

**Extract of Independent
Certifier's Opinion on the
Papers Exchanged between**

**Turner & Townsend (on
behalf of the Employer)**

and

**Bilfinger Berger Siemens
(Infracore)**

**Rev 3A / Rev 4 Programme
Edinburgh Trams Contract**

**Confidential & Legally Privileged
FOI(S)A Exempt**

December 2011

Prepared by:

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I confirm that the Settlement Agreement should incorporate the Rev 4 Programme.

The Settlement Agreement Contract Sum should be adjusted to take account of the impact of the change between Rev 3A and Rev 4 programmes.

The method of valuing the time impact of delay in programmed activities resulting from a delayed start when that delay occurs should be in accordance with Schedule Part 4 Appendix A and Schedule Part 45, Appendix C.

I confirm that the City of Edinburgh Council requested that Infraco retain their Subcontractors to the postponed commencement date.

Turner & Townsend and Infraco concur that there is no disagreement on the start date moving from 2nd September to 3rd October 2011 and that mobilisation occurred.

During the period of stand by, the City of Edinburgh Council witnessed the efforts Infraco made to retain the subcontractors to maintain their commitment to commence work on the Edinburgh Tram Network.

From the discussion between Turner & Townsend and Infraco it has been identified that the start dates for elements of work in IC and IDSP involving Bilfinger Berger, Crummock and Lagan were not affected. Extracting these elements and applying the contract rates amounts to a sum of £158,390.

Given that the contract rates being applied carry an element of Siemens values, I would consider it reasonable that if the contract rates are being used to ensure a consistency of approach, then a further allowance be made in a similar sum to that of the Bilfinger Berger element of IC (i.e. £60,349) and applied to the element of works where the start date was not impacted.

To that end I would propose that the value set aside regarding IC and IDSP should be taken from £158,390 to £218,500. The apportionment of the £218,500 being:

Section IC	Bilfinger Berger	£60,349
Section IC	Crummock	£58,157
Section IDSP	Lagan	£39,843
	Siemens	£60,110
		<hr/>
		£218,459
		<hr/>
		£218,500
		<hr/>

Infraco are obliged to mitigate the project cost to the client and to that end I would request that Infraco confirm at the point of each valuation application that there is no double allowance for overheads, etc arising from the priority works in the period of delayed start. Similarly, I request that Infraco confirm at the time of each valuation application that the impact on the milestone payments relates to the agreed schedule of rates referred to earlier and has been incurred.

Further the effects of this opinion on cost and programme are taken in the context of the Rev3A Rev4 programme at the time of the signing the Settlement Agreement on 15th September 2011. In that regard, it is to be recognised that other matters of delay, e.g. due to utilities, require to be considered to ensure that there is no element of allowance or costs being duplicated.

To conclude, the effect in my opinion of movement from Rev 3A to Rev 4 as at 15th September 2011 on the Contract Sum is an additional £4,541,161. As such the milestones should be reviewed and agreed.

Finally, Infraco, Turner & Townsend and the City of Edinburgh Council should continue to work together to mitigate the impact of the delay to the start date by reviewing existing and future time restraints and project burdens on the programme.



Submission Received from Turner & Townsend

Edinburgh Trams – Rev 3A to Rev Assessment

(Confidential – Legally Privileged and FOI(S)A exempt)

Contract Provisions

- Settlement Agreement - clause 3.1 (a) – payment in respect of matters relating to the changes in the Programme requirements from revision 3a to revision4 which is agreed in principle but the amount requires to be quantified and agreed.
- Schedule 4 Appendix B – Prelims arising from extensions of time or delay shall be calculated using the rates in Appendix A
- Schedule 45 Appendix C – prolongation costs shall be calculated using the rates in Appendix A.

Schedule 4 and 45 envisages delay during the course of the works rather than delay prior to re-commencement.

BBS have used the prolongation rates and periods involved as envisaged in Schedules 4 and 45 as opposed to Clause 3.1 (a) Settlement Agreement.

Proposal

Reimburse the delay to the re-commencement on a 'fair and reasonable' basis and the extension to the programme using the prolongation rates. To aid the assessment BB Civil Works team structure dated 1st September 2011 has been used.

In the absence of evidence of actual costs incurred we have based the assessment on a proportion of the weekly prelim costs. Using this approach would indicate a total in the order of **£2.86M**

12 December 2011 (version 0.1)

Edinburgh Trams – Rev 3A to Rev Assessment

Cost Head	Comment
Off - Street	
BBCUK	
Edinburgh Park Office	Covered in On-Street
2A/5A (part) - Haymarket to Murrayfield Underpass	Refer to Civil Works Team 'ref D', all team members identified : 100%
5 – Section 5 overall	Refer to Civil Works Team 'ref E', 9 out of 13 of team mobilised therefore 69% assumed
7A/5C (part) – Depot to Edinburgh Airport	Refer to Civil Works Team 'ref F, 'all team members identified : 100%
Sub-contractors	
2A/5A (part) - Haymarket to Murrayfield Underpass (Graham)	Include 2.14 weeks prolongation, Haymarket Yards concurrent delay with delay to re-commencement. Extended programme period included at 100%.
5 (Structures) - Expanded	Extent of mobilisation to be confirmed – say 50%
5 (Civil) – All other works (Various)	Mobilisation deferred until 3 rd of October– say 0%
7A/5C (part) – Depot to Edinburgh Airport (Farrans)	Site team full established 3 rd of October, evidence of actual mobilisation required to assess this – say 0%
Off-Street Traffic Management (Class One)	Extent of mobilisation to be confirmed – say 50%

12 December 2011 (version 0.1)

Edinburgh Trams – Rev 3A to Rev Assessment

Cost Head	Comment
On - Street	
BBCUK	
Edinburgh Park Office	Refer to Civil Works Team' – 27 out of a team of 32 mobilised therefore 89% assumed.
Torphicen Street Office	Refer to Civil Works Team 'ref A' – 3 out of a team of 7 mobilised, but say 30% included as a fixed cost, therefore 60% assumed.
1C - Broughton Street to Waverley Bridge	Refer to Civil Works Team 'ref B' – 5 out of a team of 7 mobilised, but say 30% included as a fixed cost, therefore 86% assumed.
1D – Lothian Road Junction - Haymarket	Refer to Civil Works Team 'ref C' – 4 out of a team of 5 mobilised, but say 30% included as a fixed cost, therefore 72% assumed.
Sub-contractors	
1C - Broughton Street to Waverley Bridge (Crummock)	Planned commencement Rev3A was 25 th of November, Rev 4 10 th January 2012; opportunity to mitigate say 0%
1C/1D – Princes St Outstanding Works	No claim
1DSP – Lothian Road Jct – West Maitland St (Lagan)	Planned commencement Rev 3A - 7 Feb 2012, Rev 4 – 7 Mar 2012; opportunity to mitigate say 0%
1DH - West Maitland St – Haymarket (Lagan)	Site team fully in place 10 th October; extent of mobilisation t.b.c – say 20%

12 December 2011 (version 0.1)

Edinburgh Trams – Rev 3A to Rev Assessment

On-Street Traffic Management (Class One/McPhie)	Extent of mobilisation t.b.c – say 50%
On – Street Logistical Support (DR Security)	Evidence of mobilisation required – say 0%

12 December 2011 (version 0.1)

Edinburgh Trams – Rev 3A to Rev Assessment

Cost Head	Comment
Siemens	Evidence of team structure and team members in place during delayed commencement not provided
SPM (STS UK Turnkey)	Was the full team fully mobilised and in place during delay to commencement?
SPM – (Rail Automation Uk)	Was the full team fully mobilised and in place during delay to commencement?
SPM – REL (Electrification UK)	Was the full team fully mobilised and in place during delay to commencement?
SPM – TLC (Traffic Solutions UK)	Extent of mobilisation t.b.c – say 50%
SPM (Siemens AG Germany)	Extent of mobilisation t.b.c – say 50%
SPM (BAM sub-contractor)	Extent of mobilisation t.b.c – say 50%
I MO RS IS (Maintenance)	Extent of mobilisation t.b.c – say 50%

12 December 2011 (version 0.1)



Submission Received from Bilfinger Berger Siemens (Infracore)

Edinburgh Tram
Rev3A Rev 4 Programme Cost Assessment

		T&T £	BBS £
BBUK	Off-street	662,893.70	1,440,303.02
BBUK	On-street	914,709.43	1,295,951.67
		1,577,603.13	2,736,254.69
OHP	10%	157,760.31	273,625.47
Sub-total		1,735,363.45	3,009,880.16
Siemens		963,117.01	1,495,189.37
OHP	17%	163,729.89	254,182.19
Sub-total		1,126,846.90	1,749,371.56
		2,862,210.35	4,759,251.72

Item	Section of Works	Description of Works	BBS Assessment Contractor	Delay Information			Weekly Rate	Total
				To start (wks)	To Finish (wks)	Overall		
BILFINGER BERGER CIVIL UK LIMITED								
1	Edinburgh Park Office	BB - Site Prelims Cost	Bilfinger Berger	4.43	7	Note 2	117,586.00	
2	2A/5A (partly)	Haymarket to Murrayfield Underpass	Bilfinger Berger	4.43	6.14	6.14	22,773.00	136,819.86
3	5	Section 5 overall	Bilfinger Berger	4.43	4.14	4.14	39,560.00	163,891.43
4	7A/5C (partly)	Depot to Edinburgh Airport	Bilfinger Berger	4.43	4.14	4.14	10,243.00	42,435.29
SUBCONTRACTORS								
5	2A/5A (partly)	Haymarket to Murrayfield Underpass	Grahams	4.43	6.14	6.14	82,663.00	507,602.71
6	5 (Structures)	All Structures (only)	Expanded	4.43	4.14	4.14	81,390.90	337,190.87
7	5 (Civil)	All other works (excl structures)	Other Sub Contractors	4.43	4.14	4.14	22,121.00	91,644.14
8	7A/5C (partly)	Depot to Edinburgh Airport	Farrans Ltd	4.43	4.43	4.43	26,416.90	116,989.13
9	Off Street	Traffic Management	Class One	4.43	1.86	1.86	23,546.70	43,729.59
							1,440,303.02	

Delay	Assessment	Weekly Rate	Total	T&T Assessment Comment
		117,586.00		
6.14	100%	22,773.00	139,826.22	
4.14	69%	39,560.00	113,385.05	
4.14	100%	10,243.00	42,406.02	
2.14	100%	82,663.00	176,898.82	Haymarket Yards in delay during September; prolongation delay included
4.14	50%	81,390.90	168,479.16	Extent of scope & mobilisation t.b.c
4.14	0%	22,121.00	-	Full mobilisation not in place on 3rd October
4.43	0%	26,416.90	-	Site established on 3rd October
1.86	50%	23,546.70	21,898.43	Extent of mobilisation t.b.c
			662,893.70	

Item	Section of Works	Description of Works	BBS Assessment		Delay Information To Start (wks)	To Finish (wks)	Overall	Weekly Rate £	Total £
			Contractor	To Start (wks)					
BILFINGER BERGER CIVIL UK LTD									
1	Edinburgh Park Office	BB Site Prelims	Bilfinger Berger	4.43	7.00	7.00	117,586.00	823,102.00	
3	Torphichen Street	BB Site Prelims	Bilfinger Berger	4.43	4.14	4.14	16,428.00	68,011.92	
4	1C	Broughton St - Waverley Bridge	Bilfinger Berger	6.57	4.14	4.14	14,567.00	60,307.38	
5	1D	Lothian Road Jct - Haymarket	Bilfinger Berger	4.00	2.14	2.14	14,931.00	31,952.34	
SUB CONTRACTORS									
6	1C	Broughton St - Waverley Bridge	Crummock	6.57	4.14	4.14	14,038.00	58,117.32	
7	1C/1D	Princes St Outstanding Wks		2.00			11,000.00	-	
8	1DSP	Lothian Road Jct - West Maitland St	Lagan	4.14	2.14	2.14	18,593.61	39,790.33	
9	1DH	West Maitland St - Haymarket		4.00	4.34	4.14	18,510.75	76,634.51	
10	On-street	Traffic Management		4.00	4.14	4.14	24,459.00	101,260.26	
11	On-street	Logistical Support		2.00	4.14	4.14	8,883.00	36,775.62	
								1,295,951.67	

Delay	Assessment	T&T Assessment		Comment
		Weekly Rate	Total	
7.00	89%	117,586.00	733,075.22	
4.14	60%	16,428.00	40,807.15	
4.14	86%	14,567.00	51,864.35	Extent of mobilisation t.b.c
2.14	72%	14,931.00	23,005.68	
-		14,038.00	-	Extent of mobilisation t.b.c
		11,000.00	-	Extent of mobilisation t.b.c
2.14		18,593.61	-	Feb/Mar 12 commencement
4.14	20%	18,510.75	15,326.90	Extent of mobilisation t.b.c
4.14	50%	24,459.00	50,630.13	Extent of mobilisation t.b.c
4.14	0%	8,883.00	-	
			914,709.43	

SPM (STS UK Turnkey) Prolongation						
Type: BBS-SPM						
Rate: SPM						
Item	Description	Quant	Rate	Unit	Total	
1	Overall Project Management	7.00	£64,072.21	per week	£44,505.50	
2	Track Work PM	4.43	£15,141.27	per week	£67,054.21	
3	Track Work Site Running Costs	4.43	£3,280.00	per week	£14,525.71	
4	Depot Workshop Equipment		£5,519.57	per week	n/a	
5	Infrastructure, Insurance, Bonds, Guarantees	7.00	£17,669.95	per week	£123,689.62	
6	Extended defects liability	7.00	£18,025.92	per week	£126,181.45	
						779,956.50

SPM-RA (Rail Automation UK)						
Type: BBS-SPM-RA						
Rate: SPM						
Item	Description	Quant	Rate	Unit	Total	
1	Rail Auto Specific extended PM	2.14	£9,775.95	per week	£20,948.47	
						20,948.47

SPM-REL (Electrification UK)						
Type: BBS-SPM-REL						
Rate: SPM-REL						
Item	Description	Quant	Rate	Unit	Total	
1	Rail Elec Specific extended PM	6.86	£8,848.17	per week	£60,673.18	
						60,673.18

SPM-TLC (Traffic Solutions UK)						
Type: BBS-SPM-TLC						
Rate: SPM-TLC						
Item	Description	Quant	Rate	Unit	Total	
1	Traffic Solutions Specific extended PM	8.86	£8,848.17	per week	£78,369.52	
						78,369.52

SPM (Siemens AG Germany)						
Type: BBS-SPM-TLC						
Rate: SPM-TLC						
Item	Description	Quant	Rate	Unit	Total	
1	RA (Rail Automation)	2.86	£23,834.44	per week	£68,098.40	
2	REL (Electrification)	6.86	£9,535.85	per week	£65,388.66	
3	DWE (Depot Workshop Equipment)		£5,519.57	per week		
4	SPM (Overall Project Management)	7.00	£11,618.25	per week	£81,327.74	
						214,814.79

SPM (BAM)						
Type: BBS-SPM-TRW-BAM						
Rate: SPM-TRW-BAM						
Item	Description	Quant	Rate	Unit	Total	
1	BAM	4.43	£71,112.00	per week	£314,924.57	
						314,924.57

IMO RS IS Siemens Maintenance						
Type: BBS-SPM-RSIS						
Rate: SPM-RSIS						
Item	Description	Quant	Rate	Unit	Total	
1	Project Manager (67%)	23.33	£628.22	per day	£14,658.47	
	Finance and Commercial Manager	15.75	£688.50	per day	£10,843.88	
						25,502.34

1,495,189.37

SPM (STS UK Turnkey) Prolongation						
Type: BBS-SPM						
Rate: SPM						
Item	Description	Quant	Rate	Unit	Total	
1	Overall Project Management	7.00	75% £64,072.21	per week	£336,379.10	
2	Track Work PM	4.43	75% £15,141.27	per week	£50,306.87	
3	Track Work Site Running Costs	4.43	75% £3,280.00	per week	£10,897.80	
4	Depot Workshop Equipment		75% £5,519.57	per week	£0.00	
5	Infrastructure, Insurance, Bonds, Guarantees	7.00	75% £17,669.95	per week	£92,767.24	
6	Extended defects liability	7.00	75% £18,025.92	per week	£94,636.08	
						584,987.09

SPM-RA (Rail Automation UK)						
Type: BBS-SPM-RA						
Rate: SPM						
Item	Description	Quant	Rate	Unit	Total	
1	Rail Auto Specific extended PM	2.14	75% £9,775.95	per week	£15,690.40	
						15,690.40

SPM-REL (Electrification UK)						
Type: BBS-SPM-REL						
Rate: SPM-REL						
Item	Description	Quant	Rate	Unit	Total	
1	Rail Elec Specific extended PM	6.86	75% £8,848.17	per week	£45,523.83	
						45,523.83

SPM-TLC (Traffic Solutions UK)						
Type: BBS-SPM-TLC						
Rate: SPM-TLC						
Item	Description	Quant	Rate	Unit	Total	
1	Traffic Solutions Specific extended PM	8.86	50% £8,848.17	per week	£39,197.39	
						39,197.39

SPM (Siemens AG Germany)						
Type: BBS-SPM-TLC						
Rate: SPM-TLC						
Item	Description	Quant	Rate	Unit	Total	
1	RA (Rail Automation)	2.86	50% £23,834.44	per week	£34,083.25	
2	REL (Electrification)	6.86	50% £9,535.85	per week	£32,707.97	
3	DWE (Depot Workshop Equipment)		50% £5,519.57	per week	£0.00	
4	SPM (Overall Project Management)	7.00	50% £11,618.25	per week	£40,663.88	
						107,455.09

SPM (BAM)						
Type: BBS-SPM-TRW-BAM						
Rate: SPM-TRW-BAM						
Item	Description	Quant	Rate	Unit	Total	
1	BAM	4.43	50% £71,112.00	per week	£157,513.08	
						157,513.08

IMO RS IS Siemens Maintenance						
Type: BBS-SPM-RSIS						
Rate: SPM-RSIS						
Item	Description	Quant	Rate	Unit	Total	
1	Project Manager (67%)	23.33	50% £628.22	per day	£7,328.19	
	Finance and Commercial Manager	15.75	50% £688.50	per day	£5,421.94	
						12,750.12

963,117.01