that:

- (a) Prolongation costs including Preliminaries elements relating to Systems and Trackwork shall be based on Actual Cost or Estimated Actual Cost of the resources and/or labour employed by Infraco or its sub-contractors.

- (b) In respect of the valuation of cost elements relating to Systems and Trackworks, 17% is to be added to the Actual Cost or Estimated Actual Costs in respect of related head office overheads and profit percentages.
- (c) Preliminaries elements in relation to prolongation costs which relate to Civil Engineering Works arising from extensions of time or delay, valued in accordance with the rates set out in Appendix 2.1 hereto.
- (d) In all cases where prolongation is being valued in accordance with Clause 80.6 costs which relate to the Tram Supply Obligations shall be valued on the basis of Actual Cost or estimated Actual Cost.
- (e) In relation to Systems and Trackwork Actual Cost or Estimated Actual Cost will be established on the basis of the principles agreed in relation to tie Change number 1.

APPENDIX 2.1

PROLONGATION CALCULATION WORKSHEET

See Supplemental Information CD provided with 29 July 2010 Project Carlisle Proposal;

Appendix 2.1 – Prolongation Calculation Worksheet

APPENDIX 3

GMP DRAWINGS

For the section of tram between Airport and Haymarket, and other agreed accommodation works.

3.1 BSC GMP Drawings

See Project Carlisle BBUK GMP – See CD provided with 29 July 2010 Project Carlisle Proposal:

The following attached drawings supersede those previously provided on the Project Carlisle BBUK GMP CD provided with 29 July 2010 Project Carlisle Proposal:

ULE90130-07-BRG-00083, REV 1
ULE90130-05-PLG-00265, REV2
ULE90130-07-DRG-00136, REV 5
ULE90130-07-DRG-00137, REV5
ULE90130-07-STP-00032, REV 2
ULE90130-07-HRL-00003, REV 10
ULE90130-07-HRL-00903, REV 9
ULE90130-07-HRL-00403, REV 7
ULE90130-07-HRL-00503, REV 8
ULE90130-07-HRL-00201, REV 9

Appendix 3.1a – GMP Drawing Register 1 - See CD provided with 29 July 2010 Project Carlisle Proposal:

Appendix 3.1b – GMP Drawing Register 2 - See CD provided with 29 July 2010 Project Carlisle Proposal:

Appendix 3.1c – GMP Drawing Register 3 - See CD provided with 29 July 2010 Project Carlisle Proposal:

3.2 Siemens Design Submissions

See Carlisle Siemens Appendix 3 – See CD provided with 29 July 2010 Project Carlisle Proposal:

- NOTES
1. ALL WORK SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR HIGHWAY WORKS.
 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.
 3. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AND UTILITIES AT ALL TIMES.
 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES AND STRUCTURES.
 5. THE CONTRACTOR SHALL MAINTAIN ADEQUATE DRAINAGE AND EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.
 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND RESTORATION OF ALL ENVIRONMENTAL FEATURES.
 7. THE CONTRACTOR SHALL MAINTAIN ADEQUATE SAFETY MEASURES AND TRAFFIC CONTROL THROUGHOUT THE PROJECT.
 8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND RESTORATION OF ALL HISTORIC AND CULTURAL RESOURCES.
 9. THE CONTRACTOR SHALL MAINTAIN ADEQUATE RECORD DRAWINGS AND AS-BUILT RECORDS THROUGHOUT THE PROJECT.
 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND RESTORATION OF ALL NEARBY VEGETATION AND WILDLIFE.



Issued for External Approval

NO.	DESCRIPTION	DATE	BY
1	ISSUED FOR EXTERNAL APPROVAL	07/20/2010	JRG
2	REVISED TO SHOW CROSSING INTERFACES	07/20/2010	JRG
3	REVISED TO SHOW CROSSING INTERFACES	07/20/2010	JRG
4	REVISED TO SHOW CROSSING INTERFACES	07/20/2010	JRG
5	REVISED TO SHOW CROSSING INTERFACES	07/20/2010	JRG
6	REVISED TO SHOW CROSSING INTERFACES	07/20/2010	JRG
7	REVISED TO SHOW CROSSING INTERFACES	07/20/2010	JRG
8	REVISED TO SHOW CROSSING INTERFACES	07/20/2010	JRG
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10	REVISED TO SHOW CROSSING INTERFACES	07/20/2010	JRG

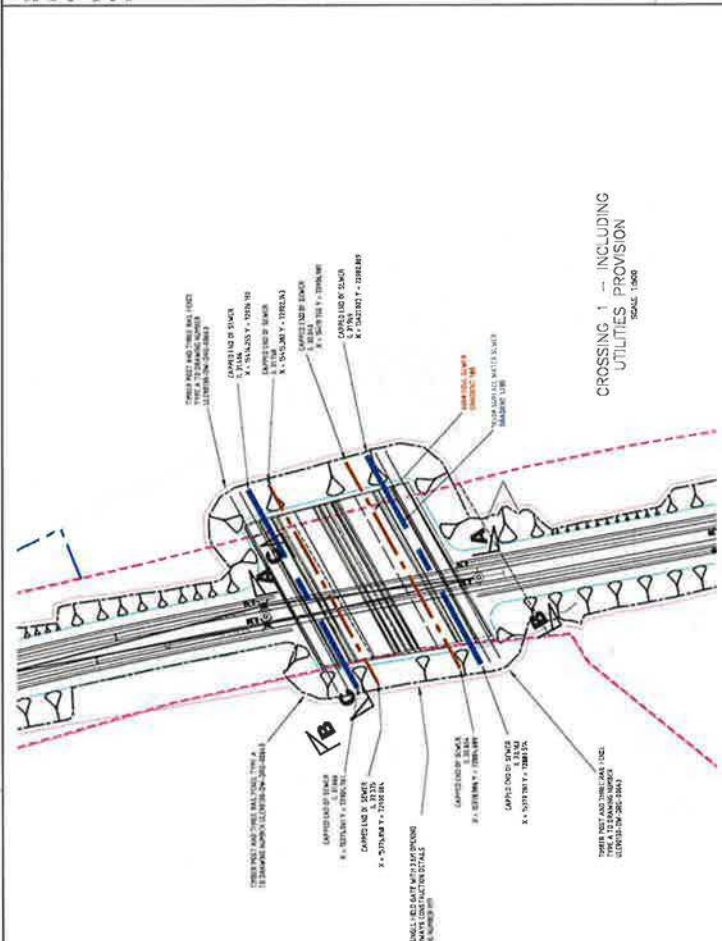
tie

EDINBURGH TRAM NETWORK

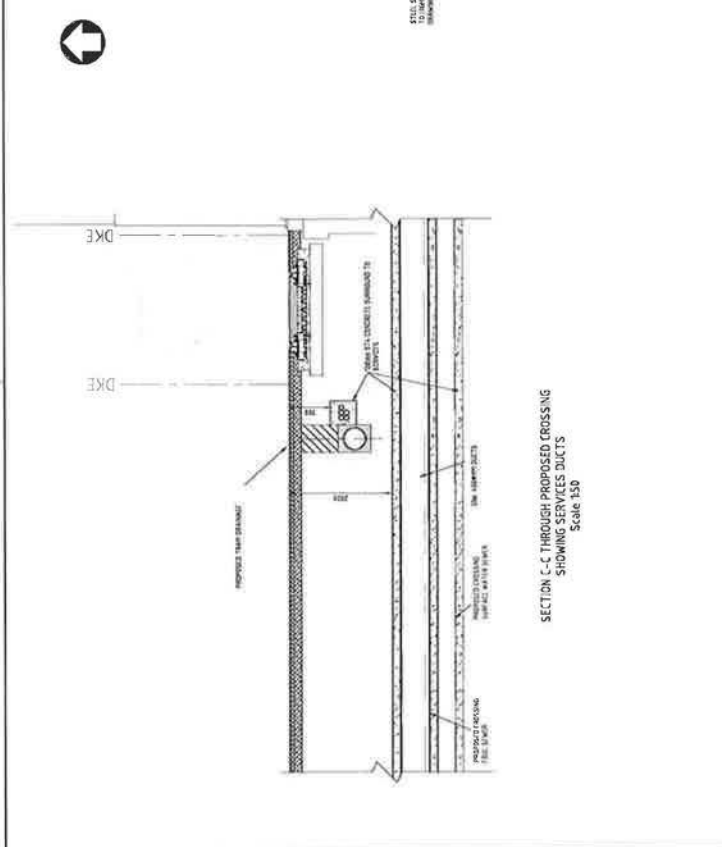
PB Anderson

NEW INGLETON LIMITED
TRAM/EARL CROSSING INTERFACE
CROSSING 1 - PLAN
AND SECTIONS

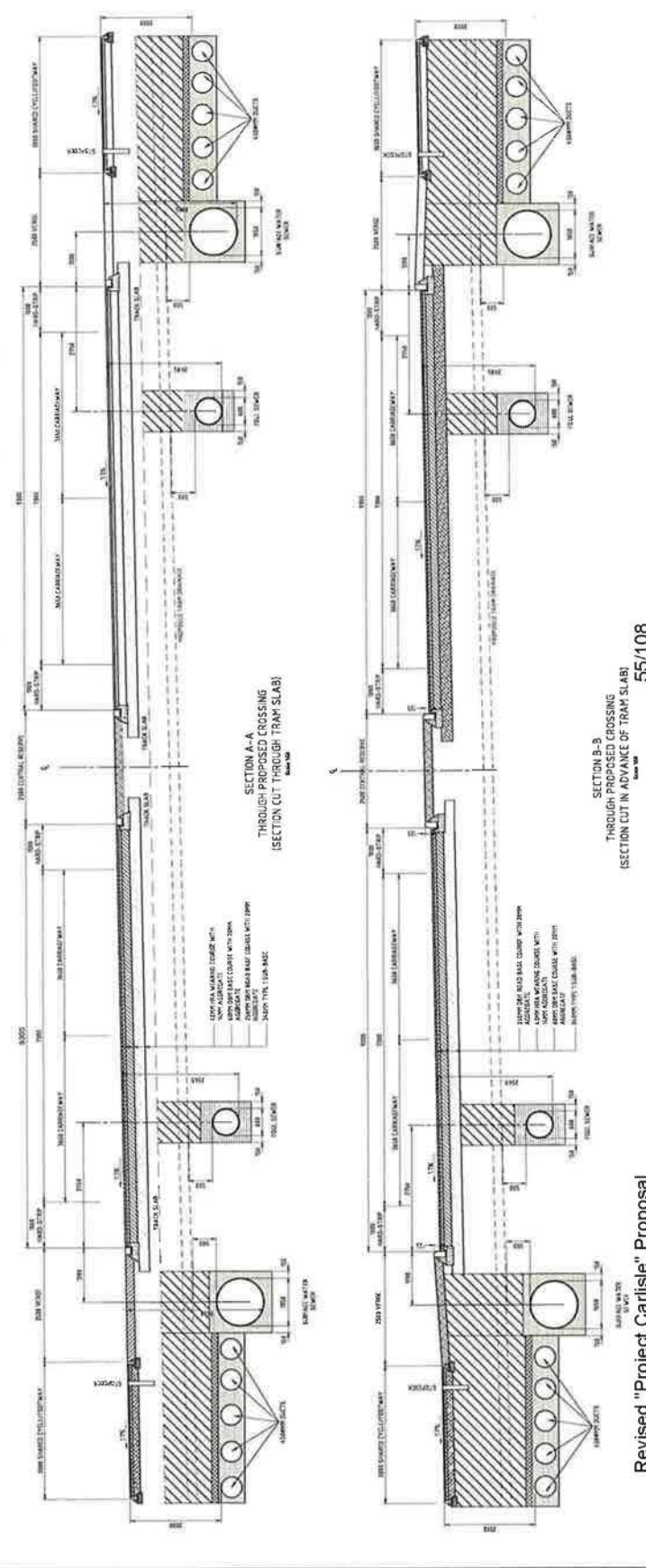
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DRAWN: JRG
CHECKED: JRG
SCALE: AS SHOWN
PROJECT NO: ULE99190-07-JRG-00136
SHEET NO: 5



CROSSING 1 - INCLUDING UTILITIES PROVISION
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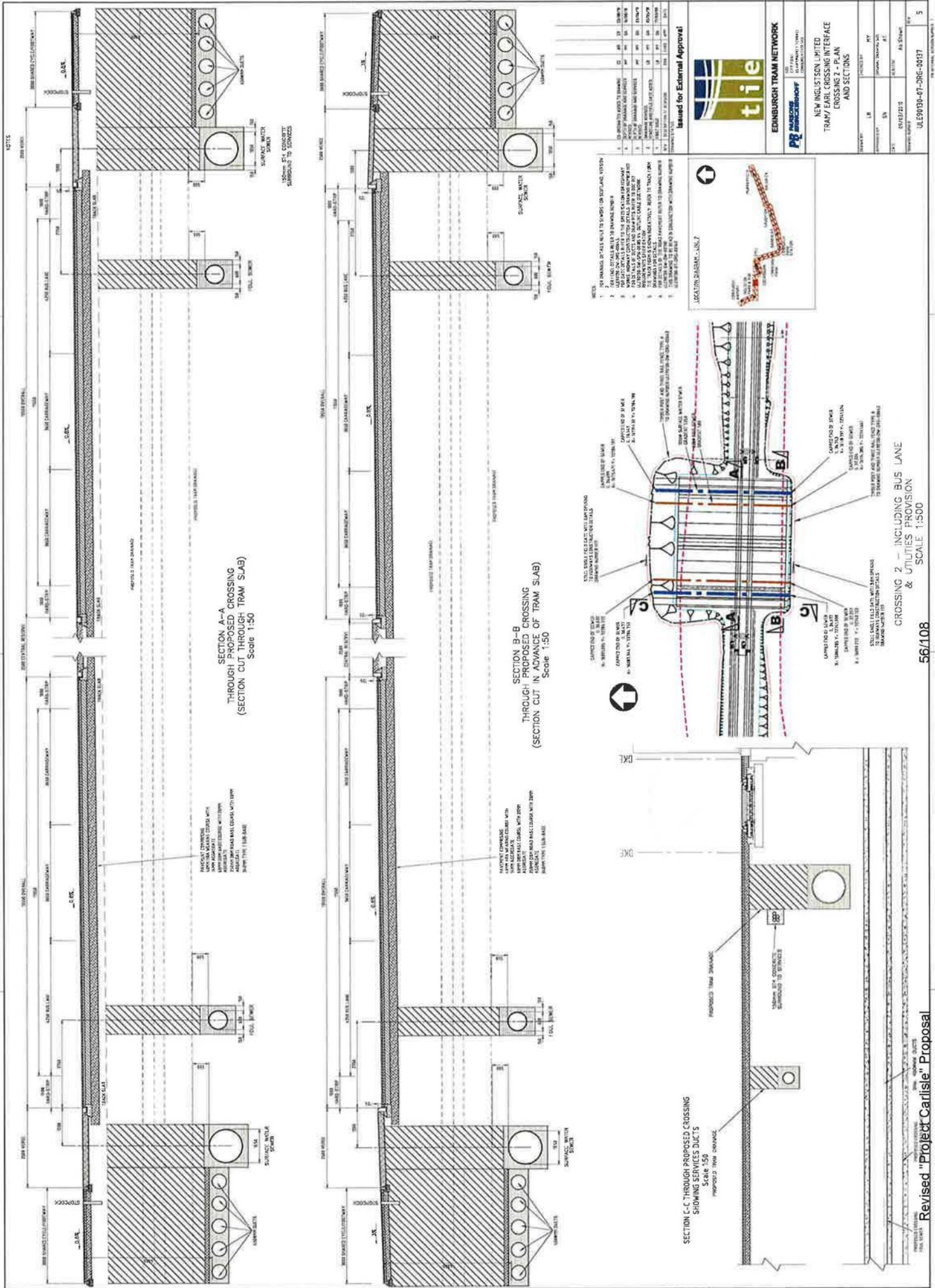


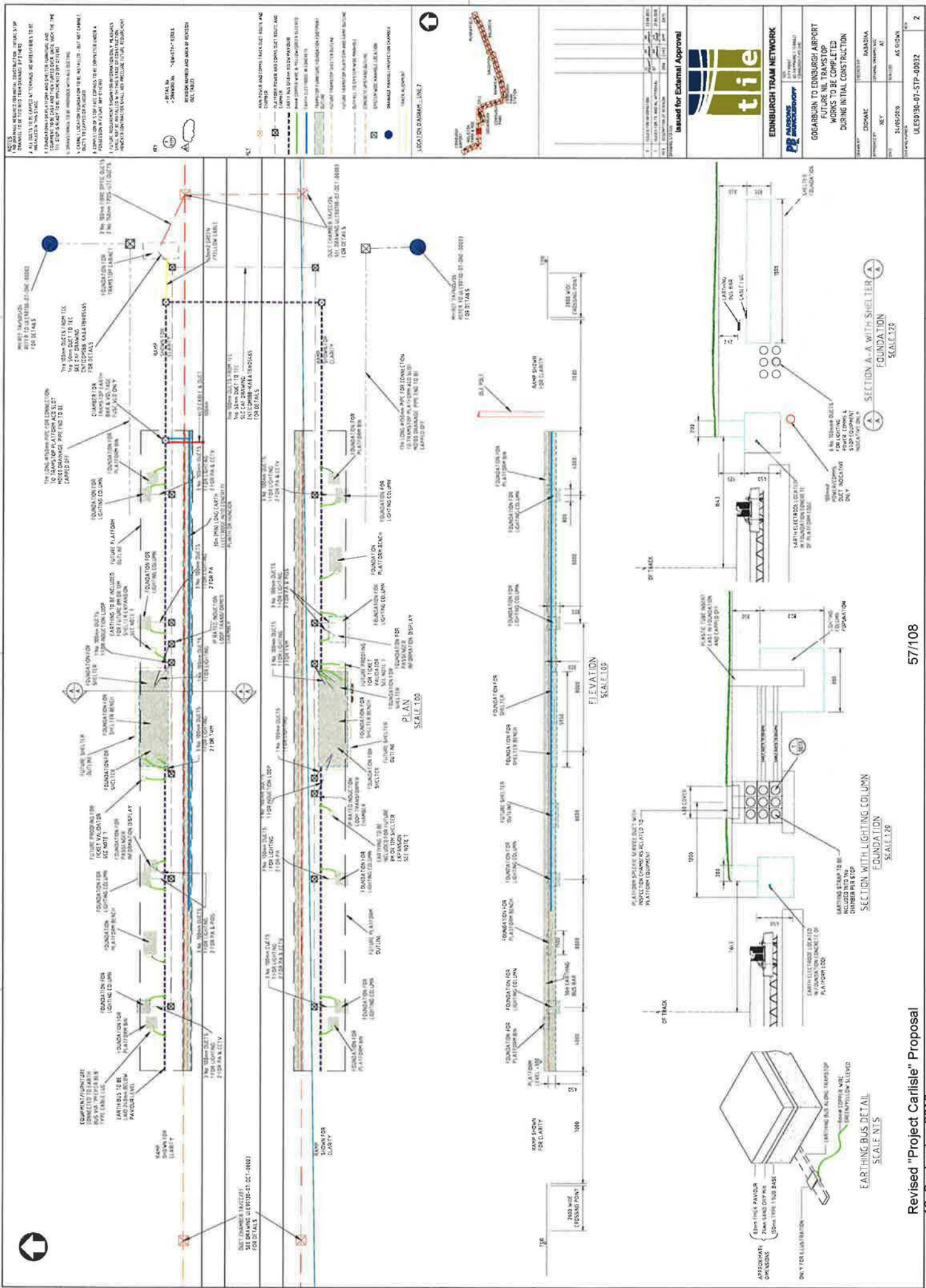
SECTION C-C THROUGH PROPOSED CROSSING
SHOWING SERVICES DUCTS
Scale: 1/8"=1'-0"

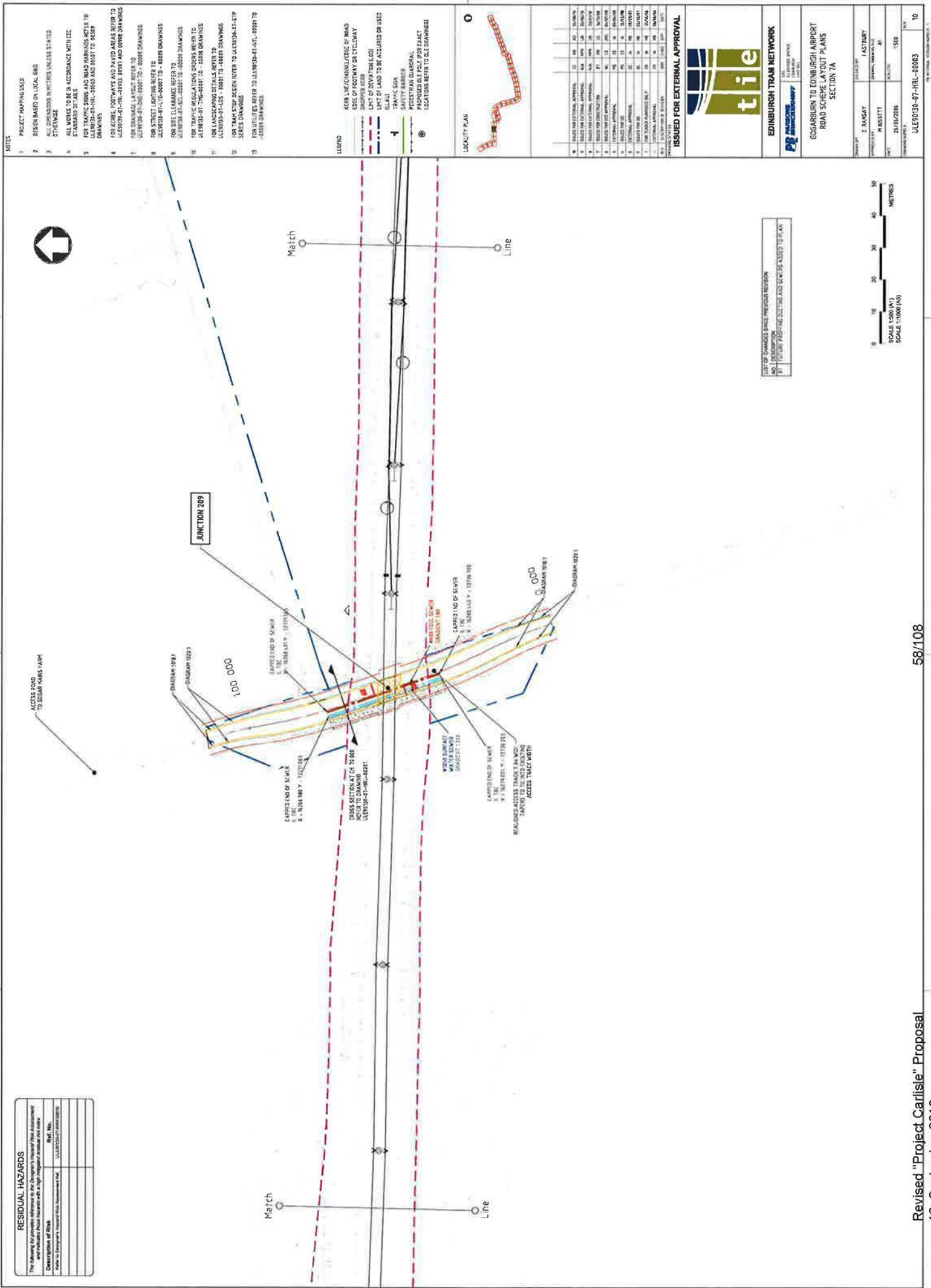


SECTION A-A
THROUGH PROPOSED CROSSING
(SECTION CUT THROUGH TRAM SLAB)
Scale: 1/8"=1'-0"

SECTION B-B
THROUGH PROPOSED CROSSING
(SECTION CUT IN ADVANCE OF TRAM SLAB)
Scale: 1/8"=1'-0"

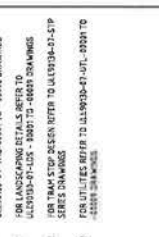






- NOTES**
- 1 PROJECT MAPPING USED
 - 2 DESIGN BASED ON LOCAL GOSS
 - 3 DIMENSIONS IN METRES UNLESS STATED OTHERWISE
 - 4 ALL WORKS TO BE IN ACCORDANCE WITH CEC
 - 5 FOR TRAFFIC SIGNS AND ROAD MARKINGS REFER TO ULE99130-01-101-2003 AND 2007 TO 2009 DRAWINGS
 - 6 FOR ALIBES, FOOTWAYS AND PAVED AREAS REFER TO ULE99130-01-101-2003, 2007 TO 2009 DRAWINGS
 - 7 FOR SIGNAGE LAYOUT REFER TO ULE99130-01-101-2007 TO 2009 DRAWINGS
 - 8 FOR STREET LIGHTING REFER TO ULE99130-01-101-2007 TO 2009 DRAWINGS
 - 9 FOR SITE CLEARANCE REFER TO ULE99130-01-101-2007 TO 2009 DRAWINGS
 - 10 FOR TRAM REGULATIONS CROSSINGS REFER TO ULE99130-01-101-2007 TO 2009 DRAWINGS
 - 11 FOR LANDSCAPING DETAILS REFER TO ULE99130-01-101-2007 TO 2009 DRAWINGS
 - 12 FOR TRAM STOP DESIGN REFER TO ULE99130-01-101-2007 TO 2009 DRAWINGS
 - 13 FOR UTILITIES REFER TO ULE99130-01-101-2007 TO 2009 DRAWINGS

- LEGEND**
- KEEN LINE/CHANNELISE OF ROAD
 - EDGE OF FOOTWAY OR CYCLEWAY
 - DEPRESSURE KEEL
 - LEFT OF DEVIATION LEG
 - RIGHT OF LAND TO BE ACQUIRED OR USED
 - TRAMWAY SIGN
 - SAFETY BARRIER
 - PEDESTRIAN GUARDRAIL
 - TRAMWAY STOP
 - LOCATIONS REFER TO SEE DRAWINGS



NO.	DESCRIPTION	DATE	BY
1	ISSUED FOR EXTERNAL APPROVAL	13/09/2010	...

ISSUED FOR EXTERNAL APPROVAL

EDINBURGH TRAM NETWORK

FOR SIGNATURE AND SEAL OF THE PROJECT MANAGER

FOR SIGNATURE AND SEAL OF THE PROJECT ENGINEER

GOGARBURN TO EDINBURGH AIRPORT
ROAD SCHEME LAYOUT PLANS
SECTION 7A

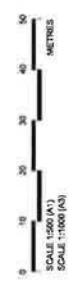
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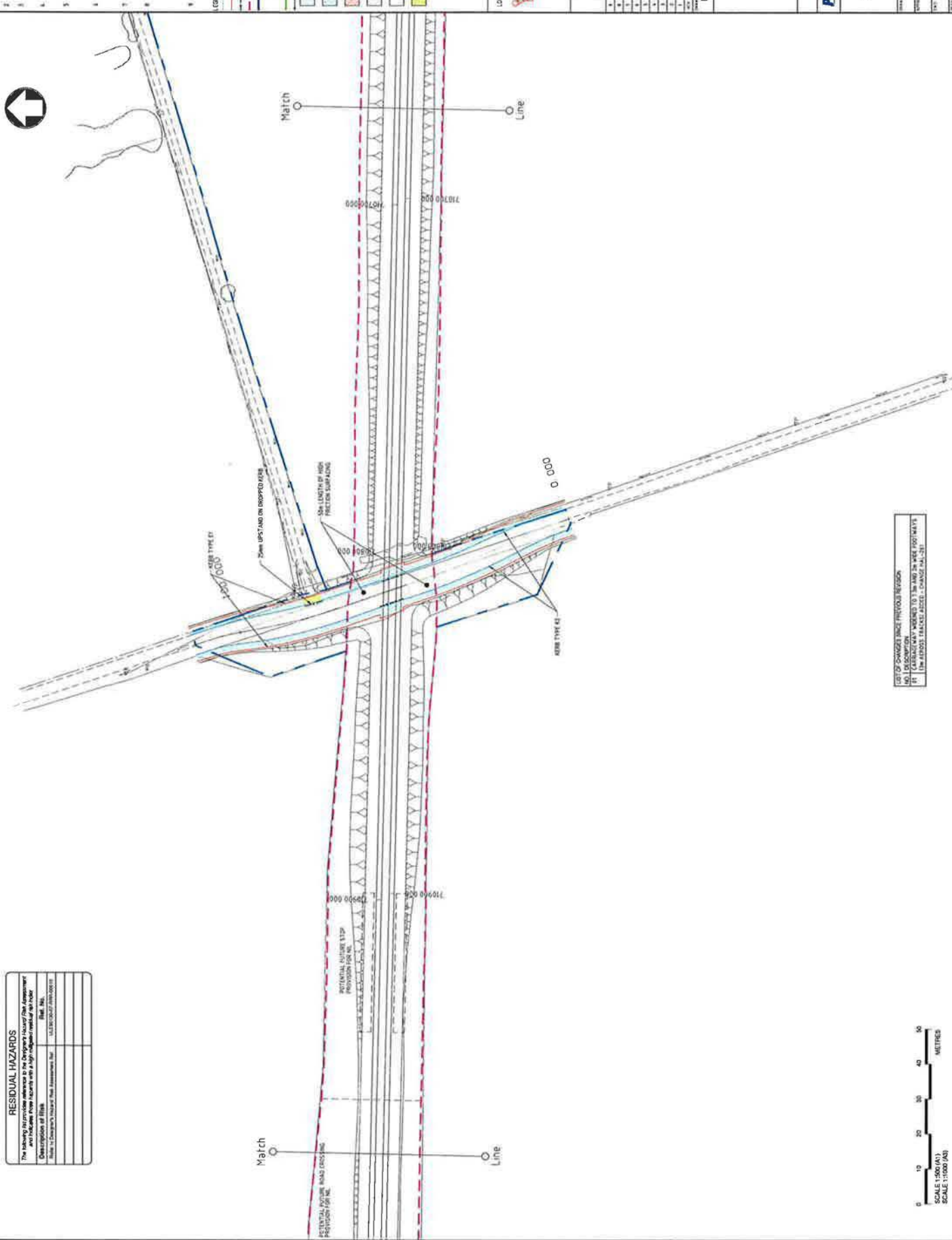
NO.	DESCRIPTION	DATE	BY
1	ISSUED FOR EXTERNAL APPROVAL	13/09/2010	...

RESIDUAL HAZARDS
The following are provided in accordance with the Design's Hazard Assessment and residual Risk Hazards with a high residual risk value
Description of Risk
Ref. No.
Date of Design's Hazard Assessment/Ref. ULE99130-01-101-2007

LIST OF CHANGES SINCE PREVIOUS REVISION
NO. DESCRIPTION
BY DATE



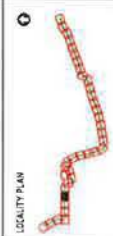
RESIDUAL HAZARDS	
This table lists any residual hazards identified in the Design's Safety Case Assessment and indicates how hazards with a high residual risk are to be managed.	
Description of Risk	Ref. No.
None - Design's Safety Case Assessment has	ULE501536-07-HRL-000011



- NOTES**
1. PROJECT MAPPING USED
 2. DESIGN BASED ON LOCAL GRID
 3. ALL DIMENSIONS IN METRES UNLESS STATED OTHERWISE
 4. ALL WORKS TO BE IN ACCORDANCE WITH E.C. STANDARD DETAILS
 5. FOR KERB TYPES REFER TO DRAWING ULE501536-07-HRL-00002, ULE501536-07-HRL-00003 & ULE501536-07-HRL-00004
 6. FOR COMPRESSED KERB DETAILS, REFER TO DRAWING ULE501536-07-HRL-00005
 7. ALL TACTILE PAVING TO BE IN ACCORDANCE WITH APPENDIX 11.1
 8. FOR ROAD MARKING, REFER TO TACTILE DETAILS FOLLOWING REMOVAL OF EXISTING SURFACE TREATMENTS REFER TO ROAD PAVEMENT MARKING DRAWINGS ULE175151-07-HRL-00007 AND 00008
 9. HIGH FRICTION SURFACE TO BE BLACK COLOURED

LEGEND

- KERB INCLUDING EDGE OF ROAD
- EDGE OF FOOTWAY OR CYCLEWAY
- CHIPPED KERB
- LIMIT OF DEVIATION LGD
- LIMIT OF LAND TO BE ACQUIRED OR USED
- BLANK
- PROPERTY LINE
- SAFETY FENCE
- PEDESTRIAN GUARDRAIL
- NEW FOOTWAY CONSTRUCTION
- STURDIOUS SURFACING
- NEW FOOTWAY BITUMINOUS SURFACING
- EXISTING FOOTWAY TO BE BROKEN OUT
- REMOVE COLOURED SURFACING
- HIGH FRICTION SURFACING
- STURDIOUS FOOTWAY - SEE ITEM 8, APP A/1 FOR VEHICLE OVERLAP



NO.	REVISION	DATE	BY	CHKD.
1	ISSUED FOR EXTERNAL APPROVAL	04.09.10	AS	AS
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ISSUED FOR EXTERNAL APPROVAL

EDINBURGH TRAM NETWORK

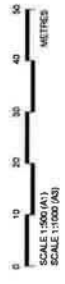
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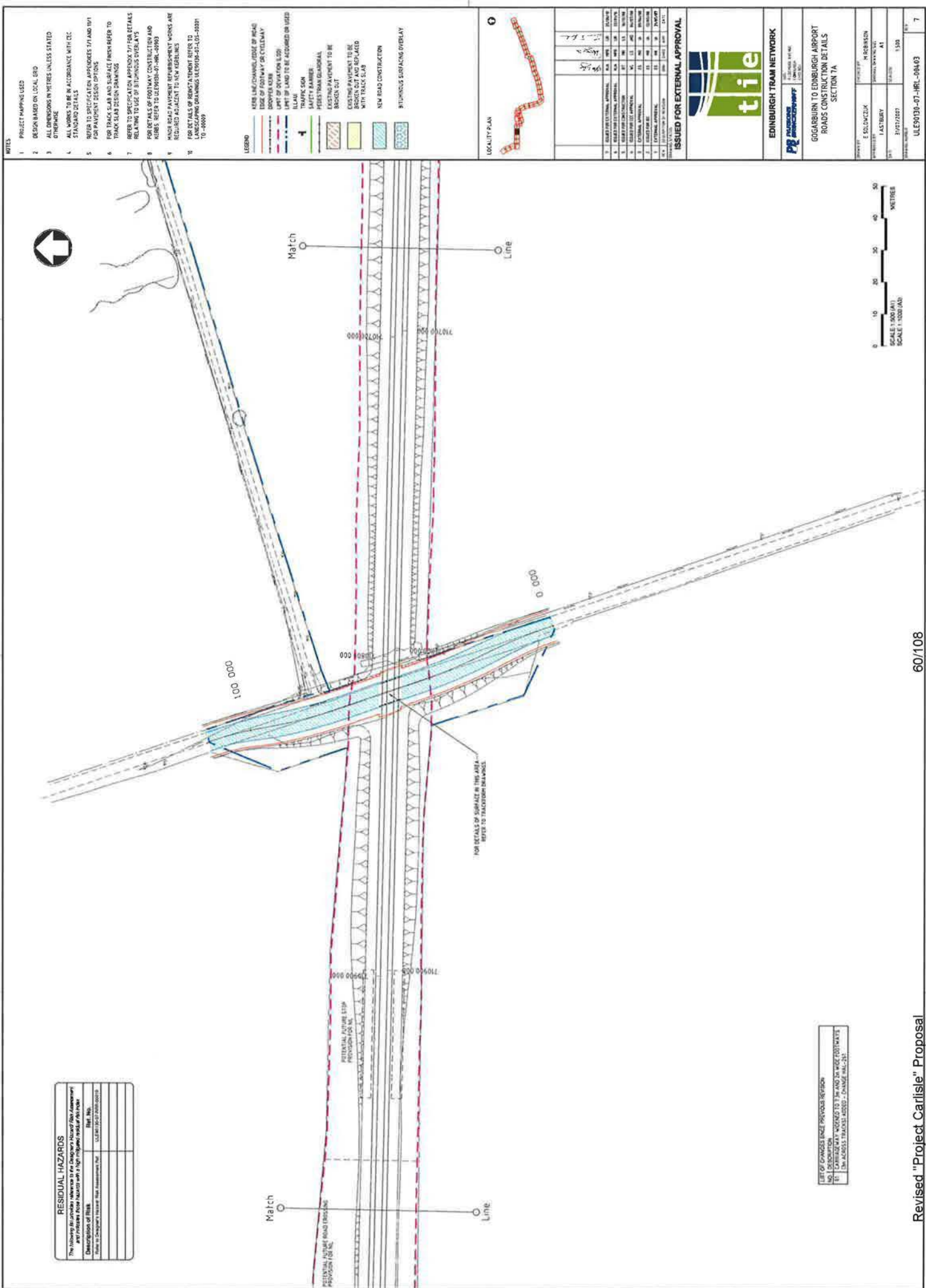
PG **PROGRESS** **PROGRESS**

GOGGARBURN TO EDINBURGH AIRPORT
KERBS, FOOTWAYS AND PAVED AREAS
SECTION 7A

PROJECT NO.	ULE501536-07-HRL-000011
DESIGNER	TIE
CLIENT	EDINBURGH TRAMWAY LIMITED
DATE	23/07/2010
SCALE	1:500
PROJECT NO.	ULE501536-07-HRL-000011
REV.	9

LIST OF CHANGES SINCE PREVIOUS REVISION
NO. DESCRIPTION
11 THE KERBS HAVE BEEN CHANGED TO TYPE 43
12 THE KERBS HAVE BEEN CHANGED TO TYPE 45





- NOTES**
- 1 PROJECT MAPPING USED
 - 2 DESIGN BASED ON LOCAL ORD
 - 3 ALL DIMENSIONS IN METRES UNLESS STATED OTHERWISE
 - 4 ALL WORKS TO BE IN ACCORDANCE WITH DC STANDARD DETAILS
 - 5 REFER TO SPECIFICATION APPENDICES 17 AND 17A FOR PAVEMENT DESIGN OPTIONS
 - 6 FOR TRACK SLAB AND SURFACE FINISH REFER TO TRACK SLAB DESIGN DRAWINGS
 - 7 REFER TO SPECIFICATION APPENDIX 17 FOR DETAILS RELATING TO USE OF BITUMINOUS OVERLAYS
 - 8 FOR DETAILS OF FOOTWAY CONSTRUCTION AND KERBS REFER TO ULE09010-07-HRL-0990
 - 9 MAJOR ROAD PAVEMENT REINFORCEMENT WORKS ARE REQUIRED ADJACENT TO NEW KERBLINES
 - 10 FOR DETAILS OF KERB/TENTH REFER TO TRACKING DRAWINGS ULE09010-07-HRL-0991 TO 0999

LEGEND

[Symbol]	KERB LINE (CHANGING USE OF ROAD)
[Symbol]	SIZE OF FOOTWAY OR CYCLEWAY
[Symbol]	PROPOSED KERB
[Symbol]	LIMIT OF DIVERSION ROAD
[Symbol]	LIMIT OF LAND TO BE ACQUIRED OR USED
[Symbol]	TRACK SOIL
[Symbol]	SAFETY BARRIER
[Symbol]	PERSTRAN GUARDRAIL
[Symbol]	EXISTING PAVEMENT TO BE BROKEN OUT
[Symbol]	EXISTING PAVEMENT TO BE BROKEN OUT AND REPLACED WITH TRACK SOIL
[Symbol]	NEW ROAD CONSTRUCTION
[Symbol]	BITUMINOUS SURFACING OVERLAY



NO.	DESCRIPTION	DATE	BY	CHECKED BY
1	ISSUED FOR EXTERNAL APPROVAL	07/09/2010
2
3
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ISSUED FOR EXTERNAL APPROVAL



EDINBURGH TRAM NETWORK
 PRACTISING ENGINEERS
 100, CANAL STREET, EDINBURGH, SCOTLAND, EH1 1YD

GOGARBURN TO EDINBURGH AIRPORT
 ROADS CONSTRUCTION DETAILS
 SECTION 7A

PROJECT NO.	E SLDVCCZK	PROJECT MGR.	M ROBINSON
PROJECT TITLE	1 A5 TIBURY	DESIGNER	AT
DATE	31/07/2007	SCALE	1:500
PROJECT NO.	ULE09010-07-HRL-00403	REV.	7

RESIDUAL HAZARDS

The following is a summary of the residual hazards identified in the Design Risk Register and the Design Risk Register for the project. It is intended to provide a high level overview of the residual risks remaining after the design has been completed.

Description of Risk	Risk No.
...	...
...	...
...	...
...	...
...	...

FOR DETAILS OF SIGNAGE IN THIS AREA REFER TO TRACKING DRAWINGS

RESIDUAL SURFACE ELEVATION PROVISION FOR SL

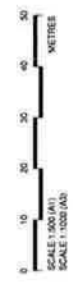
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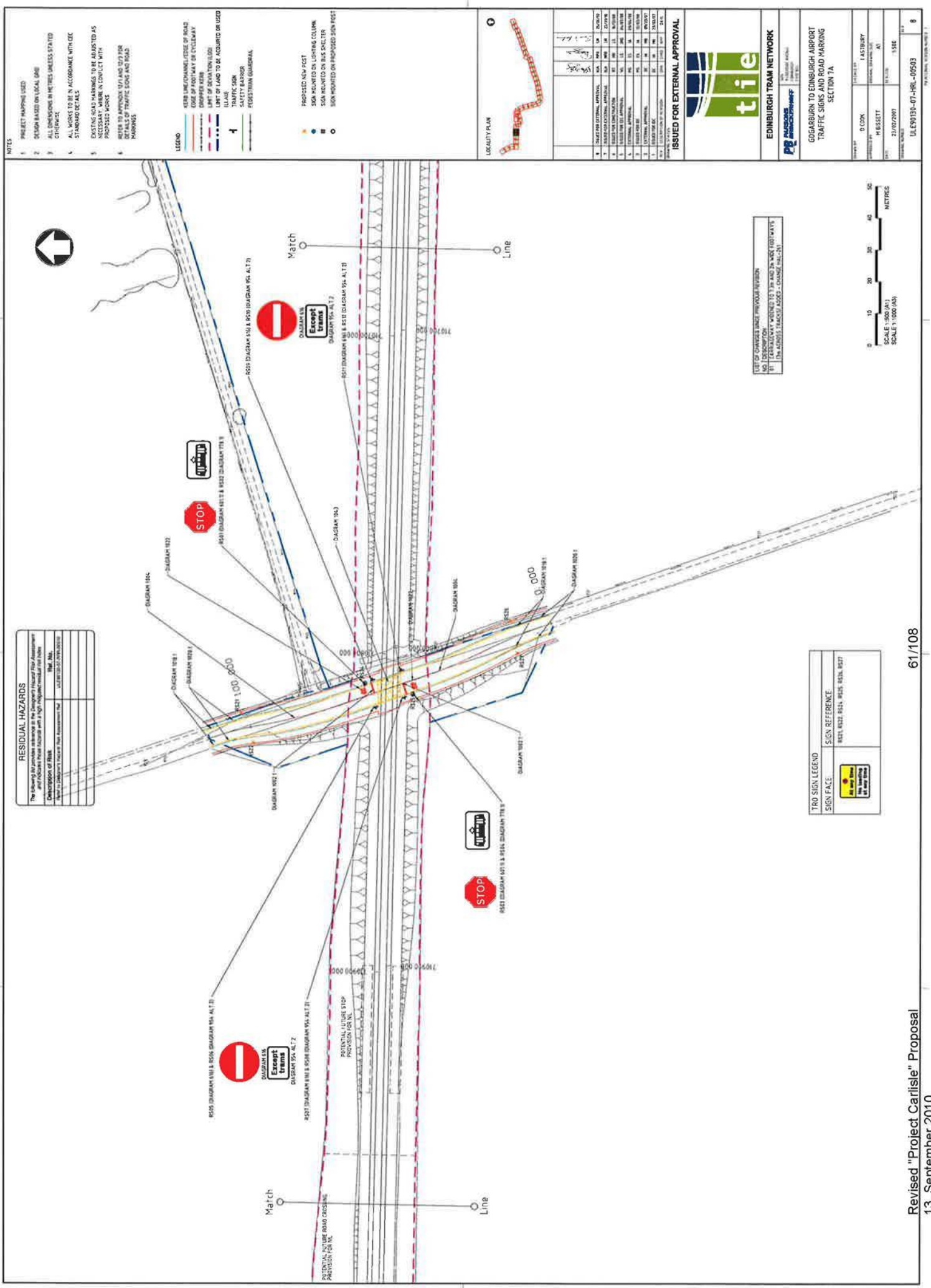
Line

Match

Line

TYPE OF CONSTRUCTION PROPOSED REVISION
 NO. 1
 1. LATERAL WAY WIDENED TO 3.0M AND IN WIDE FOOTWAYS
 2. 1M ADJUST TRACKS ADDED - CHANGE 100.21





- NOTES**
1. PROJECT DRAWING USED
 2. DESIGN BASED ON LOCAL USE
 3. ALL DIMENSIONS IN METRES UNLESS STATED OTHERWISE
 4. ALL WORKS TO BE IN ACCORDANCE WITH CEC STANDARD DETAILS
 5. EXISTING ROAD MARKINGS TO BE ADJUSTED AS NECESSARY, WHEN IN CONFLICT WITH PROPOSED WORKS
 6. REFER TO APPENDIX 1(1) AND 1(2) FOR DETAILS OF TRAFFIC SIGNS AND ROAD MARKINGS
- LEGEND**
- ROAD MARKINGS: (Symbol for road markings)
 - EXISTING ROAD MARKINGS TO BE ADJUSTED AS NECESSARY, WHEN IN CONFLICT WITH PROPOSED WORKS
 - LIMIT OF DEVIATION (LOD)
 - LIMIT OF LAND TO BE ACQUIRED OR USED
 - ILLUSTRATION OF CONSTRUCTION
 - SAFETY BARRIERS
 - FEEDSTRAIN GUARDRAIL
- PROPOSED NEW PEST**
- SSM MOUNTED ON LIGHTING COLUMN
 - SSM MOUNTED ON BUS DELTA
 - SSM MOUNTED ON PROPOSED SIGN POST

ISSUED FOR EXTERNAL APPROVAL

NO.	DESCRIPTION	DATE	BY	FOR
1	ISSUED FOR EXTERNAL APPROVAL	04.09.10	AM	AM
2	ISSUED FOR EXTERNAL APPROVAL	07.09.10	AM	AM
3	ISSUED FOR EXTERNAL APPROVAL	10.09.10	AM	AM
4	ISSUED FOR EXTERNAL APPROVAL	13.09.10	AM	AM
5	ISSUED FOR EXTERNAL APPROVAL	16.09.10	AM	AM
6	ISSUED FOR EXTERNAL APPROVAL	19.09.10	AM	AM
7	ISSUED FOR EXTERNAL APPROVAL	22.09.10	AM	AM
8	ISSUED FOR EXTERNAL APPROVAL	25.09.10	AM	AM
9	ISSUED FOR EXTERNAL APPROVAL	28.09.10	AM	AM
10	ISSUED FOR EXTERNAL APPROVAL	01.10.10	AM	AM
11	ISSUED FOR EXTERNAL APPROVAL	04.10.10	AM	AM
12	ISSUED FOR EXTERNAL APPROVAL	07.10.10	AM	AM
13	ISSUED FOR EXTERNAL APPROVAL	10.10.10	AM	AM
14	ISSUED FOR EXTERNAL APPROVAL	13.10.10	AM	AM
15	ISSUED FOR EXTERNAL APPROVAL	16.10.10	AM	AM
16	ISSUED FOR EXTERNAL APPROVAL	19.10.10	AM	AM
17	ISSUED FOR EXTERNAL APPROVAL	22.10.10	AM	AM
18	ISSUED FOR EXTERNAL APPROVAL	25.10.10	AM	AM
19	ISSUED FOR EXTERNAL APPROVAL	28.10.10	AM	AM
20	ISSUED FOR EXTERNAL APPROVAL	31.10.10	AM	AM

EDINBURGH TRAM NETWORK
[Logo and text for Edinburgh Tram Network]

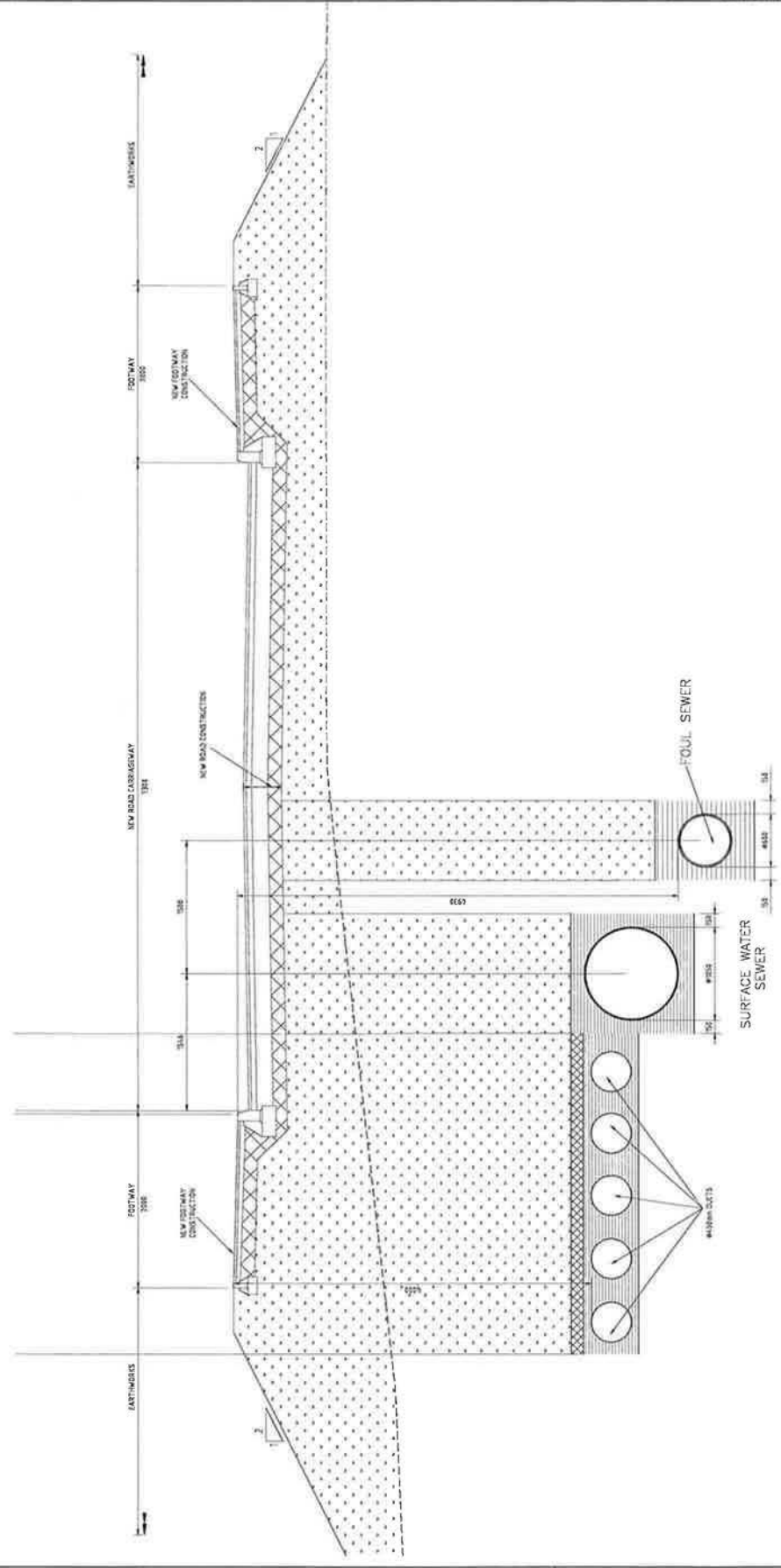
GOGARBURN TO EDINBURGH AIRPORT TRAFFIC SIGNS AND ROAD MARKING SECTION 7A

ISSUED FOR EXTERNAL APPROVAL

DESIGNED BY	D. COOK	1. HASTBURY
CHECKED BY	M. GOSSETT	2. HASTBURY
DATE	23/02/2007	3. HASTBURY
SCALE	1:1000 (AS)	4. HASTBURY
SCALE	1:500	5. HASTBURY
SCALE	1:1000 (AS)	6. HASTBURY
SCALE	1:1000 (AS)	7. HASTBURY
SCALE	1:1000 (AS)	8. HASTBURY
SCALE	1:1000 (AS)	9. HASTBURY
SCALE	1:1000 (AS)	10. HASTBURY
SCALE	1:1000 (AS)	11. HASTBURY
SCALE	1:1000 (AS)	12. HASTBURY
SCALE	1:1000 (AS)	13. HASTBURY
SCALE	1:1000 (AS)	14. HASTBURY
SCALE	1:1000 (AS)	15. HASTBURY
SCALE	1:1000 (AS)	16. HASTBURY
SCALE	1:1000 (AS)	17. HASTBURY
SCALE	1:1000 (AS)	18. HASTBURY
SCALE	1:1000 (AS)	19. HASTBURY
SCALE	1:1000 (AS)	20. HASTBURY

ULE590130-07-HR-00503 8

NOTES
 1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED
 2. ALL WORKS TO BE IN ACCORDANCE WITH CEE STANDARD DETAILS UNLESS STATED OTHERWISE



TYPICAL ROAD CROSS SECTION
 PERPENDICULAR TO GOGAR MAINS FARM ACCESS ROAD

LEGEND

[Pattern]	EXISTING GROUND LEVEL
[Pattern]	SURFACING
[Pattern]	ROAD BASE
[Pattern]	SUB-BASE
[Pattern]	DRAPING
[Pattern]	FOOTWAY/FOOTPATH SURFACING
[Pattern]	FOOTWAY/FOOTPATH CONSTRUCTION
[Pattern]	UTILITIES

1.	ISSUED FOR EXTERNAL APPROVAL	21	20	20
2.	ISSUED FOR EXTERNAL APPROVAL	21	20	20
3.	ISSUED FOR EXTERNAL APPROVAL	21	20	20
4.	ISSUED FOR EXTERNAL APPROVAL	21	20	20
5.	ISSUED FOR EXTERNAL APPROVAL	21	20	20
6.	ISSUED FOR EXTERNAL APPROVAL	21	20	20
7.	ISSUED FOR EXTERNAL APPROVAL	21	20	20
8.	ISSUED FOR EXTERNAL APPROVAL	21	20	20
9.	ISSUED FOR EXTERNAL APPROVAL	21	20	20
10.	ISSUED FOR EXTERNAL APPROVAL	21	20	20
11.	ISSUED FOR EXTERNAL APPROVAL	21	20	20
12.	ISSUED FOR EXTERNAL APPROVAL	21	20	20
13.	ISSUED FOR EXTERNAL APPROVAL	21	20	20
14.	ISSUED FOR EXTERNAL APPROVAL	21	20	20
15.	ISSUED FOR EXTERNAL APPROVAL	21	20	20
16.	ISSUED FOR EXTERNAL APPROVAL	21	20	20
17.	ISSUED FOR EXTERNAL APPROVAL	21	20	20
18.	ISSUED FOR EXTERNAL APPROVAL	21	20	20
19.	ISSUED FOR EXTERNAL APPROVAL	21	20	20
20.	ISSUED FOR EXTERNAL APPROVAL	21	20	20

ISSUED FOR EXTERNAL APPROVAL

EDINBURGH TRAM NETWORK

PAISGOWAY

TYPICAL CROSS SECTION
 SECTION 7A
 GOGAR MAINS FARM ACCESS ROAD

DATE: 21/12/17
 DRAWN: J. COOK
 CHECKED: J. COOK
 PROJECT: 13 SEP 17
 SHEET: 1/28
 DRAWING NUMBER: ULES13A-07-HRL-00201

RESIDUAL HAZARDS

The following are hazards identified in the Design's Hazard and Assessment Identification from information in high impact residual risk table

DESCRIPTION OF HAZARD

DATE OF HAZARD IDENTIFICATION

DATE OF HAZARD ASSESSMENT

DATE OF HAZARD MITIGATION

DATE OF CHANGE SINCE PREVIOUS REGION

DATE OF CHANGE SINCE PREVIOUS REGION

DATE OF CHANGE SINCE PREVIOUS REGION

APPENDIX 4

PROJECT CARLISLE SCOPE

As previously stated, we have updated this Revised Proposal to reflect the scope Infraco will be able to agree on. In essence, we will carry out the works shown on the GMP Drawings for scope of work between the Airport to Haymarket, and the enabling works.

In General

The Guaranteed Maximum Price is for the construction and delivery of the design shown on the drawings, specifications, schedules and submissions contained in the electronic record of "GMP Drawings", as they pertain to the scope of work. Changes in Procurement Laws, Tax Rates, Design Standards or Specifications, or changes in the Code of Construction Practice shall be considered a tie Change.

For the avoidance of doubt and further reference below to the Guaranteed Maximum Price being based on the GMP Drawings in the individual localities, is simply for added emphasis. Infraco shall not be obliged to build anything other than the design shown in the GMP Drawings unless instructed otherwise by tie through a tie Change Order, or as negotiated between the Parties.

Specific Identification of the Scope

1. **HAYMARKET TO AIRPORT** (including Enabling Works)
 - 1.1.1 Haymarket Corridor (chainages 200000 to 200814)
 - 1.1.2 Roseburn Junction to Balgreen (chainages 510000 to 511477);
 - 1.1.3 Balgreen to Edinburgh Park Central (chainages 520000 to 524555);
 - 1.1.4 Edinburgh Park Central to Gogar (chainages 530000 to 531898);
 - 1.1.5 Gogar Depot;
 - 1.1.6 Gogar to Edinburgh Airport (chainages 710000 to 712580).
- 1.2 All enabling works as shown in the sketches included in Infraco's Project Carlisle Proposal, dated 29 July 2010:
- 1.3 The completed, approved, assured, integrated and compliant Design for the Edinburgh Tram Network Phases 1a, to include certification thereof by each Infraco Member, the SDS Provider and any Infraco Party or SDS Provider Party involved in the production or development of Design or the Infraco's Design.

Exclusions and Qualifications

Roseburn Viaduct

Pricing is based as defined in the electronic record of "GMP Drawings" which are the IFEA Drawings (issued for external Approval) issued to CEC and Scottish Power for approval. Any impact on the design of the "GMP Drawings" shall be dealt with separately as a tie Change and an appropriate tie Change Order will be issued.

Pricing is based on the basis of an inclusion within GMP, the installation of a suitable and secure gate at the entrance to the portal (S502) to prevent unwarranted access to the Haymarket Rail Depot and potential for graffiti within the portal structure and on the basis of an inclusion within GMP, the installation of a "Trespa" system or similar approved architectural lightweight cladding finish on the face of the street facing walls of S501, S503 and S504 as an additional anti-graffiti measure and to improve the amenity of the area, a small area of additional soft landscaping up to a maximum area of 30m², and the installation of false walls in front of the abutments of S504 based on the "Trespa" system or similar to match the cladding of the street facing walls. Initial details are shown on Drawing Number ULE90130-05-PLG-00265 rev 2 draft *[based on attached sketch, to be further developed]* (See Appendix 3).

Gogarburn Landfill Site (Section 7A)

The Guaranteed Maximum Price is based on tie's recommendation, which is included in the electronic record of "GMP Drawings", which amends trackform to ballast and includes a track retaining structure in the vicinity of the 50m radius curve to the east of Gogarburn Bridge and an element of earth retention. The GMP Programme assumes that a maximum three month surcharge period is required and that access will thereafter be available to Infracore in accordance with its GMP Programme.

Outstanding Approvals etc.

Consents from Third Parties, in so far as it is required to obtain agreement of approval, have been identified when possible in the Programme. In the event other Consents or Third Party Approvals are required they shall be procured by tie in accordance with the GMP Programme, and in the event of a delay or additional cost Infracore shall be compensated by tie Change Order.

Trackform Type Confirmation

The trackform type at each location is based on the actual design as defined in the electronic record of "GMP Drawings"

Murrayfield Stadium Accommodation Works

These works are being carried out by others with an expected completion date of 31 October 2010. The GMP Programme is based upon this completion date and assumes that access will be available thereafter in accordance with the GMP Programme.

South Gyle Access Bridge – sewer clash at [Structure Number 26]

The sewer is being diverted by others with an expected completion date of 31 October 2010. The GMP Programme is based upon this completion date and assumes that access will be available thereafter in accordance with the GMP Programme.

The Guaranteed Maximum Price is based on the Drawings as included in the electronic record of “GMP Drawings”.

Gogar Interchange

The Guaranteed Maximum Price does not include for the Gogar Interchange. The Guaranteed Maximum Price is based on the GMP Drawings.

New Ingliston Limited (‘NIL’)

The Guaranteed Maximum Price is based on the Drawings to be included in the electronic record of “GMP Drawings”, and the drawings attached (See Appendix 3)

Airport Retaining Walls W14 & W15

The Guaranteed Maximum Price is based on an alternative piling solution to that shown in the electronic record of “GMP Drawings”. As such, the fully developed drawings will not constitute a tie Change, to the extent of the revisions to the alternative piling solution. However, in the event that an alternative piling solution cannot be achieved, the return to the original piling solution will constitute a tie Change. Any changes required to accommodate the outcome of the flood modelling works are not at the risk of Infracore save for alterations required to the weir within Culvert No.3, as indicated on the drawing attached (See Appendix 3).

Airport Kiosk Design

No further future proofing is allowed in the Guaranteed Maximum Price.

The Guaranteed Maximum Price is based on the current developed elliptical design which is included on the drawings as included in the electronic record of “GMP Drawings”.

Tramstop Design

The Guaranteed Maximum Price is based on the Drawings as included in the electronic record of “GMP Drawings”.

Substation Design

The Guaranteed Maximum Price is based on the Drawings as included in the electronic record of “GMP Drawings”.

Protection of Services

The protection and support of the gas main along Russell Road, as well any unknown service, is excluded from the Guaranteed Maximum Price. The protection and support of known services have been included in the GMP. The known services are:

INTC	Area and Description of Works
51	TNC002 : Utilities diversions & associated works - Section 5a.
52	TNC003 : Utilities diversions & associated works -Section 5b.
53	TNC004 : Utilities diversions & associated works - Section 5c. (excl 5C/PW/D/003)
53a	Section 5C - SW Diversion 5C/PW/D/003 at Gogar Roundabout
267	Carry out Scottish Water Diversion at Gogar Roundabout
268	Carry out Scottish Power Diversion at Gogar Roundabout
302	Protection of live utilities at Russell Road Bridge during construction
340	Edinburgh Park Bridge South Abutment Base - Existing service (cable)
361	Scottish Power Utility Diversion Murrayfield Underpass
369	Temp works for Thus and C & W and dismantle water main at A8 Underpass
431	Slew existing BT duct at A8 underpass
474	Additional manhole requirement - Section 5B
475	A8 Underpass - BT works - Slew 2 way and 4 way ducts
479	Proposed sewer lining at Water of Leith Bridge
517	Scottish Power Utility Diversion 5A/SP/D/05 at Russell Road Retaining Wall
523	A8 Underpass - support and protect BT equipment
555	Section 5B - Busgate, protection / diversion of existing services
559	5C A8 Underpass - SGN Diversion
560	5C - A8 Underpass - Grouting of existing sewer
561	5C - SP Cable at Gyle Stop Retaining Wall (Conflict ref 5C/SP/11)
577	Section 5C - W19 Gyle Stop RTW - Protection of existing services
601	5B - Busgate - SP LV Cable
602	5B - Busgate - Scottish Water existing Sewer
604	5B - Busgate - Street lighting power supply cable and ducting
611	5B - Busgate - Existing drainage
616	A8 Underpass - slew & protect GEONET apparatus
635	2A Haymarket Viaduct - Existing BT cable and drainage pipe

Landscaping

In respect of landscaping works, Infracore shall be deemed to have met all requirements relevant to landscaping which are necessary to enable the issue of a Certificate of Sectional Completion provided that the only outstanding works relate to planting. Infracore shall then carry out the planting works at the beginning of the next planting season.

Section 2A at Haymarket: Phase 1a/1b Interface Design

The Guaranteed Maximum Price is based on the Drawings as included in the electronic record of "GMP Drawings". The Guaranteed Maximum Price does not include any work within Section 3A as part of Phase 1a or Phase 1b.

Network Rail: Form C Submissions

The Guaranteed Maximum Price is based on the standard requirements for Form C submissions and on approvals being given in line with the Programme. tie shall assist the Infraco in obtaining all relevant approvals.

Third Party Agreements at Edinburgh Park and Airport

The timetable constraints as detailed in the Third Party Agreement licence with Edinburgh Airport Ltd. (EAL), other than agreeing respective completion dates for the approved packages are not applicable in executing the scope of Project Carlisle.

The existing New Edinburgh Ltd. (NEL) license has deadlines of 18 months (excluding Edinburgh Park Viaduct) and 24 months (at the viaduct), which are about to expire. For the purposes of the Guaranteed Maximum Price Infraco has assumed that the required timeframes can be agreed with NEL by tie / CEC to allow Infraco to construct, test and commission in accordance with the GMP Programme.

Any impact of these dates on the GMP Programme shall be dealt with separately as a tie Change and an appropriate tie Change Order will be issued.

Overall Traffic Management Model Approval

The Guaranteed Maximum Price is based on the drawings, specifications and schedules ("GMP Drawings"). The Infraco shall comply with the requirements of the Employer's Requirements. Any required Change to the Employer's Requirements or any preferential or other design changes required by CEC will be dealt with separately as a tie Change and an appropriate tie Change Order will be issued.

OLE Vehicle Impact Report

Infraco is responsible for obtaining CEC's acceptance and agreement provided such acceptance and agreement is provided in accordance with the timescales assumed in the programme. To date, CEC has not responded within the Approval Period as specified within the Infraco Contract. Any required Change due to late comments by CEC will be dealt with separately as a tie Change and an appropriate tie Change Order will be issued.

Lochside Avenue Junction

The Guaranteed Maximum Price is based on the drawings, specifications and schedules approved by CEC on 20 May 2010 and included in the electronic record of "GMP Drawings". The Guaranteed Maximum Price assumes no further comments or Informatives raised by CEC beyond those comments provided with the Approval of this design.

Changes to Traffic Regulation Orders (TROs)

tie is responsible for promotion and making of all necessary TROs to meet the PC Programme. tie confirms that Infraco have provided all necessary documentation and support required to support TRO 1 (defined as necessary for tram operations) for all on-street (Line 1) and off street (Line 2) sections. Further, Infraco is not responsible for the cost of any changes or amendments to any TRO documentation (drawings, schedules or reports) or to the design as a result of the TRO process or for any delays to the PC Programme due to a delay in the TRO process. Infraco is not responsible for the cost of any abortive works or delays due to the final "made" TRO impacting on the IFC design or changes to the GMP Drawings.

Drainage Alignment Drawings (Off-Street)

Any changes required to the current design on the drawings, specifications and schedules ("GMP Drawings), including both the impact on design and in construction, shall be dealt with separately as a tie Change and an appropriate tie Change Order will be issued.

OLE Interface at Tower Place Bridge

The Guaranteed Maximum Price is based on the drawings, specifications and schedules ("GMP Drawings").

OLE Interface at Russell Road Retaining Walls 3 & 4

The Guaranteed Maximum Price is based on the drawings, specifications and schedules ("GMP Drawings").

Interfaces with Energy Suppliers at Depot

Agreement for Local Power supply, meter arrangements, and gas supply, in this area remain outstanding. Additional issues regarding Way-leave clarification are also outstanding. Any further delay in these matters incurred beyond 12 July 2010 shall be to the full responsibility of tie, and subject to an extension of time.

Washing Plant

The Guaranteed Maximum Price is based on the Siemens proposal and the actual status of design. Any additional arrangements shall be subject to a tie Notice of Change and an appropriate tie Change Order will be issued.

Combined Poles

The Guaranteed Maximum Price includes in the material and equipment the complete set of pole extensions required to allow for the implementation of the street lighting integrated with the OLE poles for the original scope of work as indicated on the GMP Drawings.

Cable ducts

Cable duct connections between ETN and the Urban Traffic Control (UTC) and the City in View CCTV Control in a size of 150 mm diameter are not allowed in the Guaranteed Maximum Price due to an outstanding clarification on the right of way and the related design. For the execution of this work a tie change order may be required.

Noise & Vibration

Due to outstanding issues, the design and construction of the Floating Slab (Floating Track) as a Noise & Vibration protecting measures, no allowance has been made in the Guaranteed Maximum Price and a tie change order may be required.

HV / LV Supplies

The Guaranteed Maximum Price includes the value confirmed in TNC 014. (INF CORR 2304/RB). Any modification required for the HV / LV supply shall be subject to additional tie change order.

Utilities / Utility Works

The Guaranteed Maximum Price does not include for any Utilities, utilities or any Utilities Works that will be required to accommodate the Infraco Works other than those that have already been implemented through a tie Change Order.

Contaminated Materials

The Guaranteed Maximum Price includes for dealing with contamination, in the locations listed below, to a maximum aggregate quantity of 51,000 cubic metres, comprised of 13,000 cubic metres of hazardous material, and the remaining 38,000 considered non-hazardous. Any additional amounts shall be addressed through a tie Change Order.

2A Haymarket Yards Replacement Carpark
2A Russell Road RWs W3 & W4 including temporary stockpile on Haymarket Yards Car Park
W18 Retaining Wall at Murrayfield Tramstop
S21B and D Murrayfield Stadium and Training Pitches Retaining Walls
W8 Baird Drive Retaining Wall
S23 Carricknowe Bridge South Approach Ramp
5B Edinburgh Park Bridge to South Gyle Access Bridge

Below ground obstructions/voids

The Guaranteed Maximum Price does not include for any occurrence of archaeological findings. All obstructions and voids shall be addressed through a tie Change Order.

Duct Bank to City Chambers

The GMP does not include for duct construction from Princes Street to the City Chambers.

Design Assurance Statements

Infraco will carry out all necessary assurance statements, approvals and consents for the design, construction, testing and commissioning of the Edinburgh Tram Network as defined in this Revised Proposal (Phase 1a), with respect to the Safety Assurance Plan to enable tie to comply with ROGS and other key statutory requirements.

Ongoing tie Change Orders

Infraco and tie are in the process of negotiating numerous tie Change Orders, however it is unlikely and unnecessary that they will be finalised prior to submission of this Revised Proposal, in so far as the estimated amounts of these tie Change Orders have been incorporated in the GMP. Since Change Orders may have been issued after 30 June 2010 the GMP will require minor adjustment, as that the GMP only makes allowances for tie Change Orders issued prior to this date. However, in the instances where tie has issued Change Orders which contain qualifications, the qualifications remain valid and have been utilised in the development of the GMP.

Siemens' Materials and Equipment regarding the sections east of Haymarket

The Guaranteed Maximum Price includes the value of all materials and equipment which Siemens has already contracted for the scope east of Haymarket. The Guaranteed Maximum Price includes for delivery of all said materials and equipment, DDP (incoterms 2000) up to the defined projects warehouse in Edinburgh area. Arrangements have to be made by tie for taking over the project warehouse after completion of construction works for the initial phase or the transport of materials and equipment to other suitable locations.

An itemised and priced material schedule will be provided for the scope of work between Haymarket and Newhaven.

The Guaranteed Maximum Price is based on Infraco providing irrevocable vested ownership of these materials and equipment in favour of CEC, including transfer of title, risk and custody at a date which shall not exceed the Section C, Sectional Completion Date identified on the Programme, Revision 1- refer to activity ID 1000 of the Programme. For clarity, this is the latest date at which the last material or equipment should have been incorporated into the Works under the Programme, Revision 1.

The Guaranteed Maximum Price is predicated on the "Project Carlisle Change order allowing the immediate payment, per the itemised material schedule and within 60 days after physical delivery to the projects warehouse, of each and every such material and equipment for the scope of work between Haymarket and Newhaven.

The Guaranteed Maximum Price includes for warranty for all the above materials and equipment, for a warranty period expiring on 10 March 2013, i.e. two years after the Section C, Sectional Completion Date identified on the Programme, Revision 1.

Due to missing timeframes, cost for storage of the materials and equipment after providing irrevocable vested ownership as defined above is excluded from the Guaranteed Maximum Price. Siemens do not have long term arrangements beyond the Section C, Sectional Completion Date identified on the Programme; Revision 1 for its outsourced storage facilities in the Edinburgh area, the Guaranteed Maximum Price only includes cost for storage of the materials and equipment at Siemens' own or subcontracted onshore and/or offshore facilities, for the above, until that date.

Tram Supply:

The Guaranteed Maximum Price includes for all costs incurred by CAF in storing trams at their factory in Spain, and all other related costs (insurance, warranties etc) in accordance with Project Carlisle (See Appendix 1.3). For the sake of clarity, any reduction in the number of trams is not accepted by Infraco.

Designs Services (SDS)

Included in the Guaranteed Maximum Price is the cost for the preparation of all known works that the SDS Provider is currently aware of to complete the current scope. This includes the outstanding works relating to the original SDS design, design that has been subject to changes due to the alignment workshop process, changes requested by Infracore and changes driven by revised requirements from third party stakeholders and approvals bodies such as City of Edinburgh Council, tie, BAA, Forth Ports etc.

Also included in Appendix 1.4 CD, is a schedule of potential tie Changes that have been initiated, but for which, at the time of preparation of the Guaranteed Maximum Price, the scope was undefined. In these areas no instruction has been issued by tie. In most cases these tie Changes impact on a design that is complete, and compliant with the Employer's Requirements and the requirements of the Tram Design Manual, Third Party Agreements, CEC Standards and other core reference materials. These changes, if instructed, will result in changes to the GMP Drawings.

For the sake of clarity, these tie Changes have been excluded from the Guaranteed Maximum Price scope as it is recognised that it is entirely within the gift of tie to choose not to amend the current design presented and thereby mitigating cost and programme impact. Having reviewed the potential tie Changes for cost and programme savings we can see no added benefit in adopting the changes proposed in this schedule.

In preparing the Guaranteed Maximum Price, SDS has assumed that there will be no further changes required to the design, above and beyond those identified on the attached change schedules and as noted above. Given the exhaustive consultation approach that has been adopted with the relevant approvals bodies and the number of iterations of design that have been produced, comments received and subsequently incorporated, SDS believe the design to be robust and that all outstanding Technical and Prior Approvals could and should be granted by the relevant departments of the Approvals bodies without further change to the design. As such no allowance has been made for further design change in the production of the Guaranteed Maximum Price.

Specifically excluded from the Guaranteed Maximum Price are the following issues that at one point or another have been discussed, but not formalised or progressed by the Parties:

1. Stage E Landscape Drawings as per CEC Informative and Meeting held in September 2009;
2. South Gyle Access Bridge Detailed Design beyond Changes in S26 and W11 detailed in design as per DCR0133 feasibility report;
3. Tower Place Bridge design to reflect the removal of the ramp, concrete downstand, or revisions to the OLE, as per RDC154;
4. Forth Ports Section 1A fence alterations due to additional constraints in the Casino area;
5. Advanced Directional Signing for Constitution Street to address additional signs;
6. Lindsay Road phone mast construction conflicts;
7. Mounting of sign plates on buildings and railings;

8. Roseburn Street Viaduct curtain walls in lieu of the current fencing proposal at each abutment;
9. Murrayfield Tramstop Layout Changes to bollards, fence, and turnstiles;
10. Elder Street Junction redesign;
11. Picardy Place Detailed Design as per DCR0173 and DCR0221
12. Pedestrian Guardrail Changes;
13. Gogar Interchange name change to Edinburgh Gateway;
14. Relocation of the combined sewer at Gogar interchange.

Completion Dates and Liquidated Damages

Liquidated Damages will apply at the Infraco Contract rates and as per the terms of the Infraco Contract. However, the Planned Sectional Completion Dates are as identified in GMP Programme in Appendix 5 and are defined in the Executive Summary.

Liquidated Damages associated with tram delivery / tram commissioning in the Tram Supply Novation Agreement, the Tram Supply Agreement, and the Infraco Contract shall not apply any more, since the necessary progress of the tram delivery and tram commissioning has been included in the revised dates for the Planned Sectional Completion. The agreed commissioning dates for the Trams should be linked in the completion dates.

Schedule Part 4 Pricing Assumptions

We believe that a joint review of the existing Specified Exclusions and Pricing Assumptions in Schedule part 4 is required to enable agreement to be reached on a substantially reduced list.

Specific Contract Clause Modifications

We believe there is positive merit to the proposed Clause changes identified in your letter, and also believe that a joint review of the specific Clause modifications would enable both Parties to find agreement for the betterment of the Project.

Maintenance

The maintenance GMP is based on the current design as detailed in the GMP Drawings. If this is later subject to a Change Order, including any change to the agreed split of responsibilities within Schedule Part 2, then this shall be valued in accordance with clause 80.6.

The GMP is based on the assumption that the total maintenance period does not exceed 10 years starting with the service commencement date for Section D (as described in Appendix 5.2).

In view of the Project Carlisle revisions, we do not believe that certain conditions remain appropriate and we therefore we would like to review and to discuss the incorporation of the following points with respect to the Maintenance Services:

1. Removal of the voluntary termination by tie clause (89), which leads to a 10 year maintenance contract period.
2. Removal of the cap applicable to indexation on Spare Parts and infrastructure mobilization amounts, currently capped at a maximum aggregate amount of 50,000GBP.
3. Indexation: shall be for the full scope of maintenance, including mobilisation and initial spares.
4. Introduction of a Benchmarking point (at 5 years) regardless of whether there is any change in applicable law.
5. Renegotiation of Liability caps, as defined in Schedule Part 1, in the Maintenance Cap .

Maintenance Pricing

To reflect the Maintenance programming modifications required by Project Carlisle the Maintenance Pricing requires adjustment. The following Table identifies the Maintenance Pricing categories and Revised Amounts. Tram Maintenance and Mobilisation is included in the price provided by CAF, see APPENDIX 1.3 -CAF - Guaranteed Maximum Price Breakdown.

Maintenance Pricing

Infraco	Value
Infraco Maintenance limited to scope as defined in Infraco "Project Carlisle" Proposal	£25,133,013.00
Infraco Maintenance Mobilisation	£1,782,292.00
Infraco Spare Parts	£1,013,090.00
Total Infraco	£27,928,395.00
CAF	Value
Tram Maintenance	TBA
Maintenance Mobilization	£2,275,806.00
Total CAF	TBA

TBA = To Be Adjusted by CAF/Tie when Km/year of operation is decided (it is presumed that the total amount will be below the minimum foreseen in Tram Maintenance Agreement table for price adjustment according to distance and will therefore require an agreement of the price per kilometre. If that is not the case, TMA prices will be applied)

APPENDIX 5

INFRACO PROJECT CARLISLE PROGRAMME

5.0 Narrative

5.1 GMP Programme

5.2 Sectional Completion Dates

5.0 Narrative

General

The start date (data date) of the programme is 03 September 2010. For work activities currently under construction their actual progress at 03 September 2010 is taken as the start point of the programme.

Our 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. However construction work will be required outside the hours stated in the Code of Construction Practice for Rail Possessions, work on busy road junctions, works associated with piling at the A8 underpass, stringing catenary cables etc. Prior approval will be sought 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.

Version 59 of the SDS design programme has been used to establish milestone dates for the Issue for Construction drawings. We have assumed that there will be no amendments to the SDS design programme.

The programme is based on MUDFA having completed all works and all utilities being diverted that would conflict with INFRACO operations.

The scope of work considered is that for and set out in this Proposal. Therefore, this programme as set out in Appendix 5 was set up only with regard to the Project Carlisle Proposal and based upon the scope provided herein.

Section Completion Dates

Section 1A

The programme for the enabling works at Newhaven which includes Lindsay Road Retaining Wall and the lowering of Lindsay Road is an extract of the relevant sections of the proposed Programme Revision 3A. The construction sequence therefore relies upon the availability of the Forth Ports diversion road. This diversion route permits the simultaneous construction of Lindsay Road Retaining Wall W1A and the lowering of Lindsay Road whilst still maintaining traffic flows.

The GMP Programme assumes a

The Programme assumes that all necessary Utility diversions have been completed in this area prior to the Infracore Works commencing.

The GMP Programme assumes that all 3rd Party approvals / licences will be in place for these works to commence in accordance on 01 November 2010.

The programme for Tower Place Bridge enabling works is extracted from the Programme Revision 3A and progressed to 03 September 2010. The programme only accounts for the tie relocation of utilities from North to South. Any delay in relocating the utilities, or additional works undertaken by tie may impact the sectional completion date.

Section 2A

The GMP programme assumes the termination point for the works to be the east end of Haymarket Viaduct. No track work is envisaged beyond the eastern end of the reinforced concrete viaduct deck.

The GMP Programme assumes a commencement date of 20 September 2010 for the removal and replacement of soft ground

Section 5A

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

The construction works in general are subject to Network Rail approval. An eight week (plus three week "cooling off period") has been assumed for all Network Rail form C approvals. A four week (plus three week "cooling off period") has been allowed for the approval of all Works Package plans. The programme generally shows the latest dates for these approvals.

The GMP Programme assumes tie will procure all necessary approvals and issue the necessary Change Orders to allow the commencement of demolition in Plots 96, 97, 101 & 102, before 20 September 2010

Section 5C

The completion of the track and M & E works at the depot is dependent on the completion of the depot access bridge superstructure. The Programme assumes that the works to the depot access bridge will be accelerated to 7 days a week working from the 11 October 2010.

Section 6A

No comments.

Section 7A

The Programme assumes that the settlement period for the Gogar Landfill Site will be limited to 3 months and removal of the surcharge can commence on 15 October 2010.

The Programme also assumes that BAA will grant a licence for works on their land to recommence on 24 September 2010.

Revisions to the W14 Retaining Wall, to the extent that an alternative piling solution will be fully developed, have been included in the Programme. In the event that the approval process, by third parties, causes a delay beyond the dates included in the Programme, Infracore reserves the right to claim an extension of time.

Immediate Action Items

There are a number of time critical activities which require procurement of authorizations as well as procurement of long lead time materials. We propose to meet with tie to discuss this particular issue, as well as similar issues, within the next few days in an effort to find an agreeable solution to avoid unnecessary impacts to the Programme. The following list is not all inclusive:

1. Commencement of work at Lindsay Road in Section 1A by 01 November 2010
2. Removal and replacement of soft ground in Section 2A by 20 September 20120.
3. Permit to begin & Change Order issued for demolition in Section 5A by 20 September 2010.
4. Recommencement of work on BAA lands in Section 7A by 24 September 2010.
5. Finalisation of design to allow procurement of piling materials for Wall 14 C no later than 9 November 2010 to facilitate a 12 week fabrication and delivery requirement.

APPENDIX 5.1

INFRACO GMP PROGRAMME

Appendix 5.1 – GMP Programme:
Project Carlisle Programme – Airport to Haymarket
(Revision 01 100912)
Project Carlisle Programme – short to HAY (100912)
EDINBURGH TRAM NETWORK
Date 12-Sep-10
Pages 1 to 29

Activity ID	Activity Name	Original Start Duration	Finish	Total Float
Project Carlisle Programme - short to HAY (100912)				
KEY DATES				
1000	Delivery/ handover of all Siemens material to site	571d 02-Sep-10	18-Dec-12	0d
313	Section Completion A	447d 19-Mar-11	18-Dec-12	0d
314	Section Completion B	0d	09-Jun-11	381d
281	Construction Completion Phase 1a Edinburgh Airport to Haymarket	0d	20-Dec-11	245d
315	Section Completion C	0d	21-Jun-12	0d
310	Commencement of Revenue Service Phase 1a Edinburgh Airport to Haymarket	0d	19-Sep-12	0d
325	Section Completion D	0d	18-Dec-12	0d
COMMISSIONING PHASE EDINBURGH AIRPORT TO HAYMARKET				
300	System Integration Test; Phase 1a Edinburgh Airport to Haymarket	125d 27-Jun-12	18-Dec-12	0d
301	Test Running and Driver Familiarisation; Phase 1a Edinburgh Airport to Haymarket	30d 21-Jun-12	21-Jul-12	0d
302	T1 Post Commissioning Test completed; Phase 1a Edinburgh Airport to Haymarket	0d	20-Aug-12	0d
302.1	Test Running and Driver familiarisation performance ramp up 1...	30d 20-Aug-12	19-Sep-12	0d
302.2	T2 Performance Test completed; Phase 1a Edinburgh Airport to Haymarket	0d	19-Sep-12	0d
302.3	Approval of HMRI; Phase 1a Edinburgh Airport to Haymarket	0d	19-Sep-12	0d
302.4	Shadow running; Phase 1a Edinburgh Airport to Haymarket	90d 19-Sep-12	18-Dec-12	0d
302.5	T3 Pre-Operations Test Completed; Phase 1a Edinburgh Airport to Haymarket	0d	18-Dec-12	0d
317d 18-May-11		22-Aug-12	84d	
TRAM DELIVERY & COMMISSIONING				
Deliver & Commission First Train				
CAF-01(3)	Depot available for delivery of first Train	151d 18-May-11	20-Dec-11	74d
CAF-02(3)	1st Train Delivery & Inspection	0d 19-May-11	19-May-11	197d
CAF-03(3)	Commission First Train	48d 25-Oct-11	20-Dec-11	84d
Deliver & Commission Remaining 28 Trams				
CAF-04(3)	2nd Train Delivery	185d 22-Nov-11	22-Aug-12	84d
CAF-05(3)	2nd Train Commissioning	0d 22-Nov-11	20-Dec-11	260d
CAF-06(3)	3rd Train Delivery	20d 22-Nov-11	20-Dec-11	260d
CAF-07(3)	3rd Train Commissioning	0d 22-Nov-11	20-Dec-11	260d
CAF-08(3)	4th Train Delivery	20d 22-Nov-11	20-Dec-11	260d
CAF-09(3)	4th Train Commissioning	0d 22-Nov-11	20-Dec-11	260d
CAF-10(3)	5th Train Delivery	20d 22-Nov-11	20-Dec-11	84d
CAF-11(3)	5th Train Commissioning	0d 22-Nov-11	20-Dec-11	84d
CAF-12(3)	6th Train Delivery	0d 29-Dec-11	19-Jan-12	238d
CAF-13(3)	6th Train Commissioning	15d 29-Dec-11	19-Jan-12	238d
CAF-14(3)	7th Train Delivery	0d 29-Dec-11	19-Jan-12	84d
CAF-15(3)	7th Train Commissioning	15d 29-Dec-11	19-Jan-12	84d
CAF-16(3)	8th Train Delivery	0d 30-Jan-12	20-Feb-12	216d
CAF-17(3)	8th Train Commissioning	15d 30-Jan-12	20-Feb-12	216d
CAF-18(3)	9th Train Delivery	0d 30-Jan-12	20-Feb-12	216d
CAF-19(3)	9th Train Commissioning	15d 30-Jan-12	20-Feb-12	216d
CAF-20(3)	10th Train Delivery	0d 30-Jan-12	20-Feb-12	84d
CAF-21(3)	10th Train Commissioning	15d 30-Jan-12	20-Feb-12	84d
CAF-22(3)	11th Train Delivery	0d 29-Feb-12	21-Mar-12	194d
CAF-23(3)	11th Train Commissioning	15d 29-Feb-12	21-Mar-12	194d
CAF-24(3)	12th Train Delivery	0d 29-Feb-12	21-Mar-12	84d

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Actual Work Remaining Work Critical Remaining Work Milestone Summary

Project Carlisle - Airport to Haymarket
(Revision 01 100912)

EDINBURGH TRAM NETWORK



13-Sep-10



Page 2 of 29

Legend:
█ Actual Work
█ Remaining Work
█ Critical Remaining Work
◆ Milestone

Checked: SCS/MHE
 Approved: BSC

Activity ID	Activity Name	Original Start Duration	Finish	Total Float
1A-24-W1A-120	RW Foundation	24d 04-Nov-10	08-Dec-10	341d
1A-24-W1A-130	RC Wall	5d 04-Nov-10	10-Nov-10	340d
1A-24-W1A-140	Coping	7d 15-Nov-10	23-Nov-10	340d
1A-24-W1A-150	RW Finishing Works and Backfilling	26d 15-Dec-10	04-Feb-11	343d
1A-24-W1A-160	Waterproofing	2d 15-Dec-10	16-Dec-10	340d
1A-24-W1A-170	Brickwork	3d 17-Dec-10	21-Dec-10	340d
1A-24-W1A-180	Drainage	2d 22-Dec-10	23-Dec-10	340d
1A-24-W1A-190	Stone drainage trench	3d 11-Jan-11	13-Jan-11	340d
1A-24-W1A-200	Backfill and compact (inc demo. of exist. t.w.)	11d 19-Jan-11	02-Feb-11	340d
1A-24-W1A-370	Vehicle Parapets	2d 03-Feb-11	04-Feb-11	340d
1A-24-W1A-370	LINDSAY ROAD RW W1A - PHASE 1 (4 OF 21 UNITS) COMP...	0d	04-Feb-11	340d
1A-24-W1A-370	LINDSAY ROAD Retaining Wall W1D	22d 02-Sep-10	04-Oct-10	328d
1A-24-W1A-130	RC Wall	7d 03-Sep-10	13-Sep-10	328d
1A-24-W1A-140	Coping	7d 03-Sep-10	13-Sep-10	328d
1A-24-W1A-150	Waterproofing	15d 14-Sep-10	04-Oct-10	328d
1A-24-W1A-160	Drainage	1d 14-Sep-10	14-Sep-10	328d
1A-24-W1A-170	Stone drainage trench	1d 15-Sep-10	15-Sep-10	328d
1A-24-W1A-180	Brickwork	1d 16-Sep-10	16-Sep-10	328d
1A-24-W1A-190	Backfill and compact	1d 17-Sep-10	17-Sep-10	328d
1A-24-W1A-200	Vehicle Parapets + Crash Barrier	1d 20-Sep-10	20-Sep-10	338d
1A-24-W1A-210	Kerbing	1d 20-Sep-10	20-Sep-10	328d
1A-24-W1A-220	Footway and Road Surfacing	10d 21-Sep-10	04-Oct-10	328d
1A-24-W1A-230	LINDSAY ROAD RW W1D COMPLETE	0d	04-Oct-10	328d
1A-24-W1A-140	Coping	23d 03-Sep-10	05-Oct-10	327d
1A-24-W1A-150	Waterproofing	6d 05-Sep-10	10-Sep-10	327d
1A-24-W1A-160	Drainage	17d 13-Sep-10	05-Oct-10	327d
1A-24-W1A-170	Stone drainage trench	1d 14-Sep-10	14-Sep-10	327d
1A-24-W1A-180	Brickwork	3d 15-Sep-10	17-Sep-10	327d
1A-24-W1A-190	Backfill and compact	1d 20-Sep-10	20-Sep-10	327d
1A-24-W1A-200	Vehicle Parapets + Crash Barrier	1d 21-Sep-10	21-Sep-10	337d
1A-24-W1A-210	Kerbing	1d 21-Sep-10	21-Sep-10	327d
1A-24-W1A-220	Footway and Road Surfacing	10d 22-Sep-10	05-Oct-10	327d
1A-24-W1A-230	LINDSAY ROAD RW W1C COMPLETE	0d	05-Oct-10	327d
1A-24-TTM-05B-1000	TTM - PHASE 5B - Lindsay Road EB closed	103d 01-Nov-10	11-Apr-11	295d
1A-24-TTM-05B-01	Commence TTM Works	0d 01-Nov-10	193d	193d
1A-24-TTM-05B-1010	TTM PHASE 5B COMPLETE	0d 01-Nov-10	193d	193d
1A-24-5B-1000	TEMPORARY AND PRELIMINARY WORKS	7d 01-Nov-10	10-Nov-10	193d
1A-24-5B-1010	Establish temporary traffic management	1d 01-Nov-10	02-Nov-10	193d
1A-24-5B-1020	Site clearance	5d 02-Nov-10	09-Nov-10	193d
1A-24-5B-1030	Investigate services / inlet-outlet positions / le...	1d 09-Nov-10	10-Nov-10	193d
1A-24-5B-1040	LINDSAY ROAD (WESTBOUND)	91d 10-Nov-10	04-Apr-11	194d

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Legend: Actual Work (Green), Remaining Work (Blue), Critical Remaining Work (Red), Milestone (Diamond)

Approved: BSC

Checked: SCS/MHE

Revision: Revision 01 (100912)

Date: 12-Sep-10

Activity ID	Activity Name	Original Start Duration	Finish	Total Float	2011	2012	2013
					Jan	Feb	Mar
1A-24-5B-1030	COMMENCE ROAD WORKS (LINDSAY ROAD-WESTBOUND)	0d	10-Nov-10	193d	Aug	Sept	Oct
1A-24-5B-1040	ROAD WORKS COMPLETE (LINDSAY ROAD)	0d	04-Apr-11	193d	Jan	Feb	Mar
WESTBOUND							
1A-24-5B-1050	Remove existing footway	86d	10-Nov-10	193d	Jan	Feb	Mar
1A-24-5B-1060	Plane Main Carriageway & Footway	5d	10-Nov-10	193d	Jan	Feb	Mar
1A-24-5B-1070	Plane/break/low / excavate to Formation (Lindsay Road)	49d	24-Nov-10	193d	Jan	Feb	Mar
1A-24-5B-1080	Capping layer (600mm)	49d	25-Nov-10	195d	Jan	Feb	Mar
1A-24-5B-1090	Drainage and Outfalls	49d	26-Nov-10	193d	Jan	Feb	Mar
1A-24-5B-1100	Ducts and Chambers	49d	26-Nov-10	193d	Jan	Feb	Mar
1A-24-5B-1110	Kerbing	10d	15-Feb-11	195d	Jan	Feb	Mar
1A-24-5B-1120	Footpath Works	27d	18-Feb-11	193d	Jan	Feb	Mar
SURFACING							
1A-24-5B-1130	220mm Sub-base	4d	01-Mar-11	211d	Jan	Feb	Mar
1A-24-5B-1140	225mm Base	1d	02-Mar-11	211d	Jan	Feb	Mar
1A-24-5B-1150	60mm Binder Course	1d	03-Mar-11	211d	Jan	Feb	Mar
1A-24-5B-1160	35mm Surface Course - Main Carriageway and Boundary	1d	04-Mar-11	211d	Jan	Feb	Mar
ROAD FINISHING							
1A-24-5B-1170	Road Signs and Markings	1d	07-Mar-11	211d	Jan	Feb	Mar
1A-24-5B-1180	Landscaping	9d	21-Mar-11	193d	Jan	Feb	Mar
1A-24-5B-1190	Remove temporary traffic management	1d	01-Apr-11	193d	Jan	Feb	Mar
COMMISSIONING AND TESTING							
1A-24-5B-TEST-100	Handover / Acceptance of Roadworks and Trackworks	5d	04-Apr-11	289d	Jan	Feb	Mar
1A-24-5B-TEST-110	Start remaining E&M works along track	5d	04-Apr-11	285d	Jan	Feb	Mar
TTM PHASE 5A (LINDSAY ROAD EAST BOUND)							
1A-24-TTM-05A-1000	TTM - PHASE 5A - Lindsay Road WB closed	103d	11-Apr-11	195d	Jan	Feb	Mar
1A-24-TTM-05A-1010	TTM PHASE 5A COMPLETE	0d	11-Apr-11	193d	Jan	Feb	Mar
TEMPORARY AND PRELIMINARY WORKS							
1A-24-5A-1000	Establish temporary traffic management	1d	11-Apr-11	193d	Jan	Feb	Mar
1A-24-5A-1010	Site clearance	10d	12-Apr-11	193d	Jan	Feb	Mar
1A-24-5A-1020	Investigate services / outfall positions / inle-outlet positions / le...	1d	27-Apr-11	193d	Jan	Feb	Mar
Lindsay Road Retaining Wall WB							
Preliminary works & excavation							
1A-24-5A-W1B-100	Mobilisation, site installation and temporary fencing	14d	11-Apr-11	202d	Jan	Feb	Mar
1A-24-5A-W1B-110	Demolition	1d	11-Apr-11	202d	Jan	Feb	Mar
1A-24-5A-W1B-120	Excavation	10d	12-Apr-11	202d	Jan	Feb	Mar
RW Structure							
1A-24-5A-W1B-130	RW Foundation	20d	26-Apr-11	300d	Jan	Feb	Mar
1A-24-5A-W1B-140	RC Wall	9d	29-Apr-11	202d	Jan	Feb	Mar
RW Finishing Works and Backfilling							
1A-24-5A-W1B-150	Waterproofing	22d	31-May-11	308d	Jan	Feb	Mar
1A-24-5A-W1B-160	Drainage	5d	02-Jun-11	202d	Jan	Feb	Mar
1A-24-5A-W1B-170	Stone drainage trench	2d	09-Jun-11	202d	Jan	Feb	Mar
1A-24-5A-W1B-180	Brickwork	2d	09-Jun-11	202d	Jan	Feb	Mar
1A-24-5A-W1B-190	Backfill and compact	1d	13-Jun-11	202d	Jan	Feb	Mar
1A-24-5A-W1B-200	Vehicle Parapets	2d	14-Jun-11	212d	Jan	Feb	Mar
1A-24-5A-W1B-210	Kerbing	2d	14-Jun-11	202d	Jan	Feb	Mar
1A-24-5A-W1B-220	Footway and Road Surfacing	10d	16-Jun-11	202d	Jan	Feb	Mar

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Approved

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Revision 01 (100912)

12-Sep-10

Actual Work

Remaining Work

Critical Remaining Work

Milestone

Summary

Project Carlisle - Airport to Haymarket
(Revision 01 100912)

EDINBURGH
TRAM NETWORK



13-Sep-10

Activity ID	Activity Name	Original Start	Original Duration	Finish	Total Float
1A-24-5A-W1B-230	LINDSAY ROAD RW/W1B COMPLETE	0d		30-Jun-11	202d
1A-24-5A-W1B-230	LINDSAY ROAD RW/W1B COMPLETE	0d		30-Jun-11	202d
1A-24-5A-1030	COMMENCE ROAD WORKS (LINDSAY ROAD)	85d	28-Apr-11	30-Aug-11	196d
1A-24-5A-1040	ROAD WORKS COMPLETE (LINDSAY ROAD-EASTBOUND)	0d	28-Apr-11	30-Aug-11	193d
1A-24-5A-1050	Remove existing footway	84d	28-Apr-11	29-Aug-11	197d
1A-24-5A-1060	Plane Main Carriageway & Footway	11d	28-Apr-11	16-May-11	193d
1A-24-5A-1070	Plane/break/flower / excavate to Formation (Lindsay Road)	4d	16-May-11	20-May-11	193d
1A-24-5A-1080	Earthworks New Link Road	38d	20-May-11	14-Jul-11	193d
1A-24-5A-1090	Capping layer (600mm)	15d	20-May-11	13-Jun-11	215d
1A-24-5A-1100	Drainage and Outfalls	38d	23-May-11	15-Jul-11	193d
1A-24-5A-1120	Ducts and Chambers	38d	24-May-11	18-Jul-11	194d
1A-24-5A-1110	Manholes & Catchpits (Gros)	9d	24-May-11	07-Jun-11	223d
1A-24-5A-1130	Kerbing	9d	13-Jul-11	26-Jul-11	193d
1A-24-5A-1140	Footpath Works	29d	18-Jul-11	29-Aug-11	194d
1A-24-5A-1150	220mm Sub-base	4d	26-Jul-11	02-Aug-11	214d
1A-24-5A-1160	225mm Base	1d	27-Jul-11	27-Jul-11	211d
1A-24-5A-1170	60mm Binder Course	1d	28-Jul-11	28-Jul-11	211d
1A-24-5A-1180	35mm Surface Course - Main Carriageway and Boundary	1d	29-Jul-11	02-Aug-11	211d
1A-24-5A-1190	Parapets, Guard rails	8d	26-Jul-11	08-Aug-11	193d
1A-24-5A-1210	Installation of traffic light control	0d	02-Aug-11	02-Aug-11	212d
1A-24-5A-1220	Road Signs and Markings	1d	02-Aug-11	03-Aug-11	211d
1A-24-5A-1200	Landscaping	15d	08-Aug-11	29-Aug-11	193d
1A-24-5A-1230	Remove temporary traffic management	1d	29-Aug-11	30-Aug-11	193d
1A-24-5A-TEST-100	COMMISSIONING AND TESTING	5d	30-Aug-11	06-Sep-11	196d
1A-24-5A-TEST-110	Handover / Acceptance of Roadworks and Trackworks	5d	30-Aug-11	06-Sep-11	193d
1A-24-5A-TEST-110	Start remaining E&M works along track	0d	06-Sep-11	06-Sep-11	193d
1A-24-TTM-07-1000	TTM PHASE 7 (Ch. - 160-450)	116d	02-Sep-10	04-Mar-11	452d
1A-24-TTM-07-1020	TTM PHASE 7 - Road closed (Ch.200-450)	0d	02-Sep-10	03-Sep-10	447d
1A-24-TTM-07-1010	Old Ports Road Diversion Available / Forth Ports Licence	0d	02-Sep-10	03-Sep-10	447d
1A-24-TTM-07-1010	TTM PHASE 7 COMPLETE	0d	02-Sep-10	04-Mar-11	447d
1A-24B-7-1000	TEMPORARY AND PRELIMINARY WORKS	3d	03-Sep-10	08-Sep-10	450d
1A-24B-7-1010	Establish temporary traffic management	1d	03-Sep-10	06-Sep-10	447d
1A-24B-7-1020	Site clearance	1d	07-Sep-10	07-Sep-10	447d
1A-24B-7-1020	Investigate services / outfall positions / inlet-outlet positions / le...	1d	07-Sep-10	08-Sep-10	447d
1A-24B-7-1020	Lindsay Road Retaining Wall W1A - Phase 2	116d	06-Sep-10	04-Mar-11	452d
1A-24-7-W1A-110	Preliminary works & excavation	4d	08-Sep-10	14-Sep-10	450d
1A-24-7-W1A-120	Excavation	4d	08-Sep-10	14-Sep-10	447d
1A-24-7-W1A-130	RW Foundation	46d	15-Sep-10	18-Nov-10	509d
1A-24-7-W1A-140	RC Wall	15d	15-Sep-10	06-Oct-10	447d
1A-24-7-W1A-150	Coping	25d	30-Sep-10	04-Nov-10	447d
1A-24-7-W1A-160	RW Finishing Works and Backfilling	8d	08-Nov-10	18-Nov-10	504d
1A-24-7-W1A-170	Waterproofing	69d	12-Nov-10	04-Mar-11	452d
1A-24-7-W1A-180	Drainage	9d	12-Nov-10	25-Nov-10	447d
1A-24-7-W1A-190	Drainage	8d	19-Nov-10	02-Dec-10	447d

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Legend: █ Actual Work █ Remaining Work █ Critical Remaining Work ◆ Milestone ▶ Summary

Date: 12-Sep-10
Revision: Revision 01 (100912)
Checked: SCSM:HE
Approved: BSC

Project Carlisle - Airport to Haymarket
(Revision 01 100912)

EDINBURGH TRAM NETWORK

BILFINGER BERGER SIEMENS CAF
Civil

13-Sep-10

Activity ID	Activity Name	Original Start Duration	Finish	Total Float	2011	2012	2013
					Aug	Sep	Oct
1A-247-W1A-180	Brickwork	13d 25-Nov-10	15-Dec-10	486d			
1A-247-W1A-170	Stone drainage trench	13d 26-Nov-10	16-Dec-10	447d			
1A-247-W1A-180	Backfill and compact (incl. demolition of exist. RW)	46d 06-Dec-10	22-Feb-11	447d			
1A-247-W1A-200	Vehicle Parapets	8d 22-Feb-11	04-Mar-11	447d			
1A-247-W1A-210	LINDSAY ROAD RW/WIA COMPLETE	0d	04-Mar-11	447d			
Ocean Terminal to Port of Leith							
137d 03-Sep-10	LINDSAY ROAD RW/WIA COMPLETE	0d	29-Mar-11	434d			
137d 03-Sep-10	TOWER PLACE BRIDGE (S17) STRUCTURE COMPLETE	0d	29-Mar-11	434d			
Tower Place Bridge (S17)							
1A-1-S17-1000	TOWER PLACE BRIDGE (S17) STRUCTURE COMPLETE	0d	16-Feb-11	315d			
Procurement							
1A-1-S17-1020	Precast ramp units	60d 03-Sep-10	25-Nov-10	433d			
1A-1-S17-1030	Ducting	30d 20-Sep-10	29-Oct-10	313d			
Works to East Abutment							
1A-1-S17-1140	Demolition of existing abutment structure	5d 03-Sep-10	09-Sep-10	566d			
1A-1-S17-1200	Construct formwork to ballast walls	2d 03-Sep-10	06-Sep-10	321d			
1A-1-S17-1210	Pour concrete to ballast walls	2d 07-Sep-10	09-Sep-10	561d			
Works to West Abutment							
1A-1-S17-1350	Cut Back existing capping beam and sheet piling	4d 07-Sep-10	10-Sep-10	565d			
1A-1-S17-1360	Demolition of existing abutment structure	1d 07-Sep-10	07-Sep-10	560d			
1A-1-S17-1410	Construct formwork to ballast walls	3d 06-Sep-10	10-Sep-10	560d			
1A-1-S17-1420	Pour concrete to ballast walls	2d 08-Sep-10	09-Sep-10	560d			
Demolition of South cope and deck							
1A-1-S17-1480	Remove existing deck section by robolition	10d 09-Sep-10	16-Sep-10	313d			
South footway works							
1A-1-S17-1630	Install service ducting to south footway	5d 01-Nov-10	05-Nov-10	313d			
1A-1-S17-1640	Kerbing	2d 01-Nov-10	02-Nov-10	313d			
1A-1-S17-1650	Install in-fill concrete	2d 03-Nov-10	04-Nov-10	313d			
1A-1-S17-1660	Divert services back to South footpath (by others)	1d 05-Nov-10	05-Nov-10	313d			
Concrete works to South Deck section							
1A-1-S17-1550	Install formwork to deck slab extension	44d 17-Sep-10	17-Nov-10	315d			
1A-1-S17-1550	Install reinforcement to deck slab	19d 24-Sep-10	20-Oct-10	313d			
1A-1-S17-1570	Pour concrete to deck slab	16d 01-Oct-10	22-Oct-10	313d			
1A-1-S17-1580	Install formwork for deck cope	16d 05-Oct-10	26-Oct-10	313d			
1A-1-S17-1590	Pour concrete to deck cope	15d 07-Oct-10	27-Oct-10	313d			
1A-1-S17-1610	Strip formwork to underside of deck section (allowing for require...	20d 21-Oct-10	17-Nov-10	315d			
1A-1-S17-1600	Install pedestrian/cycleway barrier to cope	2d 28-Oct-10	29-Oct-10	313d			
1A-1-S17-1620	Waterproofing to deck concrete	2d 28-Oct-10	29-Oct-10	313d			
Pontoon							
1A-1-S17-1820	Pontoon	103d 03-Sep-10	09-Feb-11	315d			
North verge works							
1A-1-S17-1760	Install service ducting to North verge	16d 28-Jan-11	16-Feb-11	315d			
1A-1-S17-1800	Install in-fill concrete	1d 09-Feb-11	09-Feb-11	313d			
1A-1-S17-1810	Install ducting suspended from underside of soffit	5d 10-Feb-11	16-Feb-11	313d			
Demolition of North cope and deck							
1A-1-S17-1670	Move pontoons to North side of Bridge	17d 28-Oct-10	19-Nov-10	313d			
1A-1-S17-1680	Cut and remove existing parapet cope by diamond wire sawing	7d 28-Oct-10	05-Nov-10	313d			
1A-1-S17-1690	Remove existing deck section by robolition	10d 09-Nov-10	19-Nov-10	313d			

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Approved: BSC

Checked: SCS/MHE

Revision: Revision 01 (100912)

Actual Work Remaining Work Milestone

Critical Remaining Work

Summary

Project Carlisle - Airport to Haymarket
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EDINBURGH TRAM NETWORK

BILFINGER BERGER SIEMENS CAF
Civil

13-Sep-10

Activity ID	Activity Name	Original Start	Original Finish	Total Float
Concrete works to North Deck section				
1A-1-S17-1700	Install formwork to deck slab extension	47d 22-Nov-10	09-Feb-11	313d
1A-1-S17-1710	Install reinforcement to deck slab	25d 22-Nov-10	10-Jan-11	313d
1A-1-S17-1720	Pour concrete to deck slab	20d 06-Dec-10	14-Jan-11	313d
1A-1-S17-1730	Install formwork for deck cope	16d 13-Dec-10	17-Jan-11	313d
1A-1-S17-1740	Pour concrete to deck cope	16d 15-Dec-10	18-Jan-11	313d
1A-1-S17-1750	Strip formwork to underside of deck section	14d 17-Dec-10	19-Jan-11	313d
1A-1-S17-1760	Strip cope formwork	23d 10-Jan-11	09-Feb-11	313d
1A-1-S17-1770	Waterproofing to deck concrete	2d 24-Jan-11	25-Jan-11	313d
1A-1-S17-1780	Install pedestrian/cycleway barrier to cope	2d 26-Jan-11	27-Jan-11	321d
South access ramps				
West ramp				
1A-1-S17-1830	Excavate area for south West ramp	66d 30-Sep-10	14-Jan-11	486d
1A-1-S17-1840	Blinding for precast units	3d 30-Sep-10*	04-Oct-10	465d
1A-1-S17-1850	Place precast ramp units	2d 05-Oct-10	06-Oct-10	465d
1A-1-S17-1860	Instlu ramp sections	2d 25-Nov-10	29-Nov-10	429d
1A-1-S17-1870	Bitumen paint to concrete	12d 01-Dec-10	16-Dec-10	429d
1A-1-S17-1880	Backfill paving area	2d 17-Dec-10	20-Dec-10	429d
1A-1-S17-1890	Install paving to footway	3d 21-Dec-10	23-Dec-10	429d
1A-1-S17-1900	Install pedestrian/cycleway barrier	4d 24-Dec-10	12-Jan-11	429d
1A-1-S17-1910	WEST RAMP COMPLETE	2d 13-Jan-11	14-Jan-11	429d
East ramp				
1A-1-S17-1920	Excavate area for South East ramp	32d 17-Jan-11	01-Mar-11	454d
1A-1-S17-1930	Excavate area for retaining wall	3d 17-Jan-11	19-Jan-11	429d
1A-1-S17-1940	Construct retaining wall	2d 20-Jan-11	21-Jan-11	429d
1A-1-S17-1950	Blinding for units	10d 24-Jan-11	04-Feb-11	429d
1A-1-S17-1960	Place precast ramp units	2d 07-Feb-11	08-Feb-11	429d
1A-1-S17-1970	Bitumen paint to concrete	2d 08-Feb-11	10-Feb-11	429d
1A-1-S17-1980	Install trieff kerbs	2d 11-Feb-11	14-Feb-11	429d
1A-1-S17-1990	Install Aco channel	3d 15-Feb-11	17-Feb-11	429d
1A-1-S17-2000	Install deterrent paving	2d 18-Feb-11	21-Feb-11	429d
1A-1-S17-2010	Install pedestrian/cycleway barrier	2d 22-Feb-11	23-Feb-11	429d
1A-1-S17-2020	Install paving to footway	2d 24-Feb-11	25-Feb-11	429d
1A-1-S17-2030	EAST RAMP COMPLETE	2d 28-Feb-11	01-Mar-11	429d
Pumping house retaining wall				
1A-1-S17-2040	Works TBC	0d	01-Mar-11	448d
1A-1-S17-2050	PUMPING HOUSE RW COMPLETE	20d 02-Mar-11	28-Mar-11	434d
Road & Track works				
1A-1-1020	Plane/excavate existing road surface (Tower Bridge)	20d 02-Mar-11	29-Mar-11	429d
1A-1-1030	Remove existing deck waterproofing	19d 17-Feb-11	15-Mar-11	316d
1A-1-1040	New waterproofing and sand carpet	4d 17-Feb-11	22-Feb-11	313d
1A-1-1050	Surfacing to carriageway	3d 23-Feb-11	25-Feb-11	313d
1A-1-1060	Road markings	3d 26-Feb-11	02-Mar-11	313d
1A-1-1070	Road markings	5d 03-Mar-11	09-Mar-11	313d
1A-1-1080	Road markings	4d 10-Mar-11	15-Mar-11	313d
SECTION 2 HAYMARKET CORRIDOR				
02A Haymarket Corridor				
E & M installations				
1A-1-1090	11-Apr-12; SECTION 2 HAYMARKET CORRIDOR	392d 03-Sep-10	11-Apr-12	179d
1A-1-1100	11-Apr-12; 02A Haymarket Corridor	392d 03-Sep-10	11-Apr-12	179d
1A-1-1110	11-Apr-12; E & M installations	163d 28-Jun-11	11-Apr-12	179d

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Actual Work Remaining Work Critical Remaining Work Milestone

12-Sep-10 Revision 01 (100912) SCS/MHE BSC Approved

Project Carlisle - Airport to Haymarket
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EDINBURGH TRAM NETWORK



13-Sep-10

Civil

Activity ID	Activity Name	Original Start Duration	Finish	Total Float
2A-13-OHLE-40	Access for visual inspection for E&M wayside installation HAY - ...	0d 28-Jun-11	402d	
2A-13-ELEC-40	Access visual inspection to cable pits for cable laying HAY - ROJ	0d 28-Jun-11	402d	
2A-13-OHLE-41	Access for E&M wayside installation HAY - ROJ	0d 28-Jul-11	239d	
2A-13-ELEC-41	Access to cable pits for cable laying HAY - ROJ	0d 28-Jul-11	221d	
2A-13-SIGN-40	Installation of SIG-interlocking cubicle HAY Yards	15d 28-Jul-11	234d	
2A-13/14-OHLE-50	Installation of poles and building fixings -11 (13 1234 - 20 0566)	4d 28-Jul-11	204d	
2A-13/14-OHLE-60	Overhead Catenary Line -11 (13 1234 - 20 0566 + 20 0249 - 20...	11d 03-Aug-11	204d	
2A-13-SIGN-80	Installation of SIG equipment on HAY Yards	20d 11-Aug-11	234d	
2A-13-SIGN-80	Commissioning of SIG-interlocking cubicle HAY Yards	5d 08-Sep-11	234d	
2A-12/13-ELEC-60	Install Electrical Cables HAY - MUS	14d 21-Mar-12	49d	
2A-12/13/14-TELC-60	Install Fibre Optic Cables SHP - HAY - MUS	11d 21-Mar-12	52d	
2A-12/13-SGNW-60	Install Signalling Wayside Equipment HAY - MUS	14d 21-Mar-12	49d	
Haymarket (inc.) to Roseburn Junction (inc.)		307d 09-Sep-10	297d	
Haymarket Station Viaduct (S19)		137d 02-Sep-10	238d	
2A-13-S19-60	Superstructure	62d 03-Sep-10	183d	
2A-13-S19-80	Finishes	15d 01-Dec-10	183d	
2A-13-S19-90(3)	Crew Relief Facility	60d 22-Dec-10	238d	
Trackwork (1135m)		243d 02-Sep-10	387d	
Network Rail Submissions & Approval		205d 03-Sep-10	207d	
2A-13-TRCK-12	Ducting and drainage (WPP)	20d 03-Sep-10	166d	
2A-13-TRCK-10	OLE Foundation Construction v1 (WPP)	20d 24-Sep-10	166d	
2A-13-TRCK-11	OLE Construction (WPP)	20d 24-Sep-10	166d	
2A-13-TRCK-13	Installation of Track Slab (WPP)	20d 14-Oct-10	166d	
2A-13-TRCK-14	OLE Poles and Cabling (WPP)	20d 09-Jun-11	205d	
Construction		232d 20-Sep-10	362d	
2A-13-TRCK-30	Bulk Excavation - Sub Base	16d 20-Sep-10*	172d	
2A-13-TRCK-50	Drainage	16d 22-Oct-10	166d	
2A-13-TRCK-50(3)	OLE Foundations & Ducts	14d 12-Nov-10	166d	
2A-13-TRCK-40	Concrete Track Slab	23d 03-Dec-10	166d	
2A-13A-TRCK-70	Track Laying 1	18d 10-Feb-11	166d	
2A-13-SIGN-70	point machine mechanical set up	30d 10-Feb-11	449d	
2A-13-SIGN-80	wayside preparation for loops(17) and boxes(12)	23d 21-Feb-11	449d	
2A-13B-TRCK-70	Track Laying 2	10d 09-Mar-11	166d	
2A-13C-TRCK-70	Track Laying 3	14d 18-Apr-11	166d	
2A-13-TRCK-80	Track Finishes	38d 10-May-11	166d	
2A-13-TRCK-80(3)	Concrete Channel Drain	18d 04-Jul-11	166d	
2A-13-TRCK-81	Fencing	23d 28-Jul-11	166d	
Road Works		61d 10-Jan-11	317d	
2A-13C-ROAD-80(3)	Haymarket Yards	62d 10-Jan-11	249d	
2A-13B-INCS-60	Installation of traffic light control - Junction 90	7d 09-Mar-11	320d	
2A-13B-INCS-70	Installation of traffic light control - Junction 91	7d 18-Mar-11	320d	
Haymarket Terrace Substation		249d 03-Sep-10	322d	
2A-13-SUBS-110	wayleave granted (substation area)	0d	306d	
2A-13-SUBS-120	meter issue for power supply clarified	0d	306d	
2A-13-SUBS-90	Civil Engineering and Building Works	65d 22-Dec-10	183d	
2A-13-SUBS-30	Access for visual inspection for E&M Substation installation (02...	0d 07-Mar-11	186d	

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Legend:
█ Actual Work
█ Remaining Work
◆ Critical Remaining Work
◆ Milestone

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Project Carlisle - Airport to Haymarket
(Revision 01 100912)

EDINBURGH TRAM NETWORK

BILFINGER BERGER SIEMENS CAF
Civil

13-Sep-10

Activity ID	Activity Name	Original Start	Finish	Total Float
2A-13-SUBS-100	cable duct for Power Infeed	5d 07-Mar-11	14-Mar-11	191d
2A-13-SUBS-130	installation HV cable	30d 14-Mar-11	25-Apr-11	191d
2A-13-SUBS-31	Access for E&M Substation installation (02A Haymarket Terrace)	0d 06-Apr-11		196d
2A-13-SUBS-40	Power Infeed from Public Net available inc HV cable	0d 26-Apr-11		191d
2A-13-SUBS-45	Install HV Power Supply and LV Power Equipment	15d 25-May-11	26-May-11	191d
2A-13-SUBS-50	Energisation Scottish Power	0d 09-Jun-11	16-Jun-11	381d
2A-13-SUBS-55	Install Telecom and Scada	15d 16-Jun-11	07-Jul-11	191d
2A-13-SUBS-60	Installation of TPS Equipment	30d 07-Jul-11	19-Aug-11	191d
2A-13-SUBS-65	Testing and Commissioning	14d 19-Aug-11	08-Sep-11	191d
Haymarket Station Tram Stop				
2A-13-TRMS-20	wayleave issued	17d 03-Sep-10	26-May-11	394d
2A-13-TRMS-30	Civil Engineering and Building Works	0d 03-Sep-10	31-Sep-10	315d
2A-13-TRMS-40	Access for visual inspection for E&M Tram Stop installation (02A Haymarket Station)	65d 01-Dec-10	15-Mar-11	243d
2A-13-TRMS-50	Deliver and Install Shelter	0d 24-Jan-11		498d
2A-13-TRMS-60	Access for E&M Tram Stop installation (02A Haymarket Station)	10d 09-Feb-11	22-Feb-11	243d
2A-13-TRMS-70	Deliver and Install cubicle	0d 23-Feb-11		288d
2A-13-TRMS-80	Install LV Power Supply and LV Power Equipment	10d 23-Feb-11	08-Mar-11	243d
2A-13-TRMS-90	Install Telecom Equipment	25d 09-Mar-11	12-Apr-11	263d
2A-13-TRMS-100	Install Station Control Equipment + AFC Equipment	20d 13-Apr-11	12-May-11	268d
2A-13-TRMS-110	Package Test Tramstop	25d 13-Apr-11	19-May-11	263d
2A-13-TRMS-120	Landscaping	5d 20-May-11	26-May-11	263d
SECTION 05 ROSEBURN JUNCTION TO GOGAR				
2A-13-LAND-100(3)	Landscaping to Section 2A	64d 31-Aug-11	29-Nov-11	189d
05A Roseburn Junction (exc.) to Balgreen Road (inc.)		65d 31-Aug-11	29-Nov-11	166d
SECTION 05 ROSEBURN JUNCTION TO GOGAR				
05A Roseburn Junction (exc.) to Balgreen Road (inc.)		443d 03-Sep-10	21-Jun-12	126d
MUDFA works transferred to INFRACO				
5A-BT-D-02(3)	BT Russell Road Ret Wall	87d 16-Mar-11	19-Jul-11	398d
5A-BT-D-03(3)	BT Russell Road Ret Wall	30d 16-Mar-11	27-Apr-11	43d
5A-SGN-D-02(3)	Gas Russell Road Ret Wall	30d 16-Mar-11	27-Apr-11	43d
5A-SP-D-01(3)	Electric Russell Road Ret Wall	30d 16-Mar-11	27-Apr-11	43d
5A-BT-D-01(3)	BT Russell Road Ret Wall	30d 16-Mar-11	27-Apr-11	43d
5A-SP-D-02(3)	Electric Balgreen Road	20d 22-Jun-11	19-Jul-11	391d
E & M Installations				
5A-11-OHLE-30	Access for visual inspection for E&M wayside installation MUS - ...	99d 03-Feb-12	21-Jun-12	129d
5A-11-ELEC-30	Access for visual inspection to cable pits for cable laying MUS - ...	0d 03-Feb-12		222d
5A-12-ELEC-30	Access for visual inspection to cable pits for cable laying ROJ - ...	0d 20-Feb-12		211d
5A-12-OHLE-30	Access for visual inspection for E&M wayside installation ROJ - ...	0d 20-Feb-12		211d
5A-11-ELEC-60	Install Electrical Cables MUS - BAL	11d 06-Mar-12	20-Mar-12	63d
5A-11-SGNW-60	Install Signalling Wayside Equipment MUS - BAL	11d 06-Mar-12	20-Mar-12	63d
5A-1011-OHLE-50	Installation of poles and building fixings -13 (51 0770 - 52 0754)	13d 06-Mar-12	22-Mar-12	15d
5A-11-OHLE-31	Access for E&M wayside installation MUS - BAL	0d 06-Mar-12		11d
5A-11-ELEC-31	Access to cable pits for cable laying MUS - BAL	0d 06-Mar-12		62d
5A-1112/13-TELC-60	Install Fibre Optic Cables HAY - MUS - BAL	12d 21-Mar-12	09-Apr-12	51d
5A-1112/13-OHLE-50	Installation of poles and building fixings -12 (20 0457 - 51 0966)	13d 21-Mar-12	10-Apr-12	0d
5A-12-ELEC-31	Access to cable pits for cable laying ROJ - MUS	0d 21-Mar-12		49d
5A-12-OHLE-31	Access for E&M wayside installation ROJ - MUS	0d 21-Mar-12		0d

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Legend: █ Actual Work █ Critical Remaining Work █ Remaining Work ◆ Milestone

Date: 12-Sep-10
Revision 01 (100912)
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Project Carlisle - Airport to Haymarket
(Revision 01 100912)

EDINBURGH
TRAM NETWORK

BILFINGER BERGER SIEMENS CAF
Civil

13-Sep-10

Activity ID	Activity Name	Original Duration	Finish	Total Float
5A-10/11-OHLE-60	Overhead Catenary Line -13 (51 0770 - 52 0754)	26d 23-Mar-12	30-Apr-12	15d
5A-11/12/13-OHLE-60	Overhead Catenary Line -12 (20 0457 - 51 0966)	30d 10-Apr-12	23-May-12	0d
5A-11/12/13-OHLE-70	Testing & Commissioning	20d 23-May-12	21-Jun-12	0d
Roseburn Junction (exc) to Murrayfield Stadium (inc.)		413d 03-Sep-10	10-May-12	158d
Design		0d 03-Sep-10	03-Sep-10	-19d
SA-12-W18-10	Issue Construction Drawings W18	0d	03-Sep-10	-19d
Russell Road Underbridge (S20)		279d 03-Sep-10	20-Oct-11	33d
Network Rail Form C Submission & Approval		279d 03-Sep-10	20-Oct-11	33d
5A-12-S20-11(3)	Permanent Piling Working Platform (Form C)	11d 03-Sep-10	17-Sep-10	20d
5A-12-S20-16(3)	OLE Poles and Cabling (WPP)	36d 03-Sep-10	26-Oct-10	324d
5A-12-S20-17(3)	Crane Working Platform (Form C)	11d 03-Sep-10	17-Sep-10	20d
5A-12-S20-18(3)	Soil Nailing v2 (Form C)	11d 03-Sep-10	17-Sep-10	20d
5A-12-S20-10(3)	Permanent Piling v1 (WPP)	3d 15-Sep-10	17-Sep-10	20d
5A-12-S20-12(3)	Protection of Gas Main v1 (WPP)	3d 15-Sep-10	17-Sep-10	20d
5A-12-S20-18(3)	S20 Construction (WPP)	3d 15-Sep-10	17-Sep-10	20d
5A-12-S20-20(3)	Soil Nailing v2 (WPP)	3d 15-Sep-10	17-Sep-10	20d
5A-12-S20-14(3)	Ducting and drainage (WPP)	36d 21-Jun-11	15-Aug-11	0d
5A-12-S20-13(3)	OLE Construction (WPP)	36d 02-Aug-11	23-Sep-11	0d
5A-12-S20-15(3)	Installation of Track Slab (WPP)	36d 29-Aug-11	20-Oct-11	0d
Construction		185d 11-Oct-10	14-Jul-11	62d
5A-12-S20-40	Excavation and piling	60d 11-Oct-10	17-Jan-11	20d
5A-12-S20-50	Bases	30d 18-Jan-11	28-Feb-11	20d
5A-12-S20-51	Abutments and Wing Walls	45d 15-Feb-11	18-Apr-11	20d
5A-12-S20-60	Deck	50d 12-Apr-11	23-Jun-11	77d
5A-12-S20-80	Bridge Finishes	60d 19-Apr-11	14-Jul-11	20d
Russell Road Retaining Walls (W3 and W4)		296d 03-Sep-10	16-Nov-11	144d
Network Rail Submissions & Approval		10d 03-Sep-10	16-Sep-10	69d
5A-12-W4-10(3)	Slope stability for Units 1 to 10 (CAT III)	10d 03-Sep-10	16-Sep-10	43d
5A-12-W4-13(3)	TW to retain Royal Mail Bldg (CAT III)	10d 03-Sep-10	16-Sep-10	43d
5A-12-W4-14(3)	Bored piling working platform to Units 1 to 10 (Form C)	10d 03-Sep-10	16-Sep-10	43d
5A-12-W4-18(3)	TW to construct pilecaps for Units 1 to 10 (In House)	10d 03-Sep-10	16-Sep-10	43d
5A-12-W4-15(3)	Slope stability for Units 23 to 29 (CAT III)	10d 03-Sep-10	16-Sep-10	69d
5A-12-W4-16(3)	Bored piling working platform to Units 23 to 29 (Form C)	10d 03-Sep-10	16-Sep-10	69d
5A-12-W4-21(3)	TW to construct pilecaps for Units 21 to 29 (In House)	10d 03-Sep-10	16-Sep-10	69d
5A-12-W4-11(3)	Open cut excav & sheet piling installation to Units 1 to 10 (WPP)	10d 03-Sep-10	16-Sep-10	43d
5A-12-W4-17(3)	Installation of bored piling to Units 1 to 10 (WPP)	10d 03-Sep-10	16-Sep-10	43d
5A-12-W4-19(3)	Construction of pilecap & walls Units 1 to 10 (WPP)	10d 03-Sep-10	16-Sep-10	43d
5A-12-W4-12(3)	Open cut excav & sheet piling installation to Units 21 to 29 (WPP)	10d 03-Sep-10	16-Sep-10	69d
5A-12-W4-20(3)	Installation of bored piling to Units 21 to 29 (WPP)	10d 03-Sep-10	16-Sep-10	69d
5A-12-W4-22(3)	Construction of pilecap & walls Units 21 to 29 (WPP)	10d 03-Sep-10	16-Sep-10	69d
Haymarket Depot Access Road		140d 03-May-11	16-Nov-11	144d
5A-12-W4-54(3)10	Temporary Realignment	10d 03-May-11	16-May-11	43d
5A-12-W4-54(3)20	Permanent Realignment	20d 20-Oct-11	16-Nov-11	141d
Construction		296d 03-Sep-10	15-Nov-11	145d
5A-12-W4-53(3)	Retaining Wall W4B & C	205d 03-Sep-10	06-Jul-11	26d
5A-12-W4-50(3)	Retaining Wall W4A (enabling works)	10d 03-Sep-10	16-Sep-10	58d

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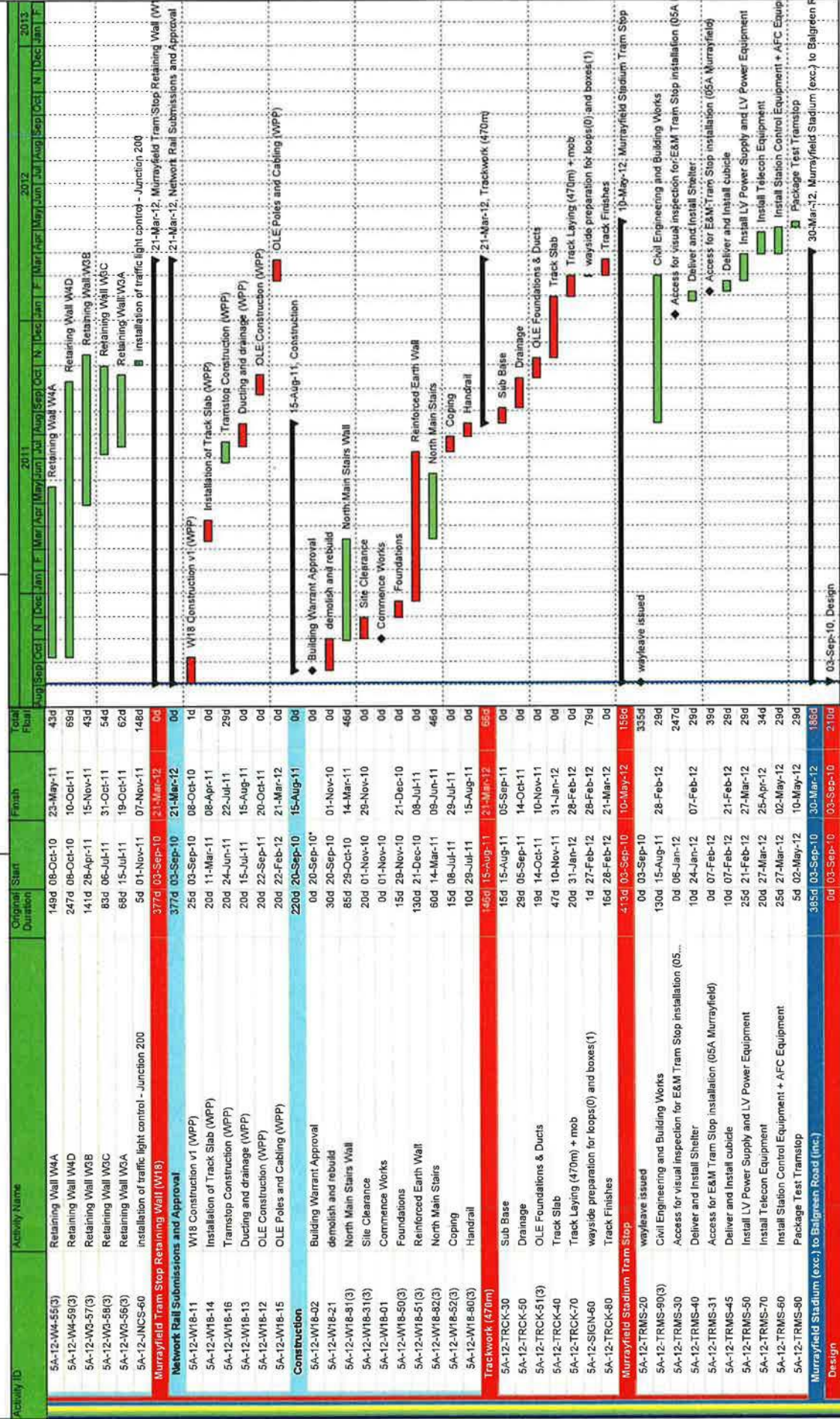
Actual Work Remaining Work Critical Remaining Work Milestone Summary

Project Carlisle - Airport to Haymarket
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EDINBURGH
TRAM NETWORK

BILFINGER BERGER SIEMENS CAF
Civil

13-Sep-10



Activity ID	Activity Name	Original Duration	Start	Finish	Total Plant
5A-11-S21B-10(3)	Issue Construction Drawings 21B	0d	03-Sep-10	03-Sep-10	36d
5A-11-S21A-10(3)	Issue Construction Drawings S21A RC Portal Bridge	0d	03-Sep-10	03-Sep-10	35d
5A-11-S21A-20(3)	Issue Construction Drawings S21A Steel Composite Bridge	0d	03-Sep-10	03-Sep-10	25d
5A-11-S21A-30(3)	Issue Construction Drawings S21A RE Structure S501	0d	03-Sep-10	03-Sep-10	210d
5A-11-S21A-40(3)	Issue Construction Drawings S21A RE Structure S503	0d	03-Sep-10	03-Sep-10	210d
5A-11-S21A-50(3)	Issue Construction Drawings S21A RE Structure S505	0d	03-Sep-10	03-Sep-10	190d
Roseburn Street Viaduct (S21A)					
		36d	03-Sep-10	29-Feb-12	416
Network Rail Submissions & approval					
5A-11-S21A-15(3)	S504 Construction (WPP)	362d	03-Sep-10	29-Feb-12	0d
5A-11-S21A-16(3)	S504 Piling Working Platform (Form C)	40d	03-Sep-10	29-Oct-10	25d
5A-11-S21A-13(3)	S502 Piling Working Platform (Form C)	40d	16-Sep-10	11-Nov-10	26d
5A-11-S21A-12(3)	S502 Construction (WPP)	20d	14-Oct-10	11-Nov-10	26d
5A-11-S21A-18(3)	S504 Bridge Beam Working Crane Platform (Form C)	40d	24-Jun-11	21-Mar-11	25d
5A-11-S21A-17(3)	S504 Bridge Beam Installation (WPP)	20d	21-Feb-11	21-Mar-11	25d
5A-11-S21A-21(3)	S505 Sheet Piling Temp Works (Form C)	40d	25-Apr-11	22-Jun-11	36d
5A-11-S21A-19(3)	S505 Construction (WPP)	20d	24-May-11	22-Jun-11	36d
5A-11-S21A-11(3)	S501 Construction (WPP)	20d	08-Jun-11	06-Jul-11	26d
5A-11-S21A-14(3)	S503 Construction (WPP)	20d	08-Jun-11	06-Jul-11	26d
5A-11-S21A-22(3)	OLE Construction (WPP)	20d	11-Aug-11	07-Sep-11	11d
5A-11-S21A-23(3)	Ducting and drainage (WPP)	20d	08-Sep-11	05-Oct-11	11d
5A-11-S21A-24(3)	Installation of Track Slab (WPP)	20d	20-Oct-11	16-Nov-11	11d
5A-11-S21A-25(3)	OLE Poles and Cabling (WPP)	20d	01-Feb-12	29-Feb-12	0d
Construction					
5A-11-S21A-70(3)	Completion of Murrayfield Stadium Accommodation Works (by ...)	256d	31-Oct-10	17-Nov-11	144d
5A-11-S21A-70(3)	Structure S504	0d	31-Oct-10*	31-Oct-10*	69d
5A-11-S21A-71(3)	Structure S502	180d	19-Nov-10	05-Oct-11	26d
5A-11-S21A-64(3)	Structure S505	120d	03-Dec-10	27-Jul-11	26d
5A-11-S21A-62(3)	Structure S501	80d	13-Jul-11	03-Nov-11	36d
5A-11-S21A-83(3)	Structure S503	80d	27-Jul-11	17-Nov-11	26d
5A-11-INCS-60	Installation of traffic light control - Junction 201	4d	06-Oct-11	12-Oct-11	167d
Murrayfield Retaining Walls (S21B)					
		289d	03-Sep-10	05-Oct-11	116
Network Rail Submissions & Approval					
5A-11-S21B-12(3)	Installation of sheet piles (WPP)	20d	03-Sep-10	30-Sep-10	16d
5A-11-S21B-13(3)	Installation of sheet piles (design) (Form C)	30d	03-Sep-10	14-Oct-10	6d
5A-11-S21B-14(3)	Construction of steep green slope section (WPP)	20d	14-Feb-11	11-Mar-11	9d
5A-11-S21B-17(3)	Installation of Lower Ballast (WPP)	20d	08-Jul-11	05-Aug-11	11d
5A-11-S21B-15(3)	OLE Construction (WPP)	20d	11-Aug-11	07-Sep-11	11d
5A-11-S21B-16(3)	Ducting and drainage (WPP)	20d	08-Sep-11	05-Oct-11	11d
Construction					
5A-11-S21B-51(3)	Sheet Piling, Ground Anchors, Bulk Excavation	195d	07-Nov-10	24-Aug-11	9d
5A-11-S21B-31	Site Clearance	22d	07-Nov-10	03-Apr-11	1d
5A-11-S21B-32	Demolition	20d	21-Feb-11	18-Mar-11	9d
5A-11-S21B-51	Foundations	15d	07-Mar-11	19-Mar-11	9d
5A-11-S21B-52	Reinforced Earth Wall	74d	04-Apr-11	19-Jul-11	9d
5A-11-S21B-53	Coping	15d	20-Jul-11	10-Aug-11	9d
5A-11-S21B-30	Handrail	10d	11-Aug-11	24-Aug-11*	9d

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Actual Work

Remaining Work

Critical Remaining Work

Summary

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
Murrayfield Stadium Underpass (S21C)					
Construction					
5A-11-S21C-31	Site Clearance	130d	04-Feb-11	10-Aug-11	9d
5A-11-S21C-32	Temporary Works - Demolition	10d	04-Feb-11	17-Feb-11	9d
5A-11-S21C-32(3)	Additional Sheet Piling	20d	18-Feb-11	17-Mar-11	9d
5A-11-S21C-33	Earthworks	10d	15-Apr-11	29-Apr-11	9d
5A-11-S21C-31	Base	10d	03-May-11	16-May-11	9d
5A-11-S21C-52	Walls	20d	17-May-11	14-Jun-11	9d
5A-11-S21C-61	Roof	20d	15-Jun-11	12-Jul-11	9d
5A-11-S21C-62	Parapet Walls	15d	06-Jul-11	26-Jul-11	9d
5A-11-S21C-80	Finishes	10d	27-Jul-11	10-Aug-11	9d
Network Rail Submissions & Approval					
5A-11-S21C-25(3)	Network Rail Form C Submission & Approval	114d	02-Sep-10	24-Feb-11	9d
5A-11-S21C-11(3)	Crane Working Platform (Form C)	25d	03-Sep-10	07-Oct-10	68d
5A-11-S21C-13(3)	Soil Nailing Working Platform (Form C)	25d	03-Sep-10	07-Oct-10	78d
5A-11-S21C-10(3)	Construction v2 (WPP)	20d	03-Dec-10	13-Jan-11	98d
5A-11-S21C-12(3)	Soil Nailing v2 (WPP)	20d	28-Jan-11	24-Feb-11	9d
Murrayfield Retaining Walls (S21D)					
Network Rail Form C Submission & Approvals					
5A-11-S21D-10(3)	Network Rail Form C West end Piling Platform Submission & Approval	351d	03-Sep-10	13-Feb-12	1935d
5A-11-S21D-11(3)	Network Rail Form C West End Piling Submission & Approval	40d	03-Sep-10*	28-Oct-10	153d
5A-11-S21D-12(3)	Network Rail Form C toe Piling Platform Submission & Approval	40d	03-Sep-10*	28-Oct-10	68d
5A-11-S21D-13(3)	Network Rail Form C Toe Sheet Piling Submission & Approval	40d	03-Sep-10*	28-Oct-10	68d
5A-11-S21D-15(3)	Installation of sheet piling to western end (WoL) (WPP)	20d	03-Sep-10	30-Sep-10	63d
5A-11-S21D-14(3)	Construction of steep green slope section (WPP)	20d	23-Feb-11	22-Mar-11	28d
5A-11-S21D-16(3)	Construction of mod block wall to western end (WoL) (WPP)	20d	01-Jun-11	28-Jun-11	341d
5A-11-S21D-13(3)10	Installation of Lower Ballast (WPP)	20d	08-Jul-11	05-Aug-11	11d
5A-11-S21D-17(3)	OLE Construction (WPP)	20d	11-Aug-11	07-Sep-11	11d
5A-11-S21D-18(3)	Ducting and drainage (WPP)	20d	08-Sep-11	05-Oct-11	11d
5A-11-S21D-13(3)20	OLE Poles and Cabling (WPP)	20d	17-Jan-12	13-Feb-12	15d
Construction					
5A-11-S21D-30(3)	Site Clearance / Testing / Design Check	164d	26-Nov-10	03-Aug-11	286d
5A-11-S21D-31(3)	Sheet Piling	13d	26-Nov-10	15-Dec-10	63d
5A-11-S21D-52(3)	Bulk Excavation	10d	16-Dec-10	12-Jan-11	63d
5A-11-S21D-42(3)10	Green Slope	29d	13-Jan-11	12-Apr-11	28d
5A-11-S21D-80	Parapet	67d	13-Apr-11	19-Jul-11	28d
Water of Leith Bridge (S21E)					
Network Rail Form C Submission & Approval					
5A-11-S21E-13(3)	Mobile crane working platform to construct bridge (Form C)	241d	03-Sep-10	26-Aug-11	330d
5A-11-S21E-14(3)	Installation of sheet piling to centre pier (WPP)	145d	03-Sep-10	11-Apr-11	12d
5A-11-S21E-15(3)	Installation of bored piling to centre pier (WPP)	5d	03-Sep-10	09-Sep-10	16d
5A-11-S21E-16(3)	Construction of centre pier (WPP)	5d	03-Sep-10	09-Sep-10	16d
5A-11-S21E-11(3)	Sheet piling working platform to centre pier (Form C)	5d	03-Sep-10	09-Sep-10	16d
5A-11-S21E-12(3)	Bored piling working platform to centre pier (Form C)	5d	03-Sep-10	09-Sep-10	16d
5A-11-S21E-17(3)	Construction of abutments (WPP)	5d	02-Dec-10	08-Dec-10	64d
5A-11-S21E-18(3)	Construction of deck (WPP)	20d	15-Mar-11	11-Apr-11	11d

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Actual Work Remaining Work Critical Remaining Work Summary

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Project Carlisle - Airport to Haymarket
(Revision 01 100912)

EDINBURGH TRAM NETWORK

BILFINGER BERGER SIEMENS CAF
Civil

13-Sep-10

Activity ID	Activity Name	Original Start Duration	Finish	Total Float
5A-11-S21E-19(3)	Steel Work Carried out by Maybe Construction	20d 15-Mar-11	11-Apr-11	11d
Enabling Works				
20d 03-Sep-10	30-Sep-10	16d		
5A-11-S21E-35(3)	Sewer Enabling Works	20d 03-Sep-10	30-Sep-10	16d
East Abutment				
190d 22-Oct-10	04-Aug-11	366d		
5A-11-S21E-45(3)	Formation to East Abutment (Murrayfield)	48d 22-Oct-10	12-Jan-11	63d
5A-11-S21E-46(3)	Bankseat	28d 13-Jan-11	16-Feb-11	34d
5A-11-S21E-47(3)	Phase 2	11d 20-Jul-11	04-Aug-11	61d
Centre Pier				
136d 01-Oct-10	26-Apr-11	166		
5A-11-S21E-51	Leaf Pier	136d 01-Oct-10	26-Apr-11	166
West Abutment				
159d 19-Nov-10	19-Jul-11	357d		
5A-11-S21E-52	Formation to West Abutment (Baird Drive)	89d 19-Nov-10	07-Apr-11	11d
5A-11-S21E-53	Bankseat	17d 08-Apr-11	04-May-11	11d
5A-11-S21E-63	Phase 2	26d 14-Jun-11	19-Jul-11	352d
Superstructure				
60d 05-May-11	26-Aug-11	11d		
5A-11-S21E-60	Bridge Deck & Finishes	80d 05-May-11	26-Aug-11	11d
Baird Drive Retaining Walls (WR)				
351d 03-Sep-10	13-Feb-12	178d		
Network Rail Submissions & Approvals				
351d 03-Sep-10	13-Feb-12	178d		
5A-11-WB-10(3)	Slope stability for steep green slope section (Form C)	10d 03-Sep-10	16-Sep-10	66d
5A-11-WB-11(3)	Sheet piling to eastern end (WoL) (Form C)	40d 03-Sep-10	28-Oct-10	11d
5A-11-WB-12(3)	Sheet piling working platform to eastern end (WoL) (Form C)	40d 03-Sep-10	28-Oct-10	11d
5A-11-WB-25(3)160	Site Setup (WPP)	10d 03-Sep-10	16-Sep-10	66d
5A-11-WB-13(3)	Sheet piling to western end (Balgreen) (Form C)	40d 17-Sep-10	11-Nov-10	437d
5A-11-WB-14(3)	Sheet piling working platform to western end (Balgreen) (Form C)	40d 17-Sep-10	11-Nov-10	437d
5A-11-WB-16(3)	Installation of sheet piling to eastern end (WoL) (WPP)	20d 01-Oct-10	28-Oct-10	11d
5A-11-WB-18(3)	Installation of sheet piling to western end (Balgreen) (WPP)	20d 15-Oct-10	11-Nov-10	437d
5A-11-WB-15(3)	Construction of steep green slope section (WPP)	20d 14-Nov-10	22-Dec-10	40d
5A-11-WB-19(3)	Construction of mod block wall to western end (Balgreen) (WPP)	20d 16-Apr-11	17-May-11	40d
5A-11-WB-17(3)	Construction of mod block wall to eastern end (WoL) (WPP)	20d 21-Apr-11	20-May-11	32d
5A-11-WB-20(3)	Construction of NWR Access Road (WPP)	20d 08-Jul-11	05-Aug-11	11d
5A-11-WB-21(3)	Installation of Lower Ballast (WPP)	20d 08-Jul-11	05-Aug-11	11d
5A-11-WB-22(3)	OLE Construction (WPP)	20d 11-Aug-11	07-Sep-11	11d
5A-11-WB-24(3)	Ducting and drainage (WPP)	20d 08-Sep-11	05-Oct-11	11d
5A-11-WB-23(3)	OLE Poles and Cabling (WPP)	20d 17-Jan-12	13-Feb-12	15d
Construction				
201d 20-Sep-10	15-Jul-11	40d		
5A-11-WB-51(3)	Bulk Excavation	35d 20-Sep-10	05-Nov-10	86d
5A-11-WB-52	Starter Layer	25d 05-Oct-10	08-Nov-10	86d
5A-11-WB-50	Green Slope	57d 27-Jan-11	15-Apr-11	40d
5A-11-WB-53	Parapet	10d 04-Jul-11	15-Jul-11	40d
Balgreen Road Bridge (S22A)				
254d 12-Oct-10	21-Oct-11	250d		
Network Rail Submissions & Approvals				
175d 12-Oct-10	01-Jul-11	64d		
5A-11-S22A-12(3)	Bored piling working platform to both abutments (Form C)	40d 12-Oct-10	07-Dec-10	60d
5A-11-S22A-10(3)	Sheet piling to west abutment (Form C)	40d 15-Oct-10	10-Dec-10	40d
5A-11-S22A-11(3)	Sheet piling working platform to west abutment (Form C)	40d 15-Oct-10	10-Dec-10	40d
5A-11-S22A-19(3)	Construction of bridge (WPP)	20d 15-Oct-10	11-Nov-10	60d
5A-11-S22A-27(3)	Mobilise	5d 29-Oct-10	04-Nov-10	40d
5A-11-S22A-16(3)	Installation of bored piling to both abutments (WPP)	20d 09-Nov-10	07-Dec-10	60d

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Approved: BSC

Checked: SCS/MHE

Revision: Revision 01 (100912)

Legend: Actual Work (Green), Remaining Work (Blue), Critical Remaining Work (Red), Milestone (Diamond)

Activity ID	Activity Name	Original Start Duration	Finish	Total Float
5A-11-S22A-15(3)	Installation of sheet piling to west abutment (WPP)	20d 12-Nov-10	10-Dec-10	40d
5A-11-S22A-17(3)	Construction of mud block wall to west abutment (WB) (WPP)	20d 03-Feb-11	02-Mar-11	82d
5A-11-S22A-13(3)	Mobile crane working platform to place pc beams (Form C)	40d 06-May-11	01-Jul-11	64d
5A-11-S22A-14(3)	Edge parapet cantilever formwork (WPP)	20d 06-Jun-11	01-Jul-11	64d
5A-11-S22A-16(3)	Placing of pc beams (WPP)	20d 06-Jun-11	01-Jul-11	64d
East Abutment				
5A-11-S22A-130(3)	Sheet Piling & Excavation	17d 06-Dec-10	11-Jan-11	437d
5A-11-S22A-160(3)	Bored Piling / Excavation / Testing	28d 12-Jan-11	18-Feb-11	437d
5A-11-S22A-180(3)	Columns	10d 21-Feb-11	04-Mar-11	437d
5A-11-S22A-190(3)	Reinforced Earth Wall-Backfilling	9d 07-Mar-11	17-Mar-11	437d
5A-11-S22A-220(3)	Access Platform Ret Walls & Reinforced Earth	12d 09-Jun-11	24-Jun-11	40d
5A-11-S22A-200(3)	Pile Caps	15d 04-Jul-11	22-Jul-11	64d
West Abutment				
5A-11-S22A-210(3)	Sheet Piling & Excavation	132d 17-Jan-11	22-Jul-11	64d
5A-11-S22A-240(3)	Bored Piling / Excavation / Testing	17d 17-Jan-11	08-Feb-11	40d
5A-11-S22A-260(3)	Columns	26d 09-Feb-11	16-Mar-11	40d
5A-11-S22A-280(3)	Reinforced Earth Wall-Backfilling	10d 17-Mar-11	30-Mar-11	40d
5A-11-S22A-380(3)	Access Platform retaining Wall & Reinforced Earth	12d 31-Mar-11	15-Apr-11	40d
5A-11-S22A-390(3)	Pile Caps	12d 16-Jun-11	01-Jul-11	40d
5A-11-S22A-290(3)	Bridge Deck	15d 04-Jul-11	22-Jul-11	64d
5A-11-S22A-290(3)	Bridge Deck	64d 25-Jul-11	21-Oct-11	64d
5A-11-S22A-290(3)	Bridge Deck	64d 25-Jul-11	21-Oct-11	64d
Network Rail Access Bridge (S22B)				
Network Rail Submissions & Approval				
5A-11-S22B-10(3)	King post wall to east abutment (Form C)	200d 03-Sep-10	29-Jun-11	2436d
5A-11-S22B-11(3)	King post piling working platform to east abutment (Form C)	160d 03-Sep-10	03-May-11	40d
5A-11-S22B-12(3)	Sheet piling to west abutment (Form C)	30d 03-Sep-10*	14-Oct-10	40d
5A-11-S22B-13(3)	Sheet piling working platform to west abutment (Form C)	30d 03-Sep-10*	14-Oct-10	40d
5A-11-S22B-16(3)	Installation of king post wall to east abutment (WPP)	30d 03-Sep-10	14-Oct-10	40d
5A-11-S22B-17(3)	Installation of sheet piling to west abutment (WPP)	30d 03-Sep-10	14-Oct-10	40d
5A-11-S22B-20(3)	Construction of bridge (WPP)	30d 03-Sep-10	14-Oct-10	40d
5A-11-S22B-14(3)	Mobile crane working platform to remove extg bridge (Form C)	40d 31-Jan-11	25-Mar-11	40d
5A-11-S22B-18(3)	Demolition of existing bridge (WPP)	20d 28-Feb-11	25-Mar-11	40d
5A-11-S22B-15(3)	Mobile crane working platform to place pc beams (Form C)	40d 07-Mar-11	03-May-11	40d
5A-11-S22B-19(3)	Placing of pc beams (WPP)	20d 04-Apr-11	03-May-11	40d
Construction				
5A-11-S22B-10(3)	Sheet Piling	155d 05-Nov-10	29-Jun-11	2436d
5A-11-S22B-20(3)	Demolish Existing Bridge Deck / New Cill Beams	40d 05-Nov-10	14-Jan-11	40d
5A-11-S22B-30(3)	New Bridge Deck & Parapets	25d 18-Apr-11	24-May-11	40d
5A-11-S22B-40(3)	Parapets & Finishes	10d 25-May-11	08-Jun-11	40d
5A-11-JNCS-70(3)	Installation of traffic light control - Junction 202	11d 09-Jun-11	23-Jun-11	240d
Balgreen Road Retaining Wall - W9				
5A-11-W9-110(3)	Foundations	37d 24-Mar-11	17-May-11	82d
5A-11-W9-115(3)	Reinforced Earth Wall	5d 24-Mar-11	30-Mar-11	82d
5A-11-W9-120(3)	Coping	17d 31-Mar-11	25-Apr-11	82d
5A-11-W9-125(3)	Handrail	10d 26-Apr-11	10-May-11	82d
5A-11-W9-125(3)	Handrail	5d 11-May-11	17-May-11	82d

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Actual Work Remaining Work Critical Remaining Work Milestone

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Project Carlisle - Airport to Haymarket
(Revision 01 100912)

EDINBURGH TRAM NETWORK

BILFINGER BERGER SIEMENS CAF
Civil

13-Sep-10

Activity ID	Activity Name	Original Start Duration	Finish	Total Float
Trackwork (1006m)				
5A-11-TRCK-30	Prepare Formation & Lower Ballast	144d 29-Aug-11	30-Mar-12	186d
5A-11-TRCK-50	OLE Foundations	20d 29-Sep-11	28-Sep-11	11d
5A-11-TRCK-60	Drainage & ducts	30d 27-Oct-11	26-Oct-11	11d
5A-11-TRCK-40	Upper Ballast	20d 09-Dec-11	08-Dec-11	11d
5A-11-TRCK-45	Track Slab	20d 09-Dec-11	19-Jan-12	11d
5A-11-TRCK-70	Tracklaying (1006m)	27d 20-Jan-12	27-Feb-12	11d
5A-11-SIGN-60	wayside preparation for loops(0) and boxes(4)	2d 24-Feb-12	27-Feb-12	206d
5A-11-TRCK-80	Top Ballast	5d 28-Feb-12	05-Mar-12	11d
5A-11-TRCK-81	Fencing & Finishing	19d 06-Mar-12	30-Mar-12	56d
Balgreen Road Tram Stop				
5A-11-TRMS-20	wayleave issued	305d 03-Sep-10	01-Dec-11	301d
5A-11-TRMS-90	Civil Engineering and Builders Work	65d 22-Jun-11	21-Sep-11	170d
5A-11-TRMS-30	Access for visual inspection for E&M Tram Stop installation (05...	0d 02-Aug-11		400d
5A-11-TRMS-40	Deliver and Install Shelter	10d 18-Aug-11	31-Aug-11	170d
5A-11-TRMS-31	Access for E&M Tram Stop installation (05A Balgreen Road)	0d 01-Sep-11		214d
5A-11-TRMS-45	Deliver and Install cubicle	10d 01-Sep-11	14-Sep-11	170d
5A-11-TRMS-50	Install LV Power Supply and LV Power Equipment	25d 15-Sep-11	19-Oct-11	170d
5A-11-TRMS-70	Install Telecom Equipment	20d 20-Oct-11	16-Nov-11	175d
5A-11-TRMS-60	Install Station Control Equipment + AFC Equipment	25d 20-Oct-11	23-Nov-11	170d
5A-11-TRMS-80	Package Test Translop	5d 24-Nov-11	01-Dec-11	170d
Jenners Depository Sub Station				
5A-11-SUBS-120	wayleave granted (substation area)	226d 03-Sep-10	08-Aug-11	245d
5A-11-SUBS-110	meter issue for power supply clarified	0d	03-Sep-10	271d
5A-11-SUBS-90	Civil Engineering and Building Works	65d 17-Nov-10	02-Mar-11	199d
5A-11-SUBS-30	Access for visual inspection for E&M Substation installation (05...	0d 01-Feb-11		204d
5B-11-SUBS-100	cable duct for Power Infeed	5d 01-Feb-11	09-Feb-11	200d
5A-11-SUBS-130	installation HV cable	30d 08-Feb-11	22-Mar-11	200d
5A-11-SUBS-31	Access for E&M Substation installation (05A Jenners Depository)	0d 03-Mar-11		204d
5A-11-SUBS-40	Power Infeed from Public Net available inc HV cable	0d 22-Mar-11		200d
5B-10-SUBS-45	Install HV Power Supply and Equipment (SP)	15d 30-Mar-11	20-Apr-11	194d
5A-11-SUBS-50	Install LV Power Supply and LV Power Equipment	15d 20-Apr-11	13-May-11	214d
5B-11-SUBS-55	Energyisation Scottish Power	0d 06-May-11		404d
5A-11-SUBS-70	Install Telecom and Scada	15d 13-May-11	06-Jun-11	214d
5A-11-SUBS-60	Installation of TPS Equipment	30d 06-Jun-11	18-Jul-11	214d
5A-11-SUBS-80	Testing and Commissioning	14d 18-Jul-11	08-Aug-11	214d
05B Balgreen Road (exc.) to Edinburgh Park Central (Inc.)				
5B-09-UTL-10(3)	MUDFA & Utilities Completions	376d 08-Sep-10	21-Mar-12	193d
5B-09-UTL-10(3)	Saughton Road North to Bankhead (South Gyle Access Sewer...	0d 01-Nov-10	01-Nov-10	54d
E & M Installations				
5B-10-ELEC-30	Access for visual inspection to cable pits for cable laying BAL - ...	205d 20-May-11	21-Mar-12	193d
5B-10-OHLE-30	Access for visual inspection for E&M wayside installation BAL - ...	0d 20-May-11		433d
5B-08-OHLE-30	Access for visual inspection for E&M wayside installation BNK - ...	0d 20-May-11		433d
5B-08-ELEC-30	Access for visual inspection to cable pits for cable laying BNK - ...	0d 24-May-11		429d
5B-09-10-OHLE-50	Installation of poles and building fixings -14 (52 0535 - 52 2032)	10d 22-Jun-11	05-Jul-11	429d
5B-10-ELEC-31	Access to cable pits for cable laying BAL - SGT	0d 22-Jun-11		249d

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Approved: BSC

Checked: SCS/MHE

Revision: Revision 01 (100912)

Actual Work: [Green Bar]

Remaining Work: [Red Bar]

Critical Remaining Work: [Red Arrow]

Milestone: [Diamond]

Summary: [Blue Arrow]

Activity ID	Activity Name	Original Start Duration	Finish	Total Float	2011	2012	2013
					Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb
5B-10-OHLE-31	Access for E&M wayside installation BAL - SGT	0d 22-Jun-11	226d				
5B-08-SIGN-40	Installation of SIG-interlocking cubicle EPS	15d 24-Jun-11	277d				
5B-08-ELEC-31	Access to cable pits for cable laying BNK - EPS	0d 24-Jun-11	260d				
5B-08-OHLE-31	Access for E&M wayside installation BNK - EPS	0d 24-Jun-11	247d				
5B-08-ELEC-30	Install Electrical Cables BNK - EPS	8d 24-Jun-11	273d				
5B-07-OHLE-30	Access for visual inspection for E&M wayside installation EPS - ...	0d 01-Jul-11	409d				
5B-07-ELEC-30	Access for visual inspection to cable pits for cable laying EPS - ...	0d 01-Jul-11	409d				
5B-09-10-OHLE-60	Overhead Catenary Line -14 (52 0535 - 52 2032)	28d 06-Jul-11	249d				
5B-08-SIGN-80	Installation of SIG equipment on crossover EPS	5d 08-Jul-11	277d				
5B-08-SIGN-80	Commissioning of SIG-interlocking cubicle EPS	5d 15-Jul-11	277d				
5B-07-ELEC-60	Install Electrical Cables EPS - EDP	7d 03-Aug-11	254d				
5B-07-OHLE-31	Access for E&M wayside installation EPS - EDP	0d 03-Aug-11	246d				
5B-07-ELEC-31	Access to cable pits for cable laying EPS - EDP	0d 03-Aug-11	253d				
5B-0708-TELC-60	Install Fibre Optic Cables BNK - EPS - EDP	8d 03-Aug-11	253d				
5B-07-SGNW-60	Install Signalling Wayside Equipment EPS - EDP	7d 03-Aug-11	246d				
5B-0708-OHLE-60	Installation of poles and building fixings -16 (52 3059- 52 4464)	9d 03-Aug-11	228d				
5B-08-SGNW-60	Install Signalling Wayside Equipment BNK - EPS	8d 12-Aug-11	246d				
5B-0708-OHLE-60	Overhead Catenary Line -16 (52 3059 - 52 4464 + 52 3621 - 52 3698)	24d 16-Aug-11	228d				
5B-09-ELEC-30	Access for visual inspection to cable pits for cable laying SGT - ...	0d 29-Sep-11	302d				
5B-09-OHLE-30	Access for visual inspection for E&M wayside installation SGT - ...	0d 29-Sep-11	302d				
5B-09-SGNW-60	Install Signalling Wayside Equipment SGT - BNK	10d 31-Oct-11	131d				
5B-09-ELEC-31	Access to cable pits for cable laying SGT - BNK	0d 31-Oct-11	131d				
5B-09-TELC-60	Install Fibre Optic Cables SGT - BNK - EPS	9d 31-Oct-11	133d				
5B-09-OHLE-31	Access for E&M wayside installation SGT - BNK	0d 31-Oct-11	120d				
5B-09-ELEC-60	Install Electrical Cables SGT - BNK	10d 31-Oct-11	131d				
5B-0910-TELC-60	Install Fibre Optic Cables BAL - SGT - BNK	12d 11-Nov-11	133d				
5B-10-SGNW-60	Install Signalling Wayside Equipment BAL - SGT	13d 14-Nov-11	131d				
5B-10-ELEC-60	Install Electrical Cables BAL - SGT	13d 14-Nov-11	131d				
5B-0809-OHLE-50	Installation of poles and building fixings -15 (52 1827 - 52 3273)	10d 22-Nov-11	120d				
5B-0809-OHLE-60	Overhead Catenary Line -15 (52 1827 - 52 3273)	24d 07-Dec-11	120d				
5B-1011-TELC-60	Install Fibre Optic Cables MUIS - BAL - SGT	12d 08-Mar-12	62d				
Balgreen Road (exc.) to Saughton Road North (inc.)		216d 03-Sep-10	392d				
Carrickknowe Bridge (S23)		179d 03-Sep-10	392d				
Carrick Knowe disruptive possessions		179d 03-Sep-10	392d				
Network Rail Submission & Approval		179d 03-Sep-10	392d				
5B-10-S23-10(3)	Steel Pedestrian Parapet WPP	20d 03-Sep-10	400d				
5B-10-S23-11(3)	OLE Poles and Cabling WPP	20d 03-May-11	210d				
North Abutment		28d 03-Sep-10	343d				
5B-10-S23-10(3)	Steel Pedestrian Parapet WPP	28d 03-Sep-10	399d				
5B-10-S23-55N(3)	Bearing Gallery	28d 03-Sep-10	396d				
5B-10-S23-76N	Wing Walls	24d 03-Sep-10	547d				
5B-10-S23-76N	Parapet Beams	24d 03-Sep-10	542d				
South Abutment		31d 03-Sep-10	414d				
5B-10-S23-76S	Wing Walls	17d 03-Sep-10	416d				
5B-10-S23-76S	Parapet Beams	17d 03-Sep-10	415d				
5B-10-S23-56S(3)	Abutment Wall	21d 03-Sep-10	401d				
5B-10-S23-56S(3)	Bearing Gallery	21d 03-Sep-10	399d				

Actual Work
Remaining Work
Critical Remaining Work
Milestone

Project Carlisle - Airport to Haymarket
(Revision 01 100912)

EDINBURGH TRAM NETWORK



13-Sep-10

Activity ID	Activity Name	Original Start Duration	Finish	Total Float
Superstructure				
Deck Finishes				
5B-10-S23-52	Waterproofing (inc. deck curing)	40d 03-Sep-10	28-Oct-10	403d
5B-10-S23-53	Walkway Construction	3d 03-Sep-10*	08-Sep-10	452d
5B-10-S23-50	Expansion Joints	12d 03-Sep-10*	21-Sep-10	349d
5B-10-S23-51	Parapet Rails	2d 09-Sep-10	10-Sep-10	426d
5B-10-S23-71	Run On Run Off Slabs	15d 04-Oct-10	22-Oct-10	399d
5B-10-S23-70	Backfill and cast slab south	8d 04-Oct-10	13-Oct-10	399d
5B-10-S23-70	Backfill and cast slab north	8d 13-Oct-10	22-Oct-10	396d
Tracklaying				
5B-10B-S23-94	Containment Slabs	44d 03-Sep-10*	03-Nov-10	396d
5B-10-S23-85	Drainage	20d 03-Sep-10*	30-Sep-10	412d
5B-10B-TRCK-70	Fix Rails	15d 22-Sep-10	12-Oct-10	412d
5B-10C-SIGN-600	wayside preparation for loops(0) and boxes(2)	8d 25-Oct-10	03-Nov-10	396d
5B-10C-SIGN-600	wayside preparation for loops(0) and boxes(2)	1d 03-Nov-10	03-Nov-10	396d
Trackwork (1890m)				
215d 03-Sep-10	21-Jul-11	288d		
Concrete Slab Track 590m				
205d 22-Sep-10	21-Jul-11	326d		
5B-10C-TRCK-30	Earthworks - Subbase	34d 22-Sep-10	08-Nov-10	326d
5B-10C-TRCK-40	OLE Foundations - Drainage - Ducts	24d 09-Nov-10	13-Dec-10	326d
5B-10C-TRCK-41(3)	Additional Drainage	21d 14-Dec-10	25-Jan-11	326d
5B-10C-TRCK-70	Track laying	10d 22-Jun-11	05-Jul-11	326d
5B-10C-SIGN-60	wayside preparation for loops(0) and boxes(3)	2d 04-Jul-11	05-Jul-11	336d
5B-10C-TRCK-80	Fencing & Finishes	12d 06-Jul-11	21-Jul-11	326d
Balasted Track 1160m				
194d 03-Sep-10	21-Jul-11	288d		
5B-10A-TRCK-30	Earthworks - Subbase	20d 03-Sep-10	30-Sep-10	170d
5B-10A-TRCK-31(3)	Additional Earthworks	10d 01-Oct-10	14-Oct-10	170d
5B-10A-TRCK-50	OLE Foundations - Drainage	23d 15-Oct-10	16-Nov-10	170d
5B-10A-TRCK-60	Additional Drainage	20d 17-Nov-10	15-Dec-10	170d
5B-10A-TRCK-40	Bottom Ballast - Ducts	23d 16-Dec-10	31-Jan-11	170d
5B-10A-TRCK-70	Track laying (1160m)	21d 26-Mar-11	26-Apr-11	170d
5B-10A-SIGN-60	wayside preparation for loops(0) and boxes(\$)	2d 25-Apr-11	26-Apr-11	323d
5B-10A-TRCK-76	Top Ballast	15d 27-Apr-11	18-May-11	170d
5B-10A-TRCK-80	Fencing & Trackside Finishes	23d 19-May-11	21-Jun-11	170d
Saughton Road North Tram Stop				
115d 03-Sep-10	28-Feb-11	455d		
5B-10-TRMS-20	wayleave issued	0d 03-Sep-10	06-Sep-10	295d
5B-10-TRMS-90	Civil Engineering and Building Works	65d 06-Sep-10*	06-Dec-10	284d
5B-10-TRMS-30	Access for visual inspection for E&M Tram Stop installation (05...	0d 14-Oct-10	12-Nov-10	568d
5B-10-TRMS-40	Deliver and Install Shelter	10d 01-Nov-10	12-Nov-10	284d
5B-10-TRMS-31	Access for E&M Tram Stop installation (05B Saughton Road No...	0d 15-Nov-10	26-Nov-10	360d
5B-10-TRMS-45	Deliver and install cubicle	10d 15-Nov-10	26-Nov-10	264d
5B-10-TRMS-50	Install LV Power Supply and LV Power Equipment	25d 29-Nov-10	17-Jan-11	324d
5B-10-TRMS-70	Install Telecom Equipment	20d 18-Jan-11	14-Feb-11	329d
5B-10-TRMS-60	Install Station Control Equipment + AFC Equipment	25d 18-Jan-11	21-Feb-11	324d
5B-10-TRMS-80	Package Test Tramstop	5d 22-Feb-11	28-Feb-11	324d
Saughton Road North (exc.) to Bankhead (inc.)				
375d 03-Sep-10	20-Mar-12	185d		
Bankhead Drive Substation				
165d 03-Sep-10	03-May-11	412d		
5B-09-SUBS-110	wayleave granted (substation area)	0d	03-Sep-10	276d
5B-09-SUBS-120	meter issue for power supply clarified	0d	03-Sep-10	291d

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Actual Work (Blue bar) Remaining Work (Green bar) Critical Remaining Work (Red bar) Milestone (Diamond)

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Activity ID	Activity Name	Original Start Duration	Finish	Total Float
5B-09-SUBS-30	Civil Engineering and Building Works	35d 11-Oct-10*	29-Nov-10	26d
5B-09-SUBS-30	Access for visual inspection for EAM Substation installation (05...	0d 29-Oct-10		276d
5B-09-SUBS-100	cable duct for Power Infeed	5d 29-Oct-10	04-Nov-10	261d
5B-09-SUBS-130	installation HV cable	25d 05-Nov-10	10-Dec-10	261d
5B-09-SUBS-31	Access for EAM Substation installation (05B Bankhead Drive)	0d 29-Nov-10		276d
5B-09-SUBS-40	Power Infeed from Public Net available inc HV cable	0d 13-Dec-10		261d
5B-09-SUBS-45	Install HV Power Supply and Equipment (SP)	15d 13-Dec-10	17-Jan-11	261d
5B-09-SUBS-50	Install LV Power Supply and LV Power Equipment	15d 17-Jan-11	07-Feb-11	281d
5B-09-SUBS-55	Enginisation Scottish Power	0d 31-Jan-11		471d
5B-09-SUBS-70	Install Telecom and Scada	15d 07-Feb-11	28-Feb-11	281d
5B-09-SUBS-60	Installation of TPS Equipment	30d 28-Feb-11	11-Apr-11	281d
5B-09-SUBS-80	Testing and Commissioning	14d 11-Apr-11	03-May-11	281d
Bankhead Tram Stop		376d 03-Sep-10	20-Mar-12	185d
5B-09-TRMS-20	wayleave issued	0d 03-Sep-10		335d
5B-09-TRMS-90	Civil Engineering and Building Works	65d 25-Sep-11	10-Jan-12	64d
5B-09-TRMS-30	Access for visual inspection for EAM Tram Stop installation (05...	0d 04-Nov-11		292d
5B-09-TRMS-40	Deliver and Install Shelter	10d 21-Nov-11	05-Dec-11	64d
5B-09-TRMS-31	Access for EAM Tram Stop installation (05B South Gyle)	0d 06-Dec-11		84d
5B-09-TRMS-45	Deliver and Install cubicle	10d 06-Dec-11	20-Dec-11	64d
5B-09-TRMS-50	Install LV Power Supply and LV Power Equipment	25d 20-Dec-11	07-Feb-12	64d
5B-09-TRMS-70	Install Telecom Equipment	20d 07-Feb-12	06-Mar-12	64d
5B-09-TRMS-60	Install Station Control Equipment + AFC Equipment	25d 07-Feb-12	13-Mar-12	64d
5B-09-TRMS-80	Package Test Tramstop	5d 13-Mar-12	20-Mar-12	64d
South Gyle Access Bridge (SAB)		228d 08-Sep-10	11-Aug-11	86d
Network Rail Submissions & Approval		137d 06-Sep-10	31-Mar-11	86d
5B-09-S26-11	Sheet piling working platform to toe of embankment (Form C)	25d 06-Sep-10	11-Oct-10	64d
5B-09-S26-12	Bored piling working platform to abutments (Form C)	25d 06-Sep-10	11-Oct-10	64d
5B-09-S26-13	Mobile crane working platform to place pc beams (Form C)	25d 06-Sep-10	11-Oct-10	64d
5B-09-S26-15	Sheet piling along toe of embankment (WPP)	20d 13-Sep-10	11-Oct-10	64d
5B-09-S26-16	Installation of sheet piling to toe of embankment (WPP)	20d 13-Sep-10	11-Oct-10	64d
5B-09-S26-17	Installation of bored piling to abutments (WPP)	20d 13-Sep-10	11-Oct-10	64d
5B-09-S26-18	Construction of abutments (WPP)	20d 13-Sep-10	11-Oct-10	64d
5B-09-S26-20	Construction of mod block wall to abutments (W11) (WPP)	20d 13-Sep-10	11-Oct-10	64d
5B-09-S26-14	Edge parapet cantilever formwork (WPP)	20d 03-Mar-11	31-Mar-11	86d
5B-09-S26-19	Placing of pc beams (WPP)	20d 03-Mar-11	31-Mar-11	86d
Construction		188d 31-Oct-10	11-Aug-11	56d
5B-09-S26-100	Completion of Sewer Diversion (by others)	0d 31-Oct-10*		94d
5B-09-S26-90	Substructure	112d 01-Nov-10	21-Apr-11	64d
5B-09-S26-91	Superstructure	76d 21-Apr-11	11-Aug-11	86d
Bankhead Retaining Wall (W11)		102d 01-Nov-10	08-Apr-11	300d
Construction		102d 01-Nov-10	08-Apr-11	300d
5B-09-W11-100	Retaining Wall Construction	99d 01-Nov-10	04-Apr-11	97d
5B-09-JNCS-60	Installation of traffic light control - Junction 202B-2	4d 04-Apr-11	08-Apr-11	286d
Trackwork (1260m)		113d 23-May-11	31-Oct-11	157d
5B-09-TRCK-30	Earthworks and Subbase	8d 23-May-11	03-Jun-11	64d

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Checked SCS/MHE Approved BSC

Actual Work Remaining Work Critical Remaining Work Milestone

Project Carlisle - Airport to Haymarket
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EDINBURGH TRAM NETWORK



13-Sep-10

Civil

Activity ID	Activity Name	Original Start Duration	Finish	Total Float
5B-08-TRCK-40(3)	Additional Earthworks	17d 03-Jun-11	28-Jun-11	64d
5B-08-TRCK-50	OLE Foundations - Drainage - Ducts	28d 03-Jun-11	08-Aug-11	64d
5B-08-TRCK-60(3)	Additional Drainage	25d 06-Aug-11	12-Sep-11	64d
5B-08-TRCK-70	Track laying (1260m) + mob	10d 12-Sep-11	26-Sep-11	64d
5B-08-SIGN-60	wayside preparation for loops(0) and boxes(6)	3d 21-Sep-11	26-Sep-11	176d
5B-08-TRCK-80	Fencing & Trackside Finishes	25d 26-Sep-11	31-Oct-11	120d
Bankhead (exc.) to Edinburgh Park Station (inc.)				
		285d 03-Sep-10	27-Oct-11	323d
Trackwork (790m)				
		199d 03-Sep-10	23-Jun-11	284d
5B-08-TRCK-30	Earthworks and Subbase	15d 03-Sep-10	23-Sep-10	192d
5B-08-TRCK-31(3)	Additional Earthworks	21d 24-Sep-10	22-Oct-10	192d
5B-08-TRCK-50	OLE Foundations - Drainage	32d 25-Oct-10	08-Dec-10	192d
5B-08-TRCK-51	Additional drainage	28d 08-Dec-10	01-Feb-11	192d
5B-08-TRCK-40	Ducts and Bottom Ballast	16d 02-Feb-11	23-Feb-11	192d
5B-08-TRCK-70	Track laying (790m)	20d 18-Apr-11	17-May-11	192d
5B-08-SIGN-60	wayside preparation for loops(0) and boxes(4)	2d 16-May-11	17-May-11	307d
5B-08-TRCK-76	Top Ballast [52 2917 - 52 3526]	10d 18-May-11	01-Jun-11	247d
5B-08-TRCK-80	Fencing and Trackside finishes	16d 02-Jun-11	23-Jun-11	247d
Edinburgh Park Station Tram Stop				
		285d 03-Sep-10	27-Oct-11	333d
5B-08-TRMS-20	wayleave issued	0d 03-Sep-10		335d
5B-08-SIG-80	Commissioning of SIG -interlocking cubicle	5d 04-May-11	10-May-11	192d
5B-08-TRMS-90	Civil Engineering and Builders Works	65d 18-May-11	18-Aug-11	330d
5B-07-JNGS-60	installation of traffic light control - Junction 203	4d 20-Jun-11	24-Jun-11	281d
5B-08-JNGS-60	installation of traffic light control - Junction 203A	4d 24-Jun-11	29-Jun-11	281d
5B-08-TRMS-30	Access for visual inspection for E&M Tram Stop installation (05...	0d 28-Jun-11		422d
5B-08-TRMS-40	Deliver and Install Shelter	10d 14-Jul-11	27-Jul-11	192d
5B-08-TRMS-31	Access for E&M Tram Stop installation (05B Edinburgh Park St...	0d 28-Jul-11		214d
5B-08-TRMS-45	Deliver and Install cubicle	10d 28-Jul-11	11-Aug-11	192d
5B-08-TRMS-50	Install LV Power Supply and LV Power Equipment	25d 12-Aug-11	15-Sep-11	192d
5B-08-TRMS-70	Install Telecom Equipment	20d 16-Sep-11	13-Oct-11	197d
5B-08-TRMS-60	Install Station Control Equipment + AFC Equipment	25d 16-Sep-11	20-Oct-11	192d
5B-08-TRMS-80	Package Test Tramstop	5d 21-Oct-11	27-Oct-11	192d
Edinburgh Park Station (exc.) to Edinburgh Park Central (inc.)				
		307d 03-Sep-10	29-Nov-11	307d
Edinburgh Park Central Tram Stop				
5B-07-TRMS-20	wayleave issued	0d 03-Sep-10		335d
5B-07-TRMS-90	Civil Engineering and Building Works	65d 31-May-11	30-Aug-11	176d
5B-07-TRMS-30	Access for visual inspection for E&M Tram Stop installation (05...	0d 01-Aug-11		406d
5B-07-TRMS-40	Deliver and Install Shelter	10d 17-Aug-11	30-Aug-11	176d
5B-07-TRMS-31	Access for E&M Tram Stop installation (05B Edinburgh Park)	0d 31-Aug-11		198d
5B-07-TRMS-45	Deliver and Install cubicle	10d 31-Aug-11	13-Sep-11	176d
5B-07-TRMS-50	Install LV Power Supply and LV Power Equipment	25d 14-Sep-11	18-Oct-11	176d
5B-07-TRMS-70	Install Telecom Equipment	20d 19-Oct-11	15-Nov-11	181d
5B-07-TRMS-60	Install Station Control Equipment + AFC Equipment	25d 19-Oct-11	22-Nov-11	176d
5B-07-TRMS-80	Package Test Tramstop	5d 23-Nov-11	29-Nov-11	176d
Trackwork (654m)				
		233d 03-Sep-10	16-Aug-11	283d
5B-07-TRCK-30	Earthworks+ Subbase	11d 03-Sep-10	17-Sep-10	176d
5B-07-TRCK-01(6)	Commence Works	0d 03-Sep-10*		176d

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Actual Work █ Critical Remaining Work █ Summary █
 Remaining Work █ Milestone ◆

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EDINBURGH
TRAM NETWORK



13-Sep-10

Activity ID	Activity Name	Original Start	Finish	Total Float
5B-07-TRCK-31(3)	Additional Earthworks	57d 20-Sep-10	08-Dec-10	176d
5B-07-TRCK-50	OLE Foundations - Drainage	19d 09-Dec-10	18-Jan-11	176d
5B-07-TRCK-51(3)	Additional Drainage	17d 19-Jan-11	10-Feb-11	176d
5B-07-TRCK-40	Track Formation - Ducts	16d 11-Feb-11	04-Mar-11	176d
5B-07-TRCK-70	Track laying (854m)	44d 10-May-11	11-Jul-11	176d
5B-07-SIGN-60	wayside preparation for loops(0) and boxes(4)	2d 08-Jul-11	11-Jul-11	402d
5B-07-TRCK-80	Track Finishes	15d 12-Jul-11	02-Aug-11	228d
5B-07-TRCK-81	Fencing	10d 03-Aug-11	16-Aug-11	251d
Edinburgh Park Station Bridge (S27)				
75d 18-Mar-11	11-Jul-11	185d		
Network Rail Submissions and Approval				
5B-07-S27-10	Installation of Rails	20d 18-Mar-11	14-Apr-11	132d
5B-07-S27-11	OLE Poles and Cabling	20d 14-Jun-11	11-Jul-11	184d
Superstructure				
30d 03-Sep-10	14-Oct-10	266d		
30d 03-Sep-10	14-Oct-10	266d		
410d 03-Sep-10	04-May-12	161d		
05C Edinburgh Park Central (exc.) to Gogarburn (inc.)				
MUDFA & Utilities Completions				
0d 03-Sep-10	03-Sep-10	120d		
5C-06-UTL-10(3)	Edinburgh Park Central to Gyle	0d	03-Sep-10*	120d
5C-03-UTL-10(3)	Gyle to Depot	0d	03-Sep-10*	120d
E & M Installations				
5C-02-OHLE-40	Access for visual inspection for E&M wayside installation DEH - GBN	285d 08-Mar-11	01-May-12	184d
5C-02-ELEC-40	Access for visual inspection to cable pits for cable laying DEH - GBN	0d 08-Mar-11	445d	
5C-02-ELEC-41	Access for visual inspection to cable pits for cable laying DEH - GBN	0d 08-Mar-11	445d	
5C-02-ELEC-70	Access for E&M wayside installation DEH - GBN	0d 07-Apr-11	255d	
5C-02-ELEC-40	Install Electrical Cables DEH - GBN	6d 07-Apr-11	282d	
5C-02-ELEC-31	Access to cable pits for cable laying DEH - GBN	0d 07-Apr-11	282d	
5C-02-ELEC-30	Access for visual inspection to cable pits for cable laying EDP - GYL	0d 10-Aug-11	338d	
5C-02-ELEC-30	Access for visual inspection for E&M wayside installation EDP - GYL	0d 10-Aug-11	338d	
5C-06-ELEC-31	Access to cable pits for cable laying EDP - GYL	0d 09-Sep-11	167d	
5C-06/07-TELC-60	Install Fibre Optic Cables EPS - EDP - GYL	8d 09-Sep-11*	20-Sep-11	182d
5C-06-SGNW-60	Install Signalling Wayside Equipment EDP - GYL	10d 09-Sep-11	22-Sep-11	180d
5C-06/07-OHLE-50	Installation of poles and building fixings -17 (52 4265 - 53 0590)	7d 09-Sep-11*	19-Sep-11	167d
5C-06-OHLE-31	Access for E&M wayside installation EDP - GYL	0d 09-Sep-11	148d	
5C-06-ELEC-60	Install Electrical Cables EDP - GYL	10d 09-Sep-11	22-Sep-11	180d
5C-06/07-OHLE-60	Overhead Catenary Line -17 (52 4265 - 53 0590)	16d 20-Sep-11	11-Oct-11	167d
5C-03-ELEC-30	Access for visual inspection to cable pits for cable laying GYL - DEP	0d 01-Feb-12	224d	
5C-03-OHLE-30	Access for visual inspection for E&M wayside installation GYL - DEP	0d 01-Feb-12	224d	
5C-01/03/06-TELC-60	Install Fibre Optic Cables EDP - GYL - DEH + DEP	15d 02-Mar-12	22-Mar-12	53d
5C-03-SGNW-60	Install Signalling Wayside Equipment GYL - DEH	9d 02-Mar-12	14-Mar-12	51d
5C-02/03/06-OHLE-50	Installation of poles and building fixings -18 (53 0456 - 53 1749)	12d 02-Mar-12	19-Mar-12	34d
5C-03-ELEC-31	Access to cable pits for cable laying GYL - DEH	0d 02-Mar-12	53d	
5C-03-OHLE-31	Access for E&M wayside installation GYL - DEH	0d 02-Mar-12	34d	
5C-03-ELEC-60	Install Electrical Cables GYL - DEH	9d 02-Mar-12	14-Mar-12	67d
5C-02-SGNW-70	Install Signalling Wayside Equipment DEH - GBN	8d 15-Mar-12	22-Mar-12	61d
5C-02/03/06-OHLE-60	Overhead Catenary Line -18 (53 0456 - 53 1749)	30d 20-Mar-12	01-May-12	34d
5C-02/03-TELC-60	Install Fibre Optic Cables GYL - DEH - GBN	8d 23-Mar-12	03-Apr-12	53d
Edinburgh Park (exc.) to Gyle Centre (inc.)				
341d 03-Sep-10	30-Jan-12	230d		
246d 04-Oct-10	30-Sep-11	163d		

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Actual Work █ Critical Remaining Work █ Summary █

Remaining Work █ Milestone ◆

12-Sep-10 Revision 01 (100912) Checked ICS/MHE Approved BSC

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
5C-06-TRCK-30	Earthworks and Subbase	20d	04-Oct-10	29-Oct-10	99d
5C-06-TRCK-25	Commence Works	0d	04-Oct-10*		99d
5C-06-TRCK-31(3)	Additional Earthworks	56d	01-Nov-10	01-Feb-11	99d
5C-06-TRCK-50	OLE Foundations - Drainage	30d	02-Feb-11	15-Mar-11	99d
5C-06-TRCK-60	Additional Drainage	40d	16-Mar-11	12-May-11	99d
5C-06-TRCK-40	Track Formation and Ducts	16d	13-May-11	06-Jun-11	99d
5C-06-TRCK-80	Road Crossings + mob (track laying activities only)	23d	07-Jun-11	07-Jul-11	99d
5C-06-JNCS-70	Installation of traffic light control - Junction 205	7d	29-Jun-11	06-Jul-11	234d
5C-06-TRCK-70	Track laying (760m)	20d	08-Jul-11	05-Aug-11	99d
5C-06-JNCS-60	Installation of traffic light control - Junction 204	6d	08-Jul-11	15-Jul-11	234d
5C-06-SIGN-60	wayside preparation for loops(?) and boxes(15)	9d	25-Jul-11	05-Aug-11	214d
5C-06-TRCK-80	Track Finishes	24d	08-Aug-11	09-Sep-11	148d
5C-06-TRCK-81	Fencing	16d	09-Sep-11	30-Sep-11	174d
Gyle Centre Tram Stop					
5C-06-TRMS-20	wayside issued	341d	03-Sep-10	30-Jun-12	230d
5C-06-TRMS-30	Civil Engineering and Building Works	65d	08-Aug-11	04-Nov-11	335d
5C-06-TRMS-40	Access for visual inspection for E&M Tram Stop installation (05-...	0d	15-Sep-11		328d
5C-06-TRMS-31	Deliver and Install Shelter	10d	03-Oct-11	14-Oct-11	99d
5C-06-TRMS-45	Access for E&M Tram Stop installation (05C Gyle)	0d	17-Oct-11		120d
5C-06-TRMS-50	Deliver and install cubicle	10d	17-Oct-11	28-Oct-11	99d
5C-06-TRMS-60	Install LV Power Supply and LV Power Equipment	25d	31-Oct-11	05-Dec-11	99d
5C-06-TRMS-70	Install Telecom Equipment	20d	06-Dec-11	16-Jan-12	104d
5C-06-TRMS-80	Install Station Control Equipment + AFC Equipment	25d	06-Dec-11	23-Jan-12	99d
5C-06-TRMS-80	Package Test Tramstop	5d	24-Jan-12	30-Jan-12	99d
Gyle Centre Tram Stop Retaining Wall (W16)					
5C-06-W16-11(2)	Temporary Works	80d	11-Oct-10	14-Feb-11	337d
5C-06-W16-110(3)	Commence Works	16d	11-Oct-10	01-Nov-10	103d
5C-06-W16-112(3)	Excavation	16d	02-Nov-10	23-Nov-10	103d
5C-06-W16-113(3)	Base Construction	24d	16-Nov-10	20-Dec-10	103d
5C-06-W16-114(3)	Wall Construction	24d	24-Nov-10	11-Jan-11	103d
5C-06-W16-115(3)	Drainage & Backfill	11d	12-Jan-11	26-Jan-11	105d
5C-06-W16-116(2)	Finishes	13d	27-Jan-11	14-Feb-11	334d
Gyle Centre (exc.) to Depot Stop (inc.)					
A8 Underpass (W28)		410d	03-Sep-10	04-May-12	181d
Phases 1 & 2		387d	03-Sep-10	31-Oct-11	254d
5C-03-W28-9(3)10	Deck Construction	76d	03-Sep-10	22-Dec-10	362d
5C-03-W28-9(3)20	North Portal	11d	03-Sep-10	17-Sep-10	83d
5C-03-W28-9(3)30	Finishes	17d	03-Sep-10	27-Sep-10	420d
Phase 4		67d	20-Sep-10	22-Dec-10	83d
5C-03-W28-9(3)10	Deck Construction	103d	03-Sep-10	06-Feb-11	468d
5C-03-W28-9(3)20	South Portal	30d	03-Sep-10	14-Oct-10	31d
5C-03-W28-9(3)30	Finishes	55d	01-Oct-10	17-Dec-10	491d
Phase 3		73d	15-Oct-10	09-Feb-11	31d
5C-03-W28-9(3)10	Deck Construction	101d	10-Feb-11	05-Jul-11	367d
5C-03-W28-9(3)	Temporary Works	78d	10-Feb-11	02-Jun-11	31d
5C-03-W28-9(3)20	Reinstate Retaining Wall	11d	17-Mar-11	31-Mar-11	427d
5C-03-W28-9(3)30	Reinstate Retaining Wall	6d	19-May-11	26-May-11	389d

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Approved: BSC

Checked: SCS/ME

Revision: Revision 01 (100912)

Actual Work: [Green Bar]

Remaining Work: [Blue Bar]

Critical Remaining Work: [Red Bar]

Milestone: [Diamond]

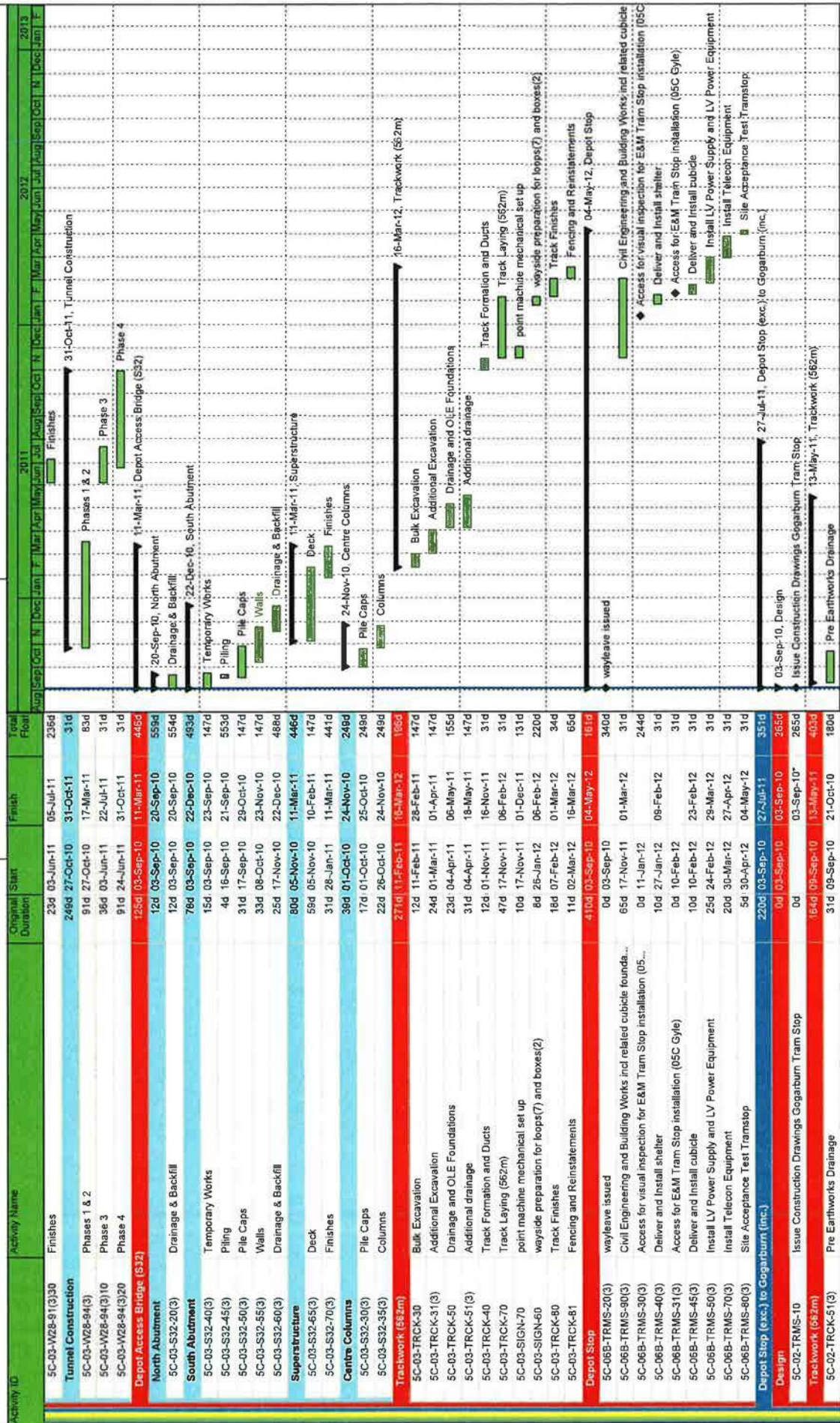
Summary: [Arrow]

Project Carlisle - Airport to Haymarket
(Revision 01 100912)

EDINBURGH
TRAM NETWORK

BILFINGER BERGER SIEMENS CAF
Civil

13-Sep-10



Date: 12-Sep-10
 Revision: Revision 01 (100912)
 Checked: SCS/MHE
 Approved: BSC
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 Summary

Activity ID	Activity Name	Original Start Duration	Finish	Total Float
5C-02-TRCK-30	Earthworks	12d 22-Oct-10	08-Nov-10	180d
5C-02-TRCK-50	Drainage	23d 09-Nov-10	10-Dec-10	180d
5C-02-TRCK-40	OLE Foundations & Ducts	12d 13-Dec-10	11-Jan-11	180d
5C-02-TRCK-91	Sub Base & Ballast	11d 12-Jan-11	28-Jan-11	180d
5C-02-TRCK-70	Track Laying (562m)	32d 27-Jan-11	11-Mar-11	180d
5C-02-SIGN-70	point machine mechanical set up	15d 27-Jan-11	16-Feb-11	332d
5C-02-SIGN-60	wayside preparation for loops(4) and boxes(1)	5d 07-Mar-11	11-Mar-11	441d
5C-02-TRCK-80	Track Finishes	18d 14-Mar-11	06-Apr-11	209d
5C-02-TRCK-81	Fencing and Reinstatements	25d 07-Apr-11	13-May-11	398d
Gogarburn Tram Stop				
5C-02-TRMS-20	wayleave issued	220d 03-Sep-10	27-Jul-11	351d
5C-02-TRMS-90	Civil Engineering and Building Works	0d 03-Sep-10	03-Sep-10	335d
5C-02-TRMS-30	Access for visual inspection for E&M Tram Stop installation (05...	65d 14-Feb-11	17-May-11	180d
5C-02-TRMS-40	Deliver and Install Shelter	0d 25-Mar-11	11-Jun-11	452d
5C-02-TRMS-31	Access for E&M Tram Stop installation (05C Gogarburn)	10d 11-Apr-11	25-Apr-11	220d
5C-02-TRMS-45	Deliver and install cubicle	0d 26-Apr-11	10-May-11	244d
5C-02-TRMS-50	Install LV Power Supply and LV Power Equipment	10d 26-Apr-11	10-May-11	220d
5C-02-TRMS-70	Install Telecom Equipment	25d 11-May-11	15-Jun-11	220d
5C-02-TRMS-60	Install Station Control Equipment + AFC Equipment	20d 16-Jun-11	13-Jul-11	230d
5C-02-TRMS-80	Package Test Tramstop	25d 16-Jun-11	20-Jul-11	220d
5C-02-TRMS-90		5d 21-Jul-11	17-Jul-11	220d
SECTION 06 GOGAR DEPOT				
06A Gogar Depot				
Depot				
Earthworks				
6A-01-TRCK-51(3)	Drainage	5d 03-Sep-10	09-Sep-10	560d
Trackwork (3492m)				
6A-01B-TRCK-70	Trackwork in Workshop	148d 03-Sep-10	15-Apr-11	422d
6A-01-SIGN-60	wayside preparation for loops(X) and boxes(X)	25d 15-Oct-10	18-Nov-10	184d
6A-01C-TRCK-70	Track Laying Finishing	17d 24-Mar-11	15-Apr-11	184d
Area 2 Preparation (North West)				
6A-012-TRCK-76(3)	Second Layer Ballast	30d 03-Sep-10	14-Oct-10	164d
6A-012-TRCK-95(3)	Handover to Track Contractor	5d 03-Sep-10	09-Sep-10	184d
6A-012-TRCK-96(3)	Trackwork	0d	09-Sep-10	184d
Area 3 Preparation (North East)				
6A-013-TRCK-76(3)10	Civils Preparation	135d 03-Sep-10	25-Mar-11	184d
6A-013-TRCK-95(3)10	Handover to Track Contractor	114d 05-Oct-10	25-Mar-11	184d
6A-013-TRCK-96(3)10	Trackwork	55d 04-Oct-10	20-Dec-10	222d
6A-013-TRCK-95(3)10	Handover to Track Contractor	0d	28-Jan-11	184d
6A-013-TRCK-96(3)10	Trackwork	40d 31-Jan-11	25-Mar-11	184d
Area 3A (Stabling East)				
6A-013-TRCK-75(3)	First Layer Ballast	65d 03-Sep-10	03-Dec-10	184d
6A-013-TRCK-76(3)	Second Layer Ballast	2d 03-Sep-10	06-Sep-10	232d
6A-013-TRCK-95(3)	Handover to Track Contractor	5d 07-Sep-10	13-Sep-10	232d
6A-013-TRCK-96(3)	Trackwork	0d	13-Sep-10	232d
6A-013-TRCK-95(3)	Handover to Track Contractor	10d 19-Nov-10	03-Dec-10	184d
Area 4 Preparation (East)				
6A-014-TRCK-52(3)	Drains	95d 03-Sep-10	28-Jan-11	164d
6A-014-TRCK-60(3)	Ducts	1d 03-Sep-10	03-Sep-10	233d
6A-014-TRCK-60(3)	Ducts	5d 06-Sep-10	10-Sep-10	233d

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Legend: Actual Work (Blue), Remaining Work (Green), Critical Remaining Work (Red), Milestone (Diamond)

Summary

Project Carlisle - Airport to Haymarket
(Revision 01 100912)

EDINBURGH TRAM NETWORK

BILFINGER BERGER SIEMENS CAF
Civil

13-Sep-10

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
6A-014-TRCK-74(3)	Cut Formation / Sub Ballast	1d	14-Sep-10	14-Sep-10	232d
6A-014-TRCK-75(3)	First Layer Ballast	4d	15-Sep-10	20-Sep-10	232d
6A-014-TRCK-76(3)	Second Layer Ballast	5d	21-Sep-10	27-Sep-10	232d
6A-014-TRCK-85(3)	Handover to Track Contractor	0d	0d	27-Sep-10	232d
6A-014-TRCK-86(3)	Trackwork	30d	06-Dec-10	28-Jan-11	184d
Depot Building					
6A-01-BLDS-65	Building Envelope	175d	03-Sep-10	24-May-11	385d
6A-01-BLDS-66	Fitting out and Finishes	5d	03-Sep-10	08-Sep-10	561d
6A-01-BLDS-71	E & M Workshop Equipment Installation	25d	03-Sep-10	07-Oct-10	259d
6A-01-BLDS-30	Access for visual inspection for E&M workshop equipment	110d	05-Nov-10	25-Apr-11	416d
6A-01-BLDS-72	Installation of workshop equipment	0d	05-Nov-10	05-Nov-10	552d
6A-01-BLDS-31	Access for E&M workshop equipment	90d	06-Dec-10	25-Apr-11	391d
Building Services					
6A-01-BLDS-70	Building Services Installation	80d	03-Sep-10	24-Dec-10	283d
6A-01-BLDS-80	Building Services Commissioning	15d	03-Sep-10	23-Sep-10	293d
6A-01-BLDS-81	Inspection and Handover	60d	01-Oct-10	24-Dec-10	293d
6A-01-BLDS-81	Inspection and Testing	20d	26-Apr-11	24-May-11	386d
Depot Substation					
6A-01-SUBS-30	Civil Engineering and Building Works	135d	03-Sep-10	25-Mar-11	436d
6A-01-SUBS-30	Access for visual inspection for E&M Substation installation (6A-01-SUBS-110)	15d	03-Sep-10	23-Sep-10	286d
6A-01-SUBS-110	way/leave granted (depot + Maybury area)	0d	03-Sep-10	03-Sep-10	261d
6A-01-SUBS-120	meter issue for power supply clarified	0d	03-Sep-10	03-Sep-10	281d
6A-01-SUBS-31	Access for E&M Substation installation (06A Depot)	0d	24-Sep-10	03-Sep-10	312d
6A-01-SUBS-130	Installation HV cable	20d	15-Oct-10	12-Nov-10	261d
6A-01-SUBS-40	Power Infeed from Public Net available inc HV cable	0d	12-Nov-10	12-Dec-10	261d
6A-01-SUBS-45	Install HV Power Supply and Equipment (SP)	20d	12-Nov-10	13-Dec-10	261d
6A-01-SUBS-50	Install Telecom and Scada	15d	06-Dec-10	10-Jan-11	431d
6A-01-SUBS-50	Install LV Power Supply and LV Power Equipment	10d	13-Dec-10	10-Jan-11	431d
6A-01-SUBS-60	Installation of TPS Equipment	45d	10-Jan-11	14-Mar-11	431d
6A-01-SUBS-55	Energisation Scottish Power	0d	10-Jan-11	10-Jan-11	486d
6A-01-SUBS-80	Testing and Commissioning	20d	28-Feb-11	28-Mar-11	431d
Access Roads					
6A-01-ROAD-90(3)	Carpark	120d	03-Sep-10	04-Mar-11	451d
6A-01-ROAD-91(3)	Hardstanding	6d	03-Sep-10	10-Sep-10	502d
6A-01-ROAD-94(3)	Access Road	40d	03-Sep-10	28-Oct-10	526d
6A-01-ROAD-95(3)	Complete Access Road & Finishes	22d	13-Sep-10	12-Oct-10	502d
6A-01-JNCS-50	Installation of traffic light control - Junction 208	30d	14-Jan-11	24-Feb-11	446d
E & M Installations					
6A-01-OHLE-50(3)	Installation of poles and building fixings (Depot)	122d	01-Dec-10	09-Jun-11	386d
6A-01-ELEC-40	Access for visual inspection to cable pits for cable laying (Depot)	32d	01-Dec-10	28-Jan-11	184d
6A-01-OHLE-40	Access for visual inspection for E&M Depot installation	0d	10-Dec-10	10-Dec-10	487d
6A-01-OHLE-60(3)	Overhead Catenary Line (Depot)	0d	16-Dec-10	16-Dec-10	493d
6A-01-SGNVL-70	Install Signalling Wayside Equipment (Depot)	76d	28-Jan-11	18-May-11	184d
6A-01-ELEC-41	Access to cable pits for cable laying (Depot)	12d	28-Jan-11	15-Feb-11	460d
6A-01-ELEC-70	Install Electrical Cables Depot	0d	28-Jan-11	28-Jan-11	423d
6A-01-ELEC-70	Install Electrical Cables Depot	25d	28-Jan-11	04-Mar-11	447d

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Actual Work Remaining Work Critical Remaining Work Milestone Summary

Project Carlisle - Airport to Haymarket
(Revision 01 100912)

EDINBURGH TRAM NETWORK



13-Sep-10

Activity ID	Activity Name	Original Start Duration	Finish	Total Float
7A-04-TRCK-140(3)	Reinforced Earth Embankment	44d 28-Jan-11	30-Mar-11	141d
7A-04-TRCK-80	Drainage	12d 31-Mar-11	15-Apr-11	141d
7A-04-TRCK-80	Ducting & OLE Foundations	11d 18-Apr-11	04-May-11	141d
7A-04-TRCK-140	Sub base & Ballast	10d 05-May-11	18-May-11	141d
7A-04-TRCK-100	Track Laying (400m)	18d 19-May-11	14-Jun-11	251d
7A-04-SIGN-70	wayside preparation for loops(0) and boxes(4)	2d 13-Jun-11	21-Jun-11	141d
7A-04-TRCK-86	Top Ballast	5d 15-Jun-11	21-Jun-11	357d
7A-04-TRCK-110	Fencing & Trackside Finishes	15d 22-Jun-11	12-Jul-11	357d
Gogarburn Bridge to Ingliston Tram Stop Ch 400 to 800		72d 03-Sep-10	14-Dec-10	499d
7A-04-TRCK-160	Pre Earthworks Drainage	4d 03-Sep-10	08-Sep-10	180d
7A-04-TRCK-30	Earthworks	1d 09-Sep-10	09-Sep-10	194d
7A-04-TRCK-51(3)	Drainage	1d 10-Sep-10	10-Sep-10	278d
7A-04-TRCK-50	OLE Foundations & ducts	1d 13-Sep-10	13-Sep-10	278d
7A-04-TRCK-40	Sub base & Ballast	10d 14-Sep-10	27-Sep-10	278d
7A-04-TRCK-70	Track Laying (1750m)	20d 28-Sep-10	25-Oct-10	278d
7A-04-SIGN-60	wayside preparation for loops(0) and boxes(8)	2d 22-Oct-10	25-Oct-10	403d
7A-04-TRCK-76	Top Ballast	20d 26-Oct-10	22-Nov-10	278d
7A-04-TRCK-80	Fencing & Trackside Finishes	15d 23-Nov-10	14-Dec-10	494d
Gogarburn Bridge to Ingliston Tram Stop Ch 800 to 1750		128d 03-Sep-10	16-Mar-11	443d
7A-04-TRCK-51(3)10	Drainage	15d 03-Sep-10	23-Sep-10	191d
7A-04-TRCK-51(3)20	Critical Nil Works	30d 03-Sep-10	14-Oct-10	182d
7A-04-TRCK-180	OLE Foundations & ducts	6d 24-Sep-10	01-Oct-10	181d
7A-04-TRCK-190	Sub base & Ballast	23d 15-Oct-10	16-Nov-10	182d
7A-04-TRCK-200	Track Laying	30d 17-Nov-10	12-Jan-11	182d
7A-04-SIGN-80	wayside preparation for loops(0) and boxes(8)	2d 11-Jan-11	12-Jan-11	357d
7A-04-TRCK-86	Top Ballast	20d 13-Jan-11	09-Feb-11	232d
7A-04-TRCK-170	Fencing & Trackside Finishes	25d 10-Feb-11	16-Mar-11	438d
Ingliston Park and Ride Tram Stop		176d 03-Sep-10	27-May-11	393d
7A-04-TRMS-20	wayleave issued	0d 03-Sep-10	03-Sep-10	335d
7A-04-TRMS-90	Civil Engineering and Building Works	65d 02-Dec-10	16-Mar-11	182d
7A-04-TRMS-30	Access for visual inspection for E&M Tram Stop installation (07...	0d 25-Jan-11	03-Sep-10	495d
7A-04-TRMS-40	Deliver and Install Shelter	10d 10-Feb-11	23-Feb-11	262d
7A-04-TRMS-31	Access for E&M Tram Stop installation (07A Ingliston Park+Ride)	0d 24-Feb-11	09-Mar-11	287d
7A-04-TRMS-45	Deliver and Install cubicle	10d 24-Feb-11	09-Mar-11	262d
7A-04-TRMS-50	Install LV Power Supply and LV Power Equipment	25d 10-Mar-11	13-Apr-11	262d
7A-04-TRMS-70	Install Telecom Equipment	20d 14-Apr-11	13-May-11	267d
7A-04-TRMS-60	Install Station Control Equipment + AFC Equipment	25d 14-Apr-11	20-May-11	262d
7A-04-TRMS-80	Package Test Tramstop	5d 23-May-11	27-May-11	262d
Ingliston Park and Ride Substation		211d 03-Sep-10	15-Jul-11	350d
7A-01-SUBS-110	wayleave granted (BAA + substation area)	0d	03-Sep-10	246d
7A-01-SUBS-120	meter issue for power supply clarified	0d	03-Sep-10	276d
7A-04-SUBS-80	Civil Engineering and Building Works	65d 04-Nov-10	17-Feb-11	194d
7A-01-SUBS-130	Installation HV cable	40d 12-Jan-11	09-Mar-11	194d
7A-04-SUBS-30	Access for visual inspection for E&M Substation installation (07...	0d 19-Jan-11	19-Jan-11	198d
7A-04-SUBS-100	cable duct for Power Infeed	5d 19-Jan-11	28-Jan-11	194d
7A-04-SUBS-31	Access for E&M Substation installation (07A Ingliston Park and ...	0d 18-Feb-11	18-Feb-11	198d

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Approved: BSC

Checked: SCS/ME

Revision: 01 (100912)

Actual Work: [Green bar]

Remaining Work: [Red bar]

Critical Remaining Work: [Red bar with arrow]

Milestone: [Diamond]

Project Carlisle - Airport to Haymarket
(Revision 01 100912)

EDINBURGH
TRAM NETWORK



13-Sep-10

Civil

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
7A-04-SUBS-40	Power Infeed from Public Net available inc HV cable	0d	09-Mar-11		194d
7A-04-SUBS-45	Install HV Power Supply and Equipment (SP)	15d	09-Mar-11	30-Mar-11	194d
7A-04-SUBS-50	Install LV Power Supply and LV Power Equipment	15d	30-Mar-11	20-Apr-11	355d
7A-04-SUBS-55	Energisation Scottish Power	0d	13-Apr-11		419d
7A-04-SUBS-70	Install Telecom and Scada	15d	20-Apr-11	13-May-11	355d
7A-04-SUBS-70	Installation of TPS Equipment	30d	13-May-11	27-Jun-11	355d
7A-04-SUBS-80	Testing and Commissioning	14d	27-Jun-11	15-Jul-11	355d
Tram		20d	22-Nov-11	21-Dec-11	249d
07-04-TRAM-20	Track Testing of Tram	20d	22-Nov-11	21-Dec-11	244d
Ingliston Park & Ride (exc. to Edinburgh Airport (inc.))		327d	03-Sep-10	11-Jun-12	244d
Design		0d	03-Sep-10	03-Sep-10	571d
7A-05-TRCK-10	Issue Construction Drawings Trackwork (New Ingliston Ltd)	0d		03-Sep-10	566d
7A-05-TRCK-20	Issue Construction Drawings Gogarburn RWs Redesign	0d		03-Sep-10	73d
Trackwork (633m)		284d	03-Sep-10	27-Oct-11	287d
7A-05-TRCK-70	Track Laying (633m)	30d	11-Aug-11	22-Sep-11	73d
7A-05-SIGN-70	point machine mechanical set up	20d	11-Aug-11	08-Sep-11	81d
7A-05-SIGN-60	wayside preparation for loops(4) and boxes(12)	10d	08-Sep-11	22-Sep-11	181d
7A-05-TRCK-76	Top Ballast	10d	20-Sep-11	04-Oct-11	73d
7A-05-JNCS-60	installation of traffic light control - Junction 210	4d	22-Sep-11	28-Sep-11	177d
7A-05-TRCK-80	Fencing & Trackside Finishes	17d	04-Oct-11	27-Oct-11	258d
Ingliston to Hilton Ch 1750 to 2040		15d	03-Sep-10	21-Sep-10	284d
7A-05-TRCK-60	Drainage	3d	03-Sep-10	07-Sep-10	284d
7A-05-TRCK-50	OLE Foundations & Ducts	3d	06-Sep-10	10-Sep-10	284d
7A-05-TRCK-40	Sub Base & Ballast	7d	13-Sep-10	21-Sep-10	284d
EAL Programme		225d	03-Sep-10	11-Aug-11	242d
Phase A (Ch 2040 to 2200)		15d	13-Sep-10	28-Sep-10	284d
7A-05-W14A-45(3)	OLE Foundations / Street Lighting & Ducts	6d	13-Sep-10	20-Sep-10	285d
7A-05-W14A-50(3)	Earthworks Finishes sand layer / sub base	5d	22-Sep-10	28-Sep-10	284d
Phase B		125d	01-Oct-10	13-Apr-11	475d
7A-05-W14B-10(3)	Earthworks (Fill 2300m3, Cut 2900m3, cap 660m3)	22d	01-Oct-10	02-Nov-10	155d
7A-05-W14B-15(3)	Drainage	10d	02-Nov-10	16-Nov-10	155d
7A-05-W14B-25(3)	Install Temporary Works	5d	02-Nov-10	09-Nov-10	155d
7A-05-W14B-20(3)	14b Reinforced Earth Wall	10d	09-Nov-10	23-Nov-10	155d
7A-05-W14B-30(3)	14c Reinforced Earth Wall	10d	16-Nov-10	01-Dec-10	155d
7A-05-W14B-35(3)	OLE Foundations / Street Lighting	10d	01-Dec-10	15-Dec-10	155d
7A-05-W14B-40(3)	Footpath Works	8d	15-Dec-10	10-Jan-11	155d
7A-05-W14B-45(3)	Signalised Junction at Eastfield Avenue	8d	10-Jan-11	20-Jan-11	155d
7A-05-W14B-50(3)	Earthworks sand / subbase / ballast	7d	20-Jan-11	31-Jan-11	155d
7A-05-W14B-55(3)	Crash Barrier Installation	8d	31-Jan-11	10-Feb-11	463d
7A-05-W14B-60(3)	Eastfield Avenue	52d	31-Jan-11	13-Apr-11	155d
Phase C		225d	03-Sep-10	11-Aug-11	73d
7A-05-W14C-05(3)	Obtain EAL Permit	15d	03-Sep-10	24-Sep-10	78d
7A-05-W14C-10(3)	Earthworks (cut 3600m3, Fill 1900m3)	20d	01-Oct-10	29-Oct-10	73d
7A-05-W14C-15(3)	Install temporary works	20d	29-Oct-10	26-Nov-10	73d
7A-05-W14C-20(3)	14d RC Retaining Wall	137d	26-Nov-10	27-Jun-11	73d
7A-05-W14C-25(3)	Remove temporary works	12d	27-Jun-11	13-Jul-11	73d
7A-05-W14C-30(3)	Drainage	12d	13-Jul-11	29-Jul-11	73d

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Legend:
█ Actual Work
█ Remaining Work
█ Critical Remaining Work
◆ Milestone
◆ Milestone

Date: 12-Sep-10
 Revision: Revision 01 (100912)
 Checked: SCS/MHE
 Approved: BSC

Project Carlisle - Airport to Haymarket
(Revision 01 100912)

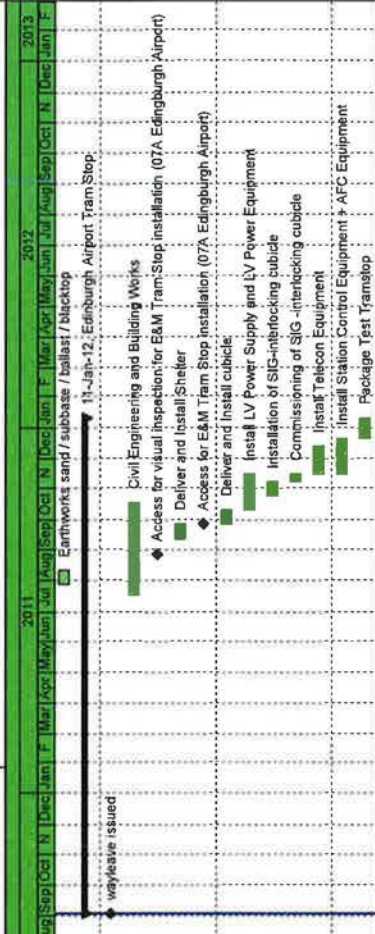
EDINBURGH TRAM NETWORK

BILFINGER BERGER SIEMENS CAF

13-Sep-10

Civil

Activity ID	Activity Name	Original Duration	Start	Finish	Final Position
7A-05-W14C-35(3)	Earthworks sand / subbase / ballast / blacktop	327d	03-Sep-10	11-Aug-11	73d
Edinburgh Airport Tram Stop	wayleave issued	244d	03-Sep-10	11-Jan-12	244d
7A-05-TRMS-20	Civil Engineering and Building Works	65d	18-Jul-11	18-Oct-11	113d
7A-05-TRMS-30	Access for visual inspection for E&M Tram Stop installation (07...	10d	13-Sep-11	27-Sep-11	113d
7A-05-TRMS-40	Deliver and Install Shelter	10d	27-Sep-11	11-Oct-11	113d
7A-05-TRMS-31	Access for E&M Tram Stop installation (07A Edinburgh Airport)	25d	11-Oct-11	15-Nov-11	113d
7A-05-TRMS-45	Deliver and Install cubicle	5d	08-Nov-11	15-Nov-11	157d
7A-05-TRMS-50	Install LV Power Supply and LV Power Equipment	20d	15-Nov-11	14-Dec-11	123d
7A-05-SIG-40	Installation of SIG-interlocking cubicle	25d	15-Nov-11	21-Dec-11	113d
7A-05-SIG-80	Commissioning of SIG-interlocking cubicle	5d	21-Dec-11	11-Jan-12	113d
7A-05-TRMS-70	Install Telecom Equipment				
7A-05-TRMS-60	Install Station Control Equipment + AFC Equipment				
7A-05-TRMS-80	Package Test Tramstop				



Date	Revision	Checked	Approved
12-Sep-10	Revision 01 (100912)	SCS/MH/E	BSC

Actual Work Remaining Work Critical Remaining Work Milestone Summary

APPENDIX 5.2

SECTIONAL COMPLETION DATES

Section	Scope	Target Date	Remarks
A	Section A means completion of the Depot (fully functional including energisation) and the first Tram delivered to the Site and assembled;	9 June 2011	finish of access bridge construction not mandatory for that milestone
B	Section B means completion of the test track functional from the Depot west entry/exit to the airport, and five Trams delivered to the Site and assembled with the first Tram to have completed the Tram Type Test and the remaining Trams to have completed the Tram Commissioning Routine Tests, such tests as described in the Employer's Requirements and the completion of all tests required to enable the commencement of Driver Training;	20 December 2011	Allows one year + shadow running remaining time for driver training - lineside systems fully functional - OCC and radio communication functional only as far as available
C	Section C means the carrying out and completion of the section from Airport to Haymarket and the completion of all tests required by the Employer's Requirements in relation to that Section, including those System Acceptance Tests that must be successfully completed prior to shadow running as provided for in the Employer's Requirements;	End of construction 21 June 2012 End of T&C 19 September 2012	3 month for Testing & Commissioning (OCC and radio communication fully functional)
D	Section D means the completion of shadow running and commencement of revenue service approval obtained and the completion of all tests required by the Employer's Requirements in relation to that Section, including those System Acceptance Tests that must be successfully completed to enable Service Commencement; Tram Commissioning Routine Tests performed for trams	18 December 2012	