

Appendix 3 – Cost Report

Section 1 - Project Summary

	Budget Information			Committed			Forecast					Third Party Contributions		Variance		Actuals	
	A	B	C=A+B	D	E	F=D+E	G	H	I	J	K=F+G+H+I+J	L	M=K-L	N=M-C	O=M/C-1	P	Q
	Original Budget	Budget Variation	Current Budget	Original Contract Value	Approved Contract Changes	Current Contract Value	Changes in Progress	Anticipated Change	Opportunities	Risk / Mitigated	Anticipated Final Cost	Estimated Contribution Value	Anticipated Final Project Cost	Budget Variance (Value)	Budget Variance (%)	COWD to Date	Outstanding Amount
Edinburgh Tram Programme	500,154	0	500,154	479,660	15,116	494,776	4,113	7,808	0	4,000	510,697	-7,641	503,056	2,902	1%	411,804	82,972
1 Infraco - Off Street	360,060	2,652	362,712	362,501	2,652	365,153	2,843	365	0	0	368,361	-5,810	362,551	-161	0%	318,202	46,951
2 Infraco - On Street	38,817	2,094	40,911	47,384	2,094	49,478	1,235	-485	0	0	50,228	-1,493	48,735	7,824	19%	18,346	31,132
3 Infraco - Other	3,218	0	3,218	3,218	0	3,218	0	0	0	0	3,218	0	3,218	0	0%	685	2,533
2.1 York Place Direct Works	0	0	0		1,015	1,015		225			1,240		1,240	1,240		400	615
4.1 Utilities (Post Mediation)	1,812	9,485	11,297	1,812	9,485	11,297	0	6,389	0	0	17,686	-188	17,498	6,201	55%	12,507	-1,210
4.2 Legacy Utilities (Revised Tram Route)	0	965	965	0	965	965	0	264	0	0	1,229	0	1,229	264	27%	1,071	-106
4.3 Legacy Utilities (Leith Walk)	1,100	-1,100	0	1,100	-1,100	0	0	900	0	0	900	0	900	900		0	0
5 Tram vehicles	62,400	5	62,405	63,645	5	63,650	35	150	0	0	63,835	-150	63,685	1,280	2%	60,593	3,057
6 Project Management (refer to CEC Report)		0	0			0					0		0	0			
7 Preparing for Operations (refer to CEC Report)		0	0			0					0		0	0			
8 Specified Risk Allowance	32,747	-14,101	18,646	0	0	0	0			4,000	4,000		4,000	-14,646	-79%	0	0

Comments:
Report excludes Enabling work packages reported under T19 and utilities reported under T18
Contributions include amounts relevant to reported budgets only. Any further contributions are reported by CEC.
Includes changes issued to 15/9/12

Risk:
BBS portion of program saving, £6.5m not included.

Actions
Ongoing risk mitigation of major risks.
Realisation of opportunities associated with specification reductions (road surfacing) and time (York Place)

Infraco Cost Report Section 1 - Commercial Summary

	Budget Information			Committed			Forecast					Third Party Contributions		Variance		Actuals	
	A	B	C = A + B	D	E	F = D + E	G	H	I	J	K = F + G + H + I + J	L	M = K - L	N = M - C	O = M / C - 1	P	Q
	Original Budget	Budget Variation	Current Budget	Original Contract Value	Approved Contract Changes	Current Contract Value	Changes in Progress	Anticipated Change	Opportunities	Risk / Provision	Anticipated Final Cost	Estimated Contribution Value	Anticipated Final Project Cost	Budget Variance (Value)	Budget Variance (%)	COWD to Date	Outstanding Amount
Infraco Contract	402,095	4,746	406,841	413,103	4,746	417,849	4,078	-120	0	0	421,807	-7,303	414,504	7,663	3.68%	337,233	80,616
Off Steet	360,060	2,652	362,712	362,501	2,652	365,153	2,843	365	0	0	368,361	-5,810	362,551	-161	1.56%	318,202	46,951
00 Preliminaries and Other Items	150,408	2,573	152,981	150,409	2,573	152,982	2,541	230	0		155,753	0	155,753	2,772	1.81%	121,449	31,533
01 Newhaven Road to Haymarket	85,368	-3,232	82,136	87,738	-3,232	84,506	126	0	0		84,632	-318	84,314	2,178	3.04%	89,803	-5,297
02 Haymarket Corridor	8,692	-4	8,688	8,692	-4	8,688	0	0	0		8,688	-14	8,674	-14	0.00%	7,632	1,056
05 Roseburn Junction to Gogar	80,035	3,370	83,405	80,105	3,370	83,475	29	135	0		83,639	-4,378	79,261	-4,144	0.28%	65,267	18,208
06 Depot	19,979	261	20,240	19,979	261	20,240	80	0	0		20,320	0	20,320	80	0.40%	19,389	851
07 Gogar to Edinburgh Airport	15,578	-316	15,262	15,578	-316	15,262	67	0	0		15,329	-1,100	14,229	-1,033	0.44%	14,662	600
On Street	38,817	2,094	40,911	47,384	2,094	49,478	1,235	-485	0	0	50,228	-1,493	48,735	7,824	22.77%	18,346	31,132
00 Preliminaries and Other Items	21,837	91	21,928	21,837	91	21,928	24	0	0		21,952	0	21,952	24	0.11%	8,893	13,035
01 Newhaven Road to Haymarket	16,980	2,003	18,983	25,547	2,003	27,550	1,211	-485	0		28,276	-1,493	26,783	7,800	48.95%	9,453	18,097
Other	3,218	0	3,218	3,218	0	3,218	0	0	0	0	3,218	0	3,218	0	0.00%	685	2,533
00 Maintenance & Mobilisation	2,205	0	2,205	2,205	0	2,205	0	0	0		2,205	0	2,205	0	0.00%	685	1,520
00 Spare Parts	1,013	0	1,013	1,013	0	1,013	0	0	0		1,013	0	1,013	0	0.00%	0	1,013

Comments:

Summary sheet values in £k. All other sheet values in £.
 Opportunities include for time saving based on current QSRA.
 Excludes £3.2m phase 1b payment (refer to budget T19.C)

Risk

Refer to Risk register for risks identified against infraco programme
 All risk is held at programme level. This section of the cost report makes no allowance for risk.
 Refer to the outputs of the QCRA/QSRA for further information on risk.

Actions

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Infracost Report Section 2A - Approved Change - Clause 80

TNC No.	Description	Forecast Amount	Previous Period	Change from Previous Period	Notes	Section Code	Change Code
501	Hawthornevale Cycle Link - Change the design to widen the footway alongside the south side of Lindsay Road	20,021	20,021	0		01	01
502	Amend the design of Ocean Drive to reinstate the footpath to the north of Ocean Drive	10,231	10,231	0		01	01
503	OLE temporary portals at depot access bridge to allow finalisation without Edinburgh Gateway	67,646	67,646	0	Edinburgh Gateway funding	05	01
504	Review of the banned right turn into Blenheim Place as part of the design for Section 1C2 roads	46,247	46,247	0		01	01
505	York Place Terminal Point - Production of a feasibility report, initial feasibility design for option ii), run time modelling etc	228,653	228,653	0		01	01
506	Design for providing a new cycleway from the Mound to Princes Street	9,437	9,437	0		01	01
506.1	Design for providing a new cycleway from the Mound to Princes Street	1,669	1,669	0		01	01
507	Provide a clarification report and completion of the St. Andrew's Square Public Realm design	133,075	133,075	0	Included within contributions	01	01
508	Obtain EAL approval for the highways design drawings at Eastfield Avenue tram crossing	10,025	10,025	0		07	01
509	Design of Cathedral Lane Substation	233,596	233,596	0		01	01
511	Storm Water Connection from Gogar Lodge to the landowners new septic tank	5,750	5,750	0		05	01
512	Re-design of Ocean Terminal Bypass Road	53,685	53,685	0		01	01
513	Revised design to minimise utility diversions / conflicts - used for slit trenching and trial holes	156,870	156,870	0		01	02
514	Utility Mapping	92,756	92,756	0	Time chargeable costs. L&M Surveys and Class One. Complete	01	02
516	Additional Water main requirement at Depot and Mini Test Track	51,282	51,282	0		06	01
517	Additional BT Ducts at Depot and Mini Test Track	2,996	2,996	0		06	01
520	Valve chamber access and alteration works to 800mm water main at the Depot	105,326	105,326	0		06	01
524	Airport to Gyle - NIL Design Finalisation (also includes Construction)	-40,559	-40,559	0		07	01
526	Airport to Gyle - Tram Delivery Temporary Works	6,878	6,878	0		07	01
529	Design Gogar Castle Access Road tram crossing and approaches	31,308	31,308	0		05	01

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TNC No.	Description	Forecast Amount	Previous Period	Change from Previous Period	Notes	Section Code	Change Code
530	Amend the design of the Depot Road turning head as per RDC191. Option 2	30,458	30,458	0		06	01
531	Edinburgh Gateway - Advance Temporary Works design	9,349	9,349	0		05	01
534	SP Insurance Ducts - Install Insurance ducts at various locations	5,637	5,637	0		07	01
536	System Wide - Tramstop Cabinets - reduction in 10 years maintenance liability	0	0	0	No saving to contract	01	01
538	Depot - Tramwash Continuous Mode - Requirement for additional hand lances washers	0	0	0	Change rejected - included within contract	06	01
539	System Wide - Delay in signing - impact on commencement and completion - costs incurred at front end of programme	2,000,000	4,541,161	-2,541,161	tNC accepted although T&T still awaiting further information from BBS on incurred costs	00	04
540	Section 7 - Plot 304 - Omit Landscaping works	-201,120	-201,120	0		07	01
544	Extension to Edinburgh Park Office to accommodate CEC / Transport Scotland	159,900	159,900	0		00	01
550	Shandwick Place OLE & Landscape Design Revision	0	0	0	Design costs to be grouped under tnc 562 (BBS PMC 045)	01	01
553	SDS to provide the services of Matt Fell until August 2012	126,175	126,175	0		00	02
555	Haymarket - OLE 196B design revision to avoid main sewer	0	0	0	Design costs to be grouped under tnc 562 (BBS PMC 045)	01	02
557	Haymarket 1 - OLE Base Relocations (Design mods)	0	0	0	Design costs to be grouped under tnc 562 (BBS PMC 045)	01	02
558	Site Wide - Provision of a CAD Technician	1,693	1,693	0		01	02
559	Detailed Design of York Place	56,438	56,438	0	tnc issued - awaiting BBS estimate	01	01
561	Omit all works at the Forth Ports area	-2,443,000	-2,443,000	0	Work deleted from scope.	01	01
562	On Street Generally - OLE Design Changes for On Street Section (PMC 045) - SIEMENS DESIGN WORKS	160,000	135,000	25,000	Includes original tNC 550, 555, 563	01	02
563	On Street - Amend pile caps from square / rectangular to circular	0	0	0	Design costs to be grouped under tnc 562 (BBS PMC 045)	01	02
564	Worksite Modelling - (TM)	10,000	10,000	0		01	03
565	Advanced design works for Edinburgh Gateway Minimum Option	2,650	2,650	0		05	01

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TNC No.	Description	Forecast Amount	Previous Period	Change from Previous Period	Notes	Section Code	Change Code
565.1	Advanced design works for Edinburgh Gateway Minimum Option	3,350	3,350	0		05	01
566	On Street Generally - Ducting Design Changes Due to Utilities Conflicts	60,000	60,000	0		00	02
567	On Street Generally - Drainage Design Changes Due to Utilities Conflicts	125,000	100,000	25,000		00	02
568	On Street Generally - Trackform Design Changes Due to Utilities Conflicts	30,000	30,000	0		00	02
569	Additional Running Costs associated with the extension to the Edinburgh Park offices	79,200	79,200	0		00	01
571	Hope Street Junction Design	22,061	12,061	10,000		01	01
572	Cathedral Lane Substation - Retaining Wall Design	34,459	34,459	0	Value based on submitted estimate from BBS	01	01
574	Haymarket Station - Delete viaduct cladding	-5,571	-5,571	0		02	01
576	Depot - Reinstatement to 250mm Water main Remedial Works	36,788	36,788	0		07	01
577	Haymarket Viaduct - Deletion of Sub Station Retaining Wall and Plinth	1,580	1,580	0		02	01
578	SI Provisional Sum Allowance	-57,984	-57,984	0		01	02
580	Cancellation of trackwork materials York Place to Newhaven	-1,100,000	-1,100,000	0	Change resulting from value engineering exercise	01	02
581	Omit Siemens work to Tower Place and Victoria Dock bridges	-100,000	-100,000	0	Change resulting from value engineering exercise	01	02
582	Delete proposed cladding installation costs on Roseburn Viaduct Structures	-308,004	-308,004	0	Change resulting from value engineering exercise	05	01
585	Descope of Service Vehicle	-21,565	-21,565	0		00	01
586	St Andrew Square - tie in detail	15,228	15,228	0	Change resulting from value engineering exercise	01	01
587	Revise design for amendments to setts areas and specification	15,512	15,512	0	Subject to separate CEC budget	01	01
589	Descoping airport tramstop kiosk and canopy	-150,000	-150,000	0		07	01
591	Diversion of Scottish Power Cable at Haymarket Viaduct	21,789	21,789	0	NR contribution	05	01
595	Haymarket Viaduct - Deletion of fitting out of Crew Relief Facility	-74,001	-74,001	0		05	01

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Infracost Report Section 2A - Approved Change - Clause 80

TNC No.	Description	Forecast Amount	Previous Period	Change from Previous Period	Notes	Section Code	Change Code
597	Section 1D - Omit disconnection of Bus Tracker	-14,928	-14,928	0		01	01
601	Clarification on length of shelter to RBS tram stop (8m)	27,863	27,863	0		05	01
602	Omit purchase of poles for PIDs North of York Place	-23,740	-23,740	0		01	01
609	Traffic Management provision in section 1A	133,140	133,140	0		01	03
615	Haymarket Viaduct - design wall for blocking off void under the bridge deck as a result of the crew relief facility being omitted	3,000	3,000	0		05	01
616	Haymarket Viaduct - construct wall for blocking off void under the bridge deck as a result of the crew relief facility being omitted	10,798	10,798	0		05	01
617	Tram stops branding changes. Requirement for etched glass to be confirmed	0	0	0	Value TBC	05	01
618	Gogar Depot 1800 mm Diameter Manhole - TQ736	6,176	6,176	0		06	01
619	Omit Track Welding Equipment	-14,420	-14,420	0		06	01
620	Airport Tram Stop Design	17,784	17,784	0		05	01
621	Amend the dates of the HV meter installation at substations	12,507	12,507	0		05	01
622	LV power for sub-station and Tramstop.	0	0	0		05	01
623	Repair minor damage to Depot (Intercom, fence panel and broken slabs)	1,867	1,867	0		07	01
624	Compressed Air Supply to Depot Gantry Road and workshop	5,576	5,576	0		07	01
627	Delete pedestrian guardrail in the area outside St John's Church (Design)	0	0	0	No costs related to tnc	01	01
632	Resolve Depot Building water ingress	0	0	0	Assumed to be BBS liability	06	01
636	Twin Crossing at Lochside Avenue	20,000	140,000	-120,000	Includes abortive cost of work carried out to date. Full forecast £140k as assumed work will no longer be carried out.	05	01
640	Unimog Insurance	-1,000	-1,000	0		00	01

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Infraco Cost Report Section 2A - Approved Change - Clause 80

TNC No.	Description	Forecast Amount	Previous Period	Change from Previous Period	Notes	Section Code	Change Code
643	Edinburgh Gateway Construction	3,416,010	3,875,000	-458,990	Construction costs; excludes fees and OLE Poles (refer to tNC 594 & 610). Excludes any contingency which is reported separately by Transport Scotland	05	01
647	Design work to support VE on carriageway reconstruction & kerb realignment	50,000	50,000	0		01	01
648	Cabinet Position For Street Lighting - design	10,000	10,000	0	Provision of as-built drawings	01	01
652	Maintenance of The Depot Workshop Equipment	49,633	49,633	0		06	01
653	Provision of IFC Drawings in DWG CAD format	4,924	4,924	0	Contractual requirements being reviewed - BBS have stated that there is a charge for this work.	01	01
657	Drainage As Built Drawings - Princes Street	15,000	15,000	0		00	01
662	Eastfield Avenue Topographical Survey	3,000	3,000	0		07	01
663	Heras fencing at depot	6,424	6,424	0		06	01
664	Gogar Castle Access Road - Additional High Friction Surfacing	6,000	6,000	0	Requirements being investigated	07	01
666	Pedestrian gate next to the vehicle access gate at the ScotRail Depot.	2,000	2,000	0		05	01
667	Call off service to respond to Network Rail TQs and interface issues	15,000	6,000	9,000		05	01
668	De-scoping of Infraco works in York Place to be undertaken direct by Crummock.	-1,015,156	-1,015,156	0		01	01
670	SDS Response to Road Safety Audit for Princes St	10,000	10,000	0		01	01
671	ScotRail car park security fence	10,000	10,000	0	Contribution from ScotRail to be reviewed	05	01
672	Amend drainage drawings to incorporate changes introduced through redesign process	15,000	0	15,000	Not to be provided by Infraco	06	01
673	Cancel order for OLE poles required for Secondary Phase 1a	-41,789	-41,789	0		01	01
679	Works to prevent water stagnation at Depot (L8 Compliance)	2,500	2,500	0		06	01
681	Hoarding design for York Place	0	0	0		01	01
683	Carry out trial holes to locate 125mm diameter pipe at Depot	5,000	5,000	0		06	01

Infracost Report Section 2A - Approved Change - Clause 80

TNC No.	Description	Forecast Amount	Previous Period	Change from Previous Period	Notes	Section Code	Change Code
685	Provide technical information on Lindsay Road works	5,000	5,000	0		01	01
689	CAD resource and engineering support to revise drawings to show the layout required for Road Sign Bases, Street Light Columns, Traffic Signal Poles, Ducting and Chambers to avoid utilities	50,000	0	50,000		01	0
690	Remedial work to repair West Shunt line at Haymarket Depot	75,000	0	75,000		05	0
691	Cathedral Lane re-design	0	0	0	No cost included at present - assume design cost will be covered through construction savings	01	0
703	Repair Switch Rail at Depot	1,000	0	1,000		06	0
Total		2,652,084	5,562,234	-2,910,150			

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Infraco Cost Report Section 2B - Approved Change - Schedule 45

IC Ref No	Description	Agreed Amount	Previous Period	Change from Previous Period	Notes	Section Code
001	Independent Certifiers Schedule Part 45 Period End Change Order to 15/10/2011	8,593	8,593	0	Includes TNC 513, TNC 543, TNC 521	01
002	Independent Certifiers Schedule Part 45 Period End Change Order to 12/11/2011	102,135	102,135	0	Includes TNC513, TNC 521, TNC 528, TNC 535, TNC 543, TNC 547, TNC 548, TNC 549	01
003	Independent Certifiers Schedule Part 45 Period End Change Order to 10/12/2011	357,140	357,140	0	Includes TNC535, TNC543, TNC548, TNC549, TNC551	01
004	Independent Certifiers Schedule Part 45 Period End Change Order to 6/1/2012	158,870	158,870	0	Includes TNC535, TNC543	01
005	Independent Certifiers Schedule Part 45 Period End Change Order to 4/2/2012	332,812	332,812	0	Includes TNC535, 543, 551, 554, 596, 598	01
006	Independent Certifiers Schedule Part 45 Period End Change Order to 3/3/2012	244,645	244,645	0	Includes TNC543, 547, 554, 600, 604, 606	01
007	Independent Certifiers Schedule Part 45 Period End Change Order to 31/3/2012	209,363	209,363	0	Includes TNC 543, 547, 554, 600, 604, 606, 629, 630	01
008	Independent Certifiers Schedule Part 45 Period End Change Order to 28/4/2012	235,258	235,258	0	Includes TNC 543, 554, 590, 596, 600, 604, 606, 629, 630, 631	01
009	Independent Certifiers Schedule Part 45 Period End Change Order to 26/5/2012	-33,988	-33,988	0	Includes TNC 543, 547, 549, 554, 570, 584, 590, 596, 600, 604, 606, 629, 630, 635, 645	01
010	Independent Certifiers Schedule Part 45 Period End Change Order to 23/6/2012	286,757	286,757	0	Includes TNC 547, 549, 554, 596, 599, 600, 606, 613, 629, 630, 635, 637, 639, 645	01
011	Independent Certifiers Schedule Part 45 Period End Change Order to 21/7/2012	169,141		169,141	Includes TNC 543, 547, 554, 583, 600, 606, 629, 630, 635, 639, 645	01
Total		2,070,725	1,901,584	169,141		

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Infraco Cost Report Section 3A - Change in Progress - Clause 80

TNC No.	Description	Forecast Amount	Previous Period	Change from Previous Period	Notes	Section Code	Change Code
525	Airport to Gyle - Site Access for Remedial Works	0	0	0	all costs associated with this change allocated to TNC 576	07	01
527	Ingliston - Reimbursement of Costs paid directly to SGN for the diversion of approximately 120m of 10" steel IP gas main to accommodate the new Edinburgh Tram at Ingliston	0	0	0	Saving from Infraco, not included during the period as cost not shown in utility budget	07	01
539.1	System Wide - Delay in signing - impact on commencement and completion - prolongation costs at end of programme	2,541,161	0	2,541,161	No costs yet incurred - this relates to delay to end of Rev 3c programme	00	04
541	Princes Street - City Chamber - Annandale Street Communication Links. Usage of CEC available BT-Lines to avoid provision of direct FO link from Princes Street to City Chambers	184,125	190,000	-5,875	Off and on street combined under Clause 80	01	01
556	Track Work Materials York Place to Newhaven - Price Fixing for Rheda City C and D	0	0	0	Included in VE register	01	01
573	Roseburn Delta - Non DDA Compliant Footpath	0	0	0	TNC covers design only. Costs associated with this change included in the anticipated change section	05	01
575	Haymarket Station - Take Down Viaduct Staircase and Parapet. TNC now withdrawn - Network Rail carrying out work	0	0	0	Work to be carried out by Network Rail	02	01
592	Haymarket Yards - Realign kerbs at Car Park Entrance	0	0	0	Currently on hold pending A. Sim review.	05	01
593	Secondary Phase 1a - Cessation of Design Work North of York Place	0	0	0	Saving opportunity being investigated in relation to future ownership of design etc prior to finalising value.	01	01
594	Edinburgh Gateway slope option - design costs	0	200,000	-200,000	Costs included in tNC 643	05	01
603	Bus Tracker Interface Specification	10,000	10,000	0	Cost based on option 2	01	01
605	Depot - Sub-Station Switching	80,000	80,000	0	Includes allowance up to Section B completion date (8/3/13)	06	03
607	Delete 110v sockets on On Street Tram Stops	-6,154	-4,500	-1,654	Assume £1.5k per tram stop. Awaiting estimate	01	01
608	Delete 110v sockets on Off Street Tram Stops	-36,851	-16,500	-20,351	Assume £1.5k per tram stop. Awaiting estimate	05	01
610	Edinburgh Gateway - Siemens Long Lead Items	0	65,000	-65,000	Costs included in tNC 643	05	01
625	Engineering attendance on site at Cathedral Lane.	0	0	0	All costs captured against tNC 566	01	01
626	Advanced procurement of Edinburgh Gateway Materials and Equipment.	0	0	0	Costs included in tNC 643	05	01
628	Prepare MUDFA As Built drawings	100,000	100,000	0	Requirements to be confirmed	01	01
649	Princes Street Blister - Design Works	0	0	0	No cost impact	01	01

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Infracost Report Section 3A - Change in Progress - Clause 80

TNC No.	Description	Forecast Amount	Previous Period	Change from Previous Period	Notes	Section Code	Change Code
651	Defer Off Street Tramstop Shelter Installation and Fit-out	50,000	50,000	0		05	01
655	Revise CCTV & PA coverage at Murrayfield tram stop	5,000	5,000	0		05	01
661	Blank off signage to Depot	10,000	10,000	0	On hold - may not be required	05	01
669	SGN Remedial Works - backfill at New Ingliston Land	12,000	12,000	0		07	03
674	Topographical survey at Eastfield avenue - DESIGN	5,000	5,000	0		07	01
675	Remove concrete around the water meter at the ScotRail Depot.	1,000	1,000	0		05	01
676	Design associated with work to Lord Bodos Bar	3,000	3,000	0		01	01
684	Repair works to utility trough cover slabs damaged by tram deliveries	0	0	0	No cost included at present - assume recharge to CAF contract	06	01
694	Traffic Light de-scope to West St Andrew St	-170,000	0	-170,000	Final value to be agreed. May be an issue with mark-ups	01	0
695	Tanker Access Edinburgh Airport	0	0	0		07	0
696	SGN as Builts for New Ingliston Limited	0	0	0		07	0
701	Reinstatement works at the Airport	20,000	0	20,000		07	0
702	Eastfield Avenue Pedestrian Crossing	30,000	0	30,000		07	0
704	Redesign of St Andrew Square - East	5,000	0	5,000		01	0
Total		2,843,281	710,000	2,133,281			

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Infraco Cost Report Section 3B - Change in Progress - Schedule 45

TNC No.	Description	In Progress	Certified	Total Forecast	Previous Period	Change from Previous Period	Notes	Section Code	Change Code
513.1	Revised design to minimise utility diversions / conflicts - used for slit trenching and trial holes	0	17,210	17,210	17,210	0		01	02
521	Haymarket - Temporary Accommodation	0	1,543	1,543	1,543	0		01	02
522	Haymarket 1 - Road Reconstruction	0	0	0	0	0	Included in VE register	01	02
523	Haymarket 1 - Additional CBR / Plate Testing	0	0	0	0	0	Included within on street priority works (contract milestones)	01	02
528	Haymarket 1 - Slit trench excavation to validate utilities	0	6,565	6,565	6,565	0	Included within on street priority works (contract milestones)	01	02
532	Princes Street - Temporary traffic management design - WITHDRAWN	0	0	0	0	0	Further information required	01	02
533	Princes Street - 500mm Water Main Diversion	0	0	0	0	0	Costs contained within 535	01	02
535	Princes Street - 500mm Water Main Diversion - rev 3 dwg	0	252,986	252,986	252,986	0		01	02
537	Haymarket 1 - Additional visit of Tar planer to facilitate slewing of BT ducts - WITHDRAWN	0	0	0	0	0	Withdrawn	01	02
543	Haymarket H1 - Utilities affecting the construction of OHLE foundations	0	257,147	257,147	256,091	1,056	Only covers section H1. H2 to YP included in item 7 of Anticipated Change.	01	02
545	Site Wide - Power to bus trackers affecting the ability to remove site clearance items	0	0	0	0	0	McNicholas to remove. Contra charge BBS; allowance included for BBS attendance	00	02
546	Increased number of drainage boxes including installation	21,482	0	21,482	0	21,482		00	02
547	Haymarket H1 - Third Party (McNicholas) affecting ability to progress the works	2,180	7,571	9,751	7,571	2,180		00	02
548	Haymarket H1 - BT Fibre Optic Service requires diverting	0	83,053	83,053	83,053	0		00	02
549	Princes Street - Amend the design of the St. Johns Church OLE bases	0	32,642	32,642	32,642	0	Opportunity to deduct original scope to be pursued once acceptance of revised pole locations is achieved.	01	02
551	Princes Street - 2011 Christmas Embargo - Temporary Surfacing of Track Infills	0	203,511	203,511	203,511	0		01	02
552	Princes Street - BT diversion @ junction of Princes Street and South St. David Street	0	0	0	0	0	Costs included within TNC 535	01	02
554	St Andrew Square & Shandwick Place - Traffic Management Requirements	27,157	209,652	236,809	216,442	20,367	Refer to Revised issue of TNC	01	02
560	St. Andrew Square - Omit £0.7m of repairs to road surface finishing	-700,000	0	-700,000	-700,000	0		01	02

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Infraco Cost Report Section 3B - Change in Progress - Schedule 45

TNC No.	Description	In Progress	Certified	Total Forecast	Previous Period	Change from Previous Period	Notes	Section Code	Change Code
570	Omit the Removal of Trees in Shandwick Place	-9,066	3,299	-5,767	-5,767	0		01	02
579	Removal of embargo and revised traffic management	0	0	0	0	0	Change resulting from value engineering exercise	01	02
583	Ordering setts for on street works	-118,329	28,329	-90,000	-90,000	0	Saving based on spreadsheet issued to CEC (GE to AC 22/05/2012). Final value still to be agreed with BBS	01	02
584	Road Reconstruction specification	0	201	201	201	0	Change resulting from value engineering exercise	01	02
588	Stafford St Return of Parking Spaces	0	0	0	0	0		01	02
590	New cycleway from The Mound into Princes Street	0	30,375	30,375	30,375	0		01	02
596	Section 1D - Costs associated with amended drainage design	0	118,851	118,851	118,851	0		01	02
598	Section 1D - Incorporate geotextile liner into Clifton Terrace void in accordance with requirements from Archaeologist	0	1,760	1,760	1,760	0		01	02
599	Floating track slab	746,986	3,014	750,000	980,000	-230,000	Forecast reduced on the basis that BBS have £109k in their On Street Price for civils work. Remaining allowance for Siemens work plus contingency for extra civils costs	01	01
600	Shandwick place - OLE bases affecting utilities (Piling)	1,623	314,340	315,964	314,251	1,713		01	02
604	St Andrew Sq - OLE bases affecting utilities (Piling)	0	37,550	37,550	37,550	0		01	02
606	York Place - Waverley Bridge - Works Delayed and disrupted as a result of works carried out by Third parties	18,001	54,159	72,160	62,736	9,424		01	02
611	Excavation of Track Slab to be carried out by McNicholas	0	0	0	0	0	Refer to Anticipated change section for costs	01	01
612	Tram stops branding changes. Requirement for etched glass to be confirmed (cost excluded)	0	0	0	0	0	Value TBC	00	01
613	Temporary Bus Station at St Andrew Square/Waterloo Place - design	40,293	8,885	49,178	49,178	0		01	01
614	Rothesay Place Traffic Management Amendment	10,000	0	10,000	10,000	0		01	01
629	Utilities affecting Track Excavation at Shandwick Place (S1)	0	35,417	35,417	36,677	-1,261		01	02
630	Utilities affecting Track Excavation at Shandwick Place (S2)	0	26,867	26,867	27,067	-200		01	02

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Infraco Cost Report Section 3B - Change in Progress - Schedule 45

TNC No.	Description	In Progress	Certified	Total Forecast	Previous Period	Change from Previous Period	Notes	Section Code	Change Code
631	Third parties affecting progress at Shandwick Place (S2)	0	7,161	7,161	7,161	0		01	02
633	Ponding on Princes St at junctions of Frederick St/Castle St	0	0	0	0	0		01	01
634	Descope duct installation at Cathedral Lane	0	0	0	0	0	In Anticipated change section	01	01
635	Amend on street drainage scope	0	9,044	9,044	9,045	-2		01	02
637	St Andrew Square Pedestrian Crossing	0	3,027	3,027	3,027	0		01	01
638	Remove pedestrian guardrail outside St John's Church	5,000	0	5,000	5,000	0		01	01
639	York Place - Traffic Management Design	128,071	87,977	216,048	250,309	-34,261		01	01
641	Cathedral Lane substation - scope change to suit Henderson Global requirements. Excludes demolition.	281,000	0	281,000	281,000	0	This allowance is for the extra over cost included in the contract for construction of the new tram substation only. There is no allowance for any works in constructing Henderson Global's substation. Design work is included in TNC 509	01	01
642	York Place temporary Tram Stop	944,000	0	944,000	944,000	0	Excludes design work (see tNC 505) and sheet piling work to strengthen basement (included in risk allowance).	01	01
644	Finials for On Street Poles	7,120	22,880	30,000	30,000	0		01	01
645	Princes Street Outstanding Works	27,145	228,590	255,734	242,192	13,542		01	01
646	Cabinet Position For Street Lighting	20,000	0	20,000	20,000	0	Relates to locations only - assume no additional work	01	01
650	Princes Street Blister	10,000	0	10,000	10,000	0		01	01
654	De-scope coloured high friction surfacing at Princes / Sth St David Street Jctn	0	0	0	0	0	Savings contained in tNC 560	01	01
656	Defer On Street Tramstop Shelter Installation and Fit-out	10,000	0	10,000	10,000	0		01	01
658	Clarification of scope to Shandwick Place Wall	0	0	0	0	0	Work to be descope from BBS. No adjustment as work will be carried out by others.	01	01
659	Road signage at Junction of Manor Place / Melville Street	2,000	0	2,000	2,000	0		01	01
660	Princes Street Traffic Management	10,000	0	10,000	10,000	0		01	01

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Infraco Cost Report Section 3B - Change in Progress - Schedule 45

TNC No.	Description	In Progress	Certified	Total Forecast	Previous Period	Change from Previous Period	Notes	Section Code	Change Code
665	Removal of Princes Street "plug"	5,000	0	5,000	0	5,000	Current requirements to be established	01	02
677	Install 20mph roundels on Lansdowne Crescent	1,500	0	1,500	1,500	0		01	01
678	Temporary traffic management design at York Place to keep bus station access open	10,000	0	10,000	20,000	-10,000		01	01
680	Coates Crescent - Bus running single lane	10,000	0	10,000	10,000	0	Feasibility study	01	01
682	Descope work associated with street lighting, road signage & traffic signals	-500,000	0	-500,000	0	-500,000	Previously included in anticipated change section	01	01
686	Alter kerbs next to CEC Connection Manhole	1,000	0	1,000	1,000	0		01	01
687	Relaxation of specification Appendix 11/1 to allow new in lieu of recovered whin kerbs	60,705	0	60,705	0	60,705		01	0
688	Descope footways outside Atholl & Coates Crescent	0	0	0	0	0		01	0
692	Installation of additional traffic management measures around St. James Centre car park	15,000	0	15,000	0	15,000		01	0
693	Footway and kerbing reinstatement in Shandwick Place	10,000	0	10,000	0	10,000		01	0
697	Remedials to Clifton Terrace kerb and footway	10,000	0	10,000	0	10,000		01	0
698	Removal of Contaminated Material in SP4	91,636	0	91,636	0	91,636		01	0
699	Pedestrian walkway from Haymarket Station	5,000	0	5,000	0	5,000		01	0
700	Hope Street Junction Works	30,000	0	30,000	0	30,000		01	0
Total		1,234,504	2,093,605	3,328,109	3,806,727	-478,618			

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Infraco Cost Report Section 4 - Anticipated Change

Ref No	Description	Forecast Amount	Previous Period	Change from Previous Period	Notes	Section Code	Change Code
4	Pricing Assumptions - 6.4.2.6 Dublin Street	70,000	70,000	0	Excludes piling if required. Includes allowance for works to adjacent properties.	01	02
6	Track Lowering - bridging trackform over utilities in St Andrew Square	150,000	150,000	0	Requirement for 30m section in St Andrews Square. Costs will come through On Street Works estimates	01	02
7	Piled OLE base in lieu of utility diversion	85,000	90,000	-5,000	Allowance for remaining scope at 23/06/2012. 1 OLE base at Shandwick Place; 2 piles, 3 bases. Costs will come through On Street Works estimates	01	02
14	Roseburn Delta - non DDA footpath	30,000	30,000	0	No design required. Temporary footpath alignment to be agreed on site. Potential modifications to surface water drainage resulting from revised earthworks and Scottish Water approvals.	05	01
15	MUDFA Reinstatement - Hope Street / Lothian Road	0	30,000	-30,000	Work now included in tNC 700	01	01
23	Drainage redesign and amendments to numbers / depths of manholes, carrier drains / drainage connections.	0	50,000	-50,000	All design cost now allocated against tNCs	01	02
24	Remove drainage from Infraco scope	-200,000	-200,000	0	Extent of deduction to be fully established. BBS are disputing the markup that applies to deductions. Reduced in period to take account of York Place removal elsewhere	01	01
25	Remove excavation of trackbox from Infraco's contract	-200,000	-200,000	0	Value to be determined by detailed site measure and application of Schedule 45 rates. Quantification to be agreed with BBS. Note that this value has been reduced as BBS are disputing the method of calculating the deduction. Reduced in period as York Place removed	01	01
26	Remove ducting in Cathedral Lane from Infraco's contract		-75,000	75,000	This work is included within the descoped York Place contract sum	01	01
27	Amend road reconstruction depth from Contract Requirements	-700,000	-700,000	0	Principles instructed, saving subject to site conditions	01	01
28	Opportunity to reduce cost associated with the temporary tram stop at York Place	-150,000	-150,000	0	Design optimisation - still to be realised	01	01

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Infraco Cost Report Section 4 - Anticipated Change

Ref No	Description	Forecast Amount	Previous Period	Change from Previous Period	Notes	Section Code	Change Code
30	Schedule Part E, Item 8. Trackside Signage	37,320	37,320	0	Includes allowance for additional signage requirements identified during the testing and commissioning	01	01
31	Schedule Part E, Item 10. OLE Change: Grosvenor Street Pole Movement	12,440	12,440	0	Current requirements to be established	01	01
32	Schedule Part E, Item 11. Unsuitable building fixings Section 1A	118,258	118,258	0	Current requirements to be established	01	01
33	Schedule Part E, Item 12. SDS Lighting Design update impacts OLE combined poles	62,200	62,200	0	Current requirements to be established	01	01
34	Schedule Part E, Item 14. SDS alignment update to match built structures	124,400	124,400	0	Current requirements to be established	01	01
35	Defer tram stop construction	30,000	30,000	0	Increased protection / security	00	01
36	Install fencing to mini test track	20,000	20,000	0		05	01
37	Redesign of OLE bases along Roseburn corridor where they are sited outside of the LOD	10,000	10,000	0		05	01
39	Desclope traffic sign and street lighting bases	0	-350,000	350,000	McNicholas to undertake bases and ducts. Value increased in line with measure. Value now contained in tNC 700	01	01
40	Disposal of contaminated excavations at Shandwick Place	75,000	75,000	0	Full extent and cost to be established.	01	01
41	Additional SDS Preliminaries (25.65%)	200,000		200,000	Final total to be reviewed, based on agreed base values.	00	01
42	Re ballast shunt line	75,000		75,000		05	01
43	Road level modifications in St Andrew Square resulting from comms ducts	30,000		30,000	Design cost included in tNC 704. Final solution to be developed	01	01
Total		-120,382	-765,382	645,000			

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Infraco Cost Report Section 5 - Opportunities

Ref No	Description	Approved Changes	Changes in Progress	Anticipated Changes	Contributions	Secured	To be secured	Total Opportunity	Value per CS report Jan 2012	Notes
01	Remove embargoes and revised TM	0	0	0	0	0	0	0	-6,460,000	Subject to completion of sections in advance of contract dates. Initial opportunity based on 22 week time saving assumed in the Rev 4C programme. Current master programme indicates 4 week saving as a result of York Place
02	Edinburgh Gateway	0	0	0	-3,416,010	-3,416,010	0	-3,416,010	0	Awaiting instruction from Transport Scotland
03	Setts (separate CEC budget)	0	-90,000	0	-890,000	-980,000	0	-980,000	-1,000,000	Funded by separate CEC budget (added to contributions register)
04	De-scope public realm at St Andrew Sq	0	-700,000	0	0	-700,000	0	-700,000	-700,000	Instructed
05	Contributions 3rd Party Agreements	0	0	0	-2,996,875	-2,996,875	0	-2,996,875	-2,500,000	Refer to contributions register
06	De-scope works at Forth Ports	-2,443,000	0	0	0	-2,443,000	0	-2,443,000	-2,450,000	Instructed
07	Omit Airport Tram Kiosk and Canopy	-150,000	0	0	0	-150,000	0	-150,000	-150,000	Approved, replacement materials t.b.c
08	Temporary tram stop at York Place	0	0	-150,000	0	-150,000	0	-150,000	-150,000	Design optimisation
09	Redeployment of Trams	0	0	0	0	0	0	0	-5,000,000	Included in CEC budget code
10	Cancel track York Place to Newhaven	-1,100,000	0	0	0	-1,100,000	0	-1,100,000	-1,100,000	Instructed
11	Omit Siemens works at Tower Place	-100,000	0	0	0	-100,000	0	-100,000	-100,000	Instructed
12	Turner & Townsend / CEC resources	0	0	0	0	0	0	0	0	Ongoing
13	Shared recovery vehicle	0	0	0	0	0	0	0	0	Not taken forward
14	Road re-construction depth	0	0	-700,000	0	-700,000	0	-700,000	-700,000	Principles instructed, saving subject to site conditions
15	Design freeze north of York Place	0	0	0	0	0	0	0	-250,000	Infraco design costs expended
16	Reduced requirement for storage	0	0	0	0	0	0	0	-1,000,000	Included in CEC budget code
17	Lay off TM at Forth Ports/Leith Walk	0	0	0	0	0	0	0	-180,000	TM not included in Infraco budget provision
18	Roseburn Viaduct Cladding	-308,004	0	0	0	-308,004	0	-308,004	-300,000	Instructed

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Infraco Cost Report Section 5 - Opportunities

Ref No	Description	Approved Changes	Changes in Progress	Anticipated Changes	Contributions	Secured	To be secured	Total Opportunity	Value per CS report Jan 2012	Notes
19	Delete Crew Relief Facility	-74,001	0	0	0	-74,001		-74,001		Instructed
Total		-4,175,005	-790,000	-850,000	-7,302,885	-13,117,890	0	-13,117,890	-22,040,000	

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Infracost Report Section 6 - Credits & Contributions

Ref No	Description	Included in Contract Sum	Approved Changes	Changes in Progress	Anticipated Changes	Total Forecast	Previous Period	Change from Previous	Contribution Received	Notes	Section Code	Change Code
01	Edinburgh Gateway Feasibility	860,000	82,995	0		940,000	940,000	0	528,000	£1.2m in total. Remainder of the costs included in CEC sections of the project budget.	05	01
02	New Ingliston Future Proof measures	540,000	0	0		540,000	540,000	0		Construction works element of overall settlement with NIL. Remaining amount contained in Land budget	07	01
03	Henderson Global - Cathedral Lane substation	-44,596	233,596	281,000		470,000	470,000	0		Full extent of agreement with Henderson Global to be established. Allowance assumes all design costs and proportion of construction costs associated with future substation will be borne by Henderson Global. Cost of £470k has been submitted to Henderson Global	01	01
04	RBS Tramstop	560,000	0	0		560,000	560,000	0		Agreement reached with RBS 11/06/2012	07	01
05	St Andrew Square Public Realm design		133,075	0		133,075	133,075	0	133,000	As per agreed change value. Assumed to be recovered from separate budget	01	01
06	Forth Ports		0	0		0	0	0		Forth Ports work removed from scope - no further contribution from Forth Ports assumed	01	01
07	CEC Miscellaneous. Mainly George Street CEC costs (£298k)	318,213	0	0		318,213	318,213	0	318,213	CEC finance have confirmed that a credit has been received in the amount shown. The extent of the workscope associated with this credit is not clear.	01	01
08	Network Rail - Haymarket station refurbishment	0	13,798	0		13,798	13,798	0		Majority of this work now being carried out by Network Rail. Remaining allowance for wall to crew relief facilities	02	01
09	Contribution from CEC for public realm work (granite setts) at St Andrews Square	890,000	0	0		890,000	890,000	0		No change in scope allowed for - setts funded by CEC. Saving based on spreadsheet issued to CEC (GE to AC 22/05/2012).	01	01
10	Network Rail - Scottish Power Cable diversion - Haymarket Station (TNC 591)		21,789	0		21,789	21,789	0			05	01
11	Edinburgh Gateway Construction		3,416,010	0		3,416,010	4,140,000	-723,990		Cost based on agreed TCO. No contingency included (TS carrying their own contingency)	05	01
Total		3,123,617	3,901,263	281,000	0	7,302,885	8,026,875	-723,990	979,213			

Infraco Cost Report Section 7 - Change Summary

Change Code	Description	Approved Change	Change in Progress	Anticipated Change	Contributions	Total
01	Scope Change	1,219,927	2,089,234	-425,382		2,883,779
02	PAVs (Utilities, etc)	1,233,742	-751,951	305,000		786,791
03	Miscellaneous Client Risk Items	143,140	92,000	0		235,140
04	Time Delay	2,000,000	2,541,161	0		4,541,161
05	Project Contributions	0	0	0	-7,302,885	-7,302,885
Total		4,596,809	3,970,444	-120,382	-7,302,885	1,143,986

Notes:

Some CE's have costs which relate to more than one change code. In such instances they have been allocated to the predominant reason.

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Infraco Cost Report Section 8 - Period Movement

Ref No.	Description	Approved Off	Approved On	In Progress Off	In Progress On	Total
539	System Wide - Delay in signing - impact on commencement and completion - costs incurred at front end of programme	-2,541,161		0	0	-2,541,161
539.1	System Wide - Delay in signing - impact on commencement and completion - prolongation costs at end of programme	0		2,541,161	0	2,541,161
541	Princes Street - City Chamber - Annandale Street Communication Links. Usage of CEC available BT-Lines to avoid provision of direct FO link from Princes Street to City Chambers	0		-5,875	0	-5,875
543	Haymarket H1 - Utilities affecting the construction of OHLE foundations	0		0	1,056	1,056
546	Increased number of drainage boxes including installation	0		0	21,482	21,482
547	Haymarket H1 - Third Party (McNicholas) affecting ability to progress the works	0		0	2,180	2,180
554	St Andrew Square & Shandwick Place - Traffic Management Requirements	0		0	20,367	20,367
562	On Street Generally - OLE Design Changes for On Street Section (PMC 045) - SIEMENS DESIGN WORKS	25,000		0	0	25,000
567	On Street Generally - Drainage Design Changes Due to Utilities Conflicts	25,000		0	0	25,000
571	Hope Street Junction Design	10,000		0	0	10,000
594	Edinburgh Gateway slope option - design costs	0		-200,000	0	-200,000
599	Floating track slab	0		0	-230,000	-230,000
600	Shandwick place - OLE bases affecting utilities (Piling)	0		0	1,713	1,713
606	York Place - Waverley Bridge - Works Delayed and disrupted as a result of works carried out by Third parties	0		0	9,424	9,424

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Infraco Cost Report Section 8 - Period Movement

Ref No.	Description	Approved Off	Approved On	In Progress Off	In Progress On	Total
607	Delete 110v sockets on On Street Tram Stops	0		-1,654	0	-1,654
608	Delete 110v sockets on Off Street Tram Stops	0		-20,351	0	-20,351
610	Edinburgh Gateway - Siemens Long Lead Items	0		-65,000	0	-65,000
629	Utilities affecting Track Excavation at Shandwick Place (S1)	0		0	-1,261	-1,261
630	Utilities affecting Track Excavation at Shandwick Place (S2)	0		0	-200	-200
635	Amend on street drainage scope	0		0	-2	-2
636	Twin Crossing at Lochside Avenue	20,000		-140,000	0	-120,000
639	York Place - Traffic Management Design	0		0	-34,261	-34,261
643	Edinburgh Gateway Construction	3,416,010		-3,875,000	0	-458,990
645	Princes Street Outstanding Works	0		0	13,542	13,542
647	Design work to support VE on carriageway reconstruction & kerb realignment	50,000		-50,000	0	0
648	Cabinet Position For Street Lighting - design	10,000		-10,000	0	0
653	Provision of IFC Drawings in DWG CAD format	4,924		-4,924	0	0
657	Drainage As Built Drawings - Princes Street	15,000		-15,000	0	0
662	Eastfield Avenue Topographical Survey	3,000		-3,000	0	0

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Infraco Cost Report Section 8 - Period Movement

Ref No.	Description	Approved Off	Approved On	In Progress Off	In Progress On	Total
664	Gogar Castle Access Road - Additional High Friction Surfacing	6,000		-6,000	0	0
665	Removal of Princes Street "plug"	0		0	5,000	5,000
666	Pedestrian gate next to the vehicle access gate at the ScotRail Depot.	2,000		-2,000	0	0
667	Call off service to respond to Network Rail TQs and interface issues	9,000		0	0	9,000
672	Amend drainage drawings to incorporate changes introduced through redesign process	15,000		0	0	15,000
678	Temporary traffic management design at York Place to keep bus station access open	0		0	-10,000	-10,000
679	Works to prevent water stagnation at Depot (L8 Compliance)	2,500		-2,500	0	0
682	Desclope work associated with street lighting, road signage & traffic signals	0		0	-500,000	-500,000
683	Carry out trial holes to locate 125mm diameter pipe at Depot	5,000		-5,000	0	0
685	Provide technical information on Lindsay Road works	5,000		-5,000	0	0
687	Relaxation of specification Appendix 11/1 to allow new in lieu of recovered whin kerbs	0		0	60,705	60,705
689	CAD resource and engineering support to revise drawings to show the layout required for Road Sign Bases, Street Light Columns, Traffic Signal Poles, Ducting and Chambers to avoid utilities	50,000		0	0	50,000
690	Remedial work to repair West Shunt line at Haymarket Depot	75,000		0	0	75,000
692	Installation of additional traffic management measures around St. James Centre car park	0		0	15,000	15,000

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Infracost Cost Report Section 8 - Period Movement

Ref No.	Description	Approved Off	Approved On	In Progress Off	In Progress On	Total
693	Footway and kerbing reinstatement in Shandwick Place	0		0	10,000	10,000
694	Traffic Light de-scope to West St Andrew St	0		-170,000	0	-170,000
697	Remedials to Clifton Terrace kerb and footway	0		0	10,000	10,000
698	Removal of Contaminated Material in SP4	0		0	91,636	91,636
699	Pedestrian walkway from Haymarket Station	0		0	5,000	5,000
700	Hope Street Junction Works	0		0	30,000	30,000
701	Reinstatement works at the Airport	0		20,000	0	20,000
702	Eastfield Avenue Pedestrian Crossing	0		30,000	0	30,000
703	Repair Switch Rail at Depot	1,000		0	0	1,000
704	Redesign of St Andrew Square - East	0		5,000	0	5,000
Total		1,208,273	0	-1,985,142	-478,618	-1,255,487

Anticipated Change			275,000	370,000	645,000
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Opportunities			0	0	0
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CEC02017359_0090

Infraco Cost Report Section 8 - Period Movement

Ref No.	Description	Approved Off	Approved On	In Progress Off	In Progress On	Total
	Change to Anticipated Final Cost	1,208,273	0	-1,710,142	-108,618	-610,487
	Contributions			-723,990	0	-723,990
	Change to Anticipated Final Project Cost	1,208,273	0	-986,153	-108,618	113,503

Edinburgh Trams
City of Edinburgh Council



Reporting Period: 12-06 - Rev 0 - 15/09/2012

Utilities Cost Report: Section 1 - Utilities Summary

	Budget Information			Committed			Forecast					Third Party Contributions		Variance		Actuals	
	A	B	C = A + B	D	E	F = D + E	G	H	I	J	K = F + G + H + I + J	L	M = K - L	N = M - C	O = M / C - 1	P	Q
	Original Budget	Budget Variation	Current Budget	Original Contract Value	Approved Contract Changes	Current Contract Value	Changes in Progress	Anticipated Change	Opportunities	Risk / Provision	Anticipated Final Cost	Estimated Contribution Value	Anticipated Final Project Cost	Budget Variance (Value)	Budget Variance (%)	Cost of Work Done	Outstanding Amount
Post Settlement Utilities	2,912	9,350	12,262	2,912	9,350	12,262	0	7,553	0	0	19,815	-188	19,627	7,365	60.1%	13,578	-1,316
McNicholas	1,812	9,064	10,876	1,812	9,064	10,876	0	5,311	0	0	16,187	-188	15,999	5,123	47.1%	12,188	-1,312
01 Conflicts	1,812	4,144	5,956	1,812	4,144	5,956		3,309			9,265		9,265	3,309	55.6%	6,701	-745
01A Drainage		1,980	1,980		1,980	1,980		354			2,334		2,334	354	17.9%	2,335	-355
01B Grosvenor St / Haymarket Sewer Collapse		188	188		188	188		-27			161	-188	-27	-215	-114.4%	161	27
01C Tower Place Bridge		50	50		50	50		15			65		65	15	30.0%	65	-15
01D Princes Street Outstanding Works		143	143		143	143		-35			108		108	-35	-24.5%	70	73
02 Legacy Works		965	965		965	965		264			1,229		1,229	264	27.4%	1,071	-106
03 Standby Team		0	0		0	0		0			0		0	0		0	0
04 Management Team		788	788		788	788		728			1,516		1,516	728	92.4%	765	23
05 Design Team		775	775		775	775		665			1,440		1,440	665	85.8%	996	-221
06 Accomodation		31	31		31	31		38			69		69	38	122.6%	24	7
Statutory Utility Companies	0	1,386	1,386	0	1,386	1,386	0	1,342	0	0	2,728	0	2,728	1,342	96.8%	1,390	-4
01 Scottish Power		126	126		126	126		89			215		215	89	70.6%	123	3
02 Scottish Gas Networks		55	55		55	55		70			125		125	70	127.3%	48	7
03 Scottish Water		693	693		693	693		771			1,464		1,464	771	111.3%	795	-102
04 Virgin Media		104	104		104	104		155			259		259	155	149.0%	175	-71
05 Verizon		20	20		20	20		-14			6		6	-14	-70.0%	0	20
06 Cable & Wireless		49	49		49	49		84			133		133	84	171.4%	50	-1
07 Fibrenet		250	250		250	250		-62			188		188	-62	-24.8%	188	62
08 BT		89	89		89	89		410			499		499	410	460.7%	70	19
09 Siemens		0	0		0	0		14			14		14	14		8	-8
12 Contributions (all companies)		0	0		0	0		-175			-175		-175	-175		-67	67
00 Legacy Works	1,100	-1,100	0	1,100	-1,100	0		900			900		900	900		0	0

Comments:
All values are in £k.

Risk
Refer to Risk register for risks identified against McNicholas programme
All risk is held at programme level. This section of the cost report makes no allowance for risk.

Actions

CEC02017359_0092

Edinburgh Trams
City of Edinburgh Council



Section 1 - Tramco Commercial Summary

	Budget Information			Committed			Forecast					Third Party Contributions		Variance		Actuals	
	A	B	C = A + B	D	E	F = D + E	G	H	I	J	K = F + G + H + I + J	L	M = K - L	N = M - C	N = M / C - 1	O	P
	Original Budget	Budget Variation	Current Budget	Original Contract Value	Approved Contract Changes	Current Contract Value	Changes in Progress	Anticipated Change	Opportunities	Risk / Provision	Anticipated Final Cost	Estimated Contribution Value	Anticipated Final Project Cost	Budget Variance (Value)	Budget Variance (%)	COWD to Date	Outstanding Amount
Trams	62,400	5	62,405	63,645	5	63,650	35	150	0	0	63,835	-150	63,685	1,280	2.29%	60,593	3,057
CAF	62,400	5	62,405	63,581	5	63,586	35	150	0	0	63,771	-150	63,621	1,216	2.19%	60,529	3,057
01 Trams	55,042	0	55,042	55,042	0	55,042	0	0			55,042	0	55,042	0	0.00%	52,069	2,973
02 Tram Maintenance Mobilisation	2,276	0	2,276	2,276	0	2,276	0	0			2,276	0	2,276	0	0.00%	2,116	160
03 Depot Equipment	740	0	740	740	0	740	0	0			740	0	740	0	0.00%	703	37
04 Miscellaneous	73	0	73	73	0	73	0	0			73	0	73	0	0.00%	73	0
05 Modification 1 - Interior Layout	300	0	300	300	0	300	0	0			300	0	300	0	0.00%	300	0
06 Modification 2 - Delivery First Tram	38	0	38	38	0	38	0	0			38	0	38	0	0.00%	38	0
07 Phoenix and Prioritised Works	3,931	0	3,931	5,112	0	5,112	0	0			5,112	0	5,112	1,181	30.04%	5,112	0
10 Post Mediation Change		5	5		5	5	35	150			190	-150	40	35	3700.00%	118	-113
Non CAF	0	0	0	64	0	64	0	0	0	0	64	0	64	64	#DIV/0!	64	0
01 Miscellaneous Costs		0	0	64		64					64		64	64	#DIV/0!	64	0

Comments:
Miscellaneous costs were expended prior to mediation and have been allocated to this budget

Risk
Refer to Risk register for risks identified against infraco programme
All risk is held at programme level. This section of the cost report makes no allowance for risk.
Refer to the outputs of the QCRA/QSRA for further information

Actions

Appendix 4 – Change Log

TRF No.	FWC No.	UO No.	Location	Description	Reason for Change	On/Off Street	Class 45/ Subclass	Category	Owner	Due	Estimate Returned	Value (Book)	Estimate Change (Value/Book)	Time Implications	Approved by	Date Issued	TO BE REBID	Comments
NO.														CE/EA		W/LOADED OUT		
605.2	86	545.2	Deard	Sub station switching (NWS) TO 1415.0570688.203.2	Sub station control not in place	On Street	Class 80	UC	SM	N/A	1	N/A	0.00	None	03/07/2012	03/07/2012	03/07/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
606	79	N/A	Ton Place - Western Bridge	Work completed and displaced in result of works carried out by Council 11th October on Tram Stop	Utilities conflict	On Street	Schedule 45	FAW	FAW	N/A	N/A	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	INCURRED PERIOD (NO 14) STARTING
607	98	N/A	On Street - Generally	Street No Longer Required	Schedule 45	On Street	Schedule 45	CA	CA	02/04/2012	02/04/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
608	9	N/A	On Street - Generally	Street No Longer Required	Schedule 45	On Street	Schedule 45	CA	CA	02/04/2012	02/04/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
609	3	574	Off Street - Section 1A	Tram Stop	Confirmation of requirements and update	Off Street	Class 80	CA	CA	02/04/2012	02/04/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
610	146	546	Edinburgh Gateway	Street No Longer Required	Order for 24E pole at Trunked	Off Street	Class 80	DC	DC	02/04/2012	02/04/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
611	114	N/A	On Street - Generally	Excavation for Track 518 from the Utilities Converter	Addressing utility at site in way that will not impact on tram stop	On Street	Schedule 45	UC	UC	10/03/2012	10/03/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
612	105	N/A	On Street - Generally	Tram Stop, Bundling Changes - ON STREET	Accommodate bundling changes being	On Street	Schedule 45	CA	CA	26/04/2012	26/04/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
612.1	102	N/A	On Street - Generally	Tram Stop, Bundling Changes - ON STREET	Accommodate bundling changes being	On Street	Schedule 45	CA	CA	10/03/2012	10/03/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
613	103	N/A	On Street - Generally	Tram Stop, Bundling Changes - ON STREET	Accommodate bundling changes being	On Street	Schedule 45	CA	CA	26/04/2012	26/04/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
614	104	N/A	On Street - Generally	Tram Stop, Bundling Changes - ON STREET	Accommodate bundling changes being	On Street	Schedule 45	CA	CA	26/04/2012	26/04/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
615	32	546	Off Street - Section 2A	Design work for blocking off of the wall under the Hypocaust road at a result of the scope of work being confirmed	Required by NM to block off road	Off Street	Class 80	DC	DC	26/04/2012	26/04/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
615.1	36.1	N/A	Off Street - Section 2A	Design work for blocking off of the wall under the Hypocaust road at a result of the scope of work being confirmed	Required by NM to block off road	Off Street	Class 80	DC	DC	26/04/2012	26/04/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
616	32	547	Off Street - Section 2A	Contract work for blocking off of the wall under the Hypocaust road at a result of the scope of work being confirmed	Required by NM to block off road	Off Street	Class 80	DC	DC	26/04/2012	26/04/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
617	105	N/A	Off Street - Generally	Tram Stop, Bundling Changes - OFF STREET	Accommodate bundling changes being	Off Street	Class 80	CA	CA	26/04/2012	26/04/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
617.1	208	N/A	Off Street - Generally	Tram Stop, Bundling Changes - OFF STREET	Accommodate bundling changes being	Off Street	Class 80	CA	CA	10/03/2012	10/03/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
618	112	578	Off Street - Depot	Sign Report 180mm Diameter Manhole - T2739	Replacement by 300mm Water	Off Street	Class 80	SM	SM	03/03/2012	03/03/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
619	106	575	Off Street - Depot	Omit Track Welding Equipment	All track welding is specialist activity the maintenance will not have the capabilities in	Off Street	Class 80	DC	DC	01/03/2012	01/03/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
620	115	569	Off Street - Airport Tram Stop	Airport Tram Stop Design	Program with design for Airport Tram Stop	Off Street	Class 80	SM	SM	10/03/2012	10/03/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
620.1	115	569.1	Off Street - Airport Tram Stop	Airport Tram Stop Design	Program with design for Airport Tram Stop	Off Street	Class 80	SM	SM	10/03/2012	10/03/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
621	111	567	Site Work - Defined HV Equipment	Amend the dates of the HV meter installation at explosion, Bankhead, James, Hypocaust and Calverley (see tabulations) to align more closely with the power supply in required for testing and commissioning	Agree method of recovery in C.C. paving	Site Work	Class 80	DC	DC	16/03/2012	16/03/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
622	117	569	Site Work - LV Power Requirement for ETN	Agreement on Method of recovery for LV power for sub station and Tram Stop	Agree method of recovery in C.C. paving	Site Work	Class 80	DC	DC	16/03/2012	16/03/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
623	120	590	Depot - Change Report	Repair minor damage to Depot	Report	Off Street	Class 80	DC	DC	16/03/2012	16/03/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
624	116	594	Depot - Compressed Air Supply to Depot, density	Supply and install compressed air supply to provide a compressed air supply to the depot empty pistons and the workshop	Request from CAF	Off Street	Class 80	DC	DC	16/03/2012	16/03/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
625	113	N/A	On Street - Generally	On Street - Generally	On Street - Generally	On Street	Class 80	DC	DC	16/03/2012	16/03/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
626	141	N/A	Off Street - Edinburgh Gateway Tram Stop	Advanced procurement of Edinburgh Gateway Materials and Equipment	Advanced procurement of Edinburgh Gateway Materials and Equipment	Off Street	Class 80	SM	SM	10/03/2012	10/03/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
626.1	141	N/A	Off Street - Edinburgh Gateway Tram Stop	Advanced procurement of Edinburgh Gateway Materials and Equipment	Advanced procurement of Edinburgh Gateway Materials and Equipment	Off Street	Class 80	SM	SM	10/03/2012	10/03/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
627	113	579	On Street - Pedestrian General	Order protective guard rail in the area outside of 14th Church	Order protective guard rail in the area outside of 14th Church	On Street	Class 80	DC	DC	16/03/2012	16/03/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
628	186	N/A	MAJOR A6 BUILT	Bring A6 built up to date in result utility diversions	Bring A6 built up to date in result utility diversions	Site Work	Class 80	DC	DC	16/03/2012	16/03/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
629	29	N/A	On Street - Section 1D End of Network 31	Utilities affecting Track Excavation at S1	Utilities affecting Track Excavation at S1	On Street	Schedule 45	FAW	FAW	10/03/2012	10/03/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
630	100	N/A	On Street - Section 1D to Network 32 (At Road Phase)	Utilities affecting Track Excavation at S2	Utilities affecting Track Excavation at S2	On Street	Schedule 45	FAW	FAW	10/03/2012	10/03/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
631	101	N/A	On Street - Section 1D to Network 32 (At Road Phase)	Third parties affecting ability to progress excavating Track Box	Third parties affecting ability to progress excavating Track Box	On Street	Schedule 45	FAW	FAW	10/03/2012	10/03/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
632	118	570	Off Street - Depot	Depot Building water aggression resolution	Depot Building water aggression resolution	Off Street	Class 80	SM	SM	16/03/2012	16/03/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
632.1	118	570.1	Off Street - Depot	Depot Building water aggression resolution	Depot Building water aggression resolution	Off Street	Class 80	SM	SM	16/03/2012	16/03/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
633	119	N/A	On Street - James St	Process R Paving at junction (revised) of Centre N	Process R Paving at junction (revised) of Centre N	On Street	Schedule 45	UC	UC	22/03/2012	22/03/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
634	123	N/A	On Street - Calverley Lane	Construction of depot installation - 14th Church to Calverley Lane row by row	Construction of depot installation - 14th Church to Calverley Lane row by row	On Street	Schedule 45	UC	UC	22/03/2012	22/03/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.
635	126.1.2	N/A	On Street - Orange St	On Street Orange St	On Street Orange St	On Street	Schedule 45	UC	UC	20/03/2012	20/03/2012	N/A	N/A	None	04/04/2012	04/04/2012	04/04/2012	NOTE: SAME SUB CONTROL ELEMENTS FOR PERIOD TO BE INCLUDED IN 14TH OCTOBER, ANTICIPATED TO CONTRIBUTE TO 14MS.

IPC No.	IPC No.	UD No.	Location	Description	Reason for Change	On/Off Street	Class 80 / Schedule 45 Instruction	IC / Change Driver	Change Category (IC/Change)	Letter Ref	Estimate Returned RT	Date Estimate Received	Estimate Value (Design)	Estimate Value (Construction)	Time Implications	Date Issued to CEC	Approved by CEC/IA	Date Issued to CEC	Approved Cost for Changes	Date Issued	TO BE ISSUED / W/LOADED OUT	Comments	
658	124	371	Off Street - Ladbroke Place	Tree Cutting at Ladbroke Avenue	Priority of red lined tree cutting pipe and valves are within DEF + 2m envelope.	On Street	Class 80	DM	UC	22/06/2012	25/06/2012	N			TBA	21/06/2012	DEC	21/06/2012		21/06/2012	RF COM 8302		
681	124	371.1	Off Street - Ladbroke Place	Tree Cutting at Ladbroke Avenue. IFA includes signed 12 from Scottish Water.	Priority of red lined tree cutting pipe and valves are within DEF + 2m envelope.	Off Street	Class 80	DM	UC	24/06/2012	24/06/2012	N			TBA	01/06/2012	DEC	01/06/2012		01/06/2012	RF COM 8309		Update 31.12.2 Estimate still to be submitted by 8th evening quote from sub contractor.
657	137		On Street	SEF Pedestrian Crossing	Client Substation	On Street	Schedule 45	IL	CC - Client Request	24/06/2012	RF COM 8306	N/A - Schedule 45	N/A - Schedule 45		TBA	26/06/2012	DEC	26/06/2012		26/06/2012	N/A - Schedule 45	N/A - Schedule 45	Urgent TNC estimated to issue by DEC
658	143		On Street	Client Substation	On Street to beaker required.	On Street	Schedule 45	IL	CC	30/06/2012	RF COM 8345	N/A - Schedule 45	N/A - Schedule 45		TBA	26/06/2012	DEC	26/06/2012		26/06/2012	N/A - Schedule 45	N/A - Schedule 45	
659	144		On Street	Client Substation	On Street to allow commencement of work for Phase.	On Street	Schedule 45	IL	CC	30/06/2012	RF COM 8346	N/A - Schedule 45	N/A - Schedule 45		TBA	01/06/2012	DEC	01/06/2012		01/06/2012	N/A - Schedule 45	N/A - Schedule 45	Advised to issue by DEC
659.1	144		On Street	Client Substation	On Street to allow commencement of work for Phase.	On Street	Schedule 45	IL	CC	13/06/2012	RF COM 8320	N/A - Schedule 45	N/A - Schedule 45		TBA	11/06/2012	DEC	11/06/2012		11/06/2012	N/A - Schedule 45	N/A - Schedule 45	
659.2	144		On Street	Client Substation	On Street to allow commencement of work for Phase.	On Street	Schedule 45	IL	CC	12/07/2012	RF COM 8348	N/A - Schedule 45	N/A - Schedule 45		TBA	14/07/2012	DEC	14/07/2012		14/07/2012	N/A - Schedule 45	N/A - Schedule 45	URGENT TNC FOR WORK PLACE
659.3	144		On Street	Client Substation	On Street to allow construction to progress.	On Street	Schedule 45	IL	CC	14/06/2012	RF COM 8315	N/A - Schedule 45	N/A - Schedule 45		TBA	13/06/2012	DEC	13/06/2012		13/06/2012	N/A - Schedule 45	N/A - Schedule 45	
659.4	144		On Street	Client Substation	On Street to allow commencement of work for Phase. New TM implementation.	On Street	Schedule 45	IL	CC	04/07/2012	RF COM 8351	N/A - Schedule 45	N/A - Schedule 45		TBA	03/07/2012	DEC	03/07/2012		03/07/2012	N/A - Schedule 45	N/A - Schedule 45	
660	145	350	On Street - Insurance of Corning	Agreement on Method of Recovery for Insurance Premium	Method of Recovery for Insurance Premium	On Street	Class 80	SE	UC	30/06/2012	RF COM 8342	N/A	N/A		TBA	28/06/2012	DEC	28/06/2012		11/07/2012	RF COM 8445	00	CONTRACTOR BETWEEN 12 AND 18.5.12 APPROVED TNC.
661	147	N/A	On Street - Cathedral Lane	On Street - Cathedral Lane	On Street - Cathedral Lane	On Street	Schedule 45	IL	CC	12/06/2012	RF COM 8380	N/A	N/A		TBA	11/06/2012	DEC	11/06/2012		11/06/2012	N/A - Schedule 45	N/A - Schedule 45	
662	176		On Street - York Place Temporary Tram Stop	On Street - York Place Temporary Tram Stop	On Street - York Place Temporary Tram Stop	On Street	Schedule 45	IL	CC	14/06/2012	RF COM 8308	N/A - Schedule 45	N/A - Schedule 45		TBA	13/06/2012	DEC	13/06/2012		13/06/2012	N/A - Schedule 45	N/A - Schedule 45	
663	148	372	Off Street - Edinburgh Gateway	Edinburgh Gateway Construction	Edinburgh Gateway Construction	Off Street	Class 80	SL	CC	14/06/2012	RF COM 8364	N/A - Schedule 45	N/A - Schedule 45		TBA	14/06/2012	DEC	14/06/2012		14/06/2012	RF COM 8364	Y	Issue 46.12 To Issue
663.1	148	372.1	Off Street - Edinburgh Gateway	Edinburgh Gateway Construction	Edinburgh Gateway Construction	Off Street	Class 80	SL	CC	ISSUED AS TOO	ISSUED AS TOO	N/A - Schedule 45	N/A - Schedule 45		TBA	24/06/2012	DEC	24/06/2012		24/06/2012	RF COM 8369	Y	Issue 46.12 To Issue
663.2	148	372.2	Off Street - Edinburgh Gateway	Edinburgh Gateway Construction	Edinburgh Gateway Construction	Off Street	Class 80	SL	CC	ISSUED AS TOO	ISSUED AS TOO	N/A - Schedule 45	N/A - Schedule 45		TBA	27/06/2012	DEC	27/06/2012		27/06/2012	RF COM 8336	00	Now include Design. Call from previous TNC's
664	38	551	On Street - On Street Cell pole	On Street - On Street Cell pole	On Street - On Street Cell pole	On Street	Class 80	SL	CC	27/06/2012	RF COM 8411	N/A - Schedule 45	N/A - Schedule 45		TBA	26/06/2012	DEC	26/06/2012		26/06/2012	RF COM 8411	00	ISSUED TO BE SUBMITTED TO THE BOARD. A TECHNICAL REPORT TO BE SUBMITTED TO THE BOARD ON CLASH WITH VENTILATION COVER LETTER 4/5/2012.
665	162.16.1.0	N/A	On Street - Prince St	On Street - Prince St	On Street - Prince St	On Street	Schedule 45	IL	CC	04/06/2012	RF COM 8364	N/A - Schedule 45	N/A - Schedule 45		TBA	11/06/2012	DEC	11/06/2012		11/06/2012	N/A - Schedule 45	N/A - Schedule 45	
666	143	N/A	On Street - Prince St	On Street - Prince St	On Street - Prince St	On Street	Schedule 45	IL	CC	12/06/2012	RF COM 8362	N/A - Schedule 45	N/A - Schedule 45		TBA	11/06/2012	DEC	11/06/2012		11/06/2012	N/A - Schedule 45	N/A - Schedule 45	
667	150	377	On Street	On Street	On Street	On Street	Class 80	SL	CC	12/06/2012	RF COM 8378	N/A	N/A		TBA	11/06/2012	DEC	11/06/2012		12/06/2012	RF COM 8378	Y	
667.1	150	377.1	On Street	On Street	On Street	On Street	Class 80	SL	CC	10/07/2012	RF COM 8438	N/A	N/A		TBA	09/07/2012	DEC	09/07/2012		10/07/2012	RF COM 8438	Y	
667.2	150	377.2	On Street	On Street	On Street	On Street	Class 80	SL	CC	06/08/2012	RF COM 8485	N/A	N/A		TBA	30/07/2012	DEC	30/07/2012		06/08/2012	RF COM 8489	N	ISSUED AS 46.13 TOO
667.3	150	377.3	On Street	On Street	On Street	On Street	Class 80	SL	CC	14/08/2012	RF COM 8507	N/A	N/A		TBA	04/08/2012	DEC	04/08/2012		14/08/2012	RF COM 8509	Y	
668	151	379	On Street - Prince St	On Street - Prince St	On Street - Prince St	On Street	Class 80	SL	CC	12/06/2012	RF COM 8383	N/A	N/A		TBA	11/06/2012	DEC	11/06/2012		12/06/2012	RF COM 8391	Y	
669			On Street - Prince St	On Street - Prince St	On Street - Prince St	On Street	Class 80	SL	CC	19/06/2012	RF COM 8384	N/A - Schedule 45	N/A - Schedule 45		TBA	18/06/2012	DEC	18/06/2012		18/06/2012	N/A - Schedule 45	N/A - Schedule 45	
670	152		On Street - Prince St	On Street - Prince St	On Street - Prince St	On Street	Class 80	SL	CC	22/06/2012	RF COM 8390	N/A	N/A		TBA	18/06/2012	DEC	18/06/2012		18/06/2012	RF COM 8391	N	ISSUED AS 46.13 TOO
671	153		Off Street - Tram Loop	Off Street - Tram Loop	Off Street - Tram Loop	Off Street	Class 80	SM	CC	22/06/2012	RF COM 8390	N/A	N/A		TBA	18/06/2012	DEC	18/06/2012		18/06/2012	RF COM 8391	N	ISSUED AS 46.13 TOO

Appendix 5 – Risk Register

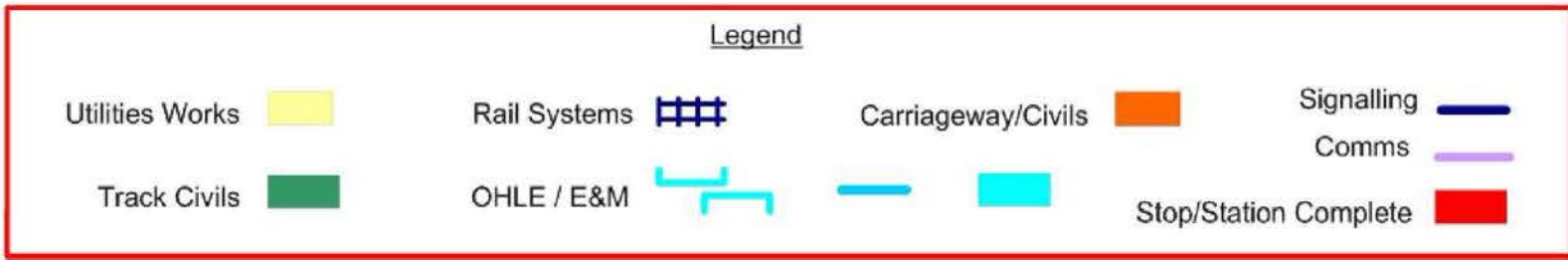
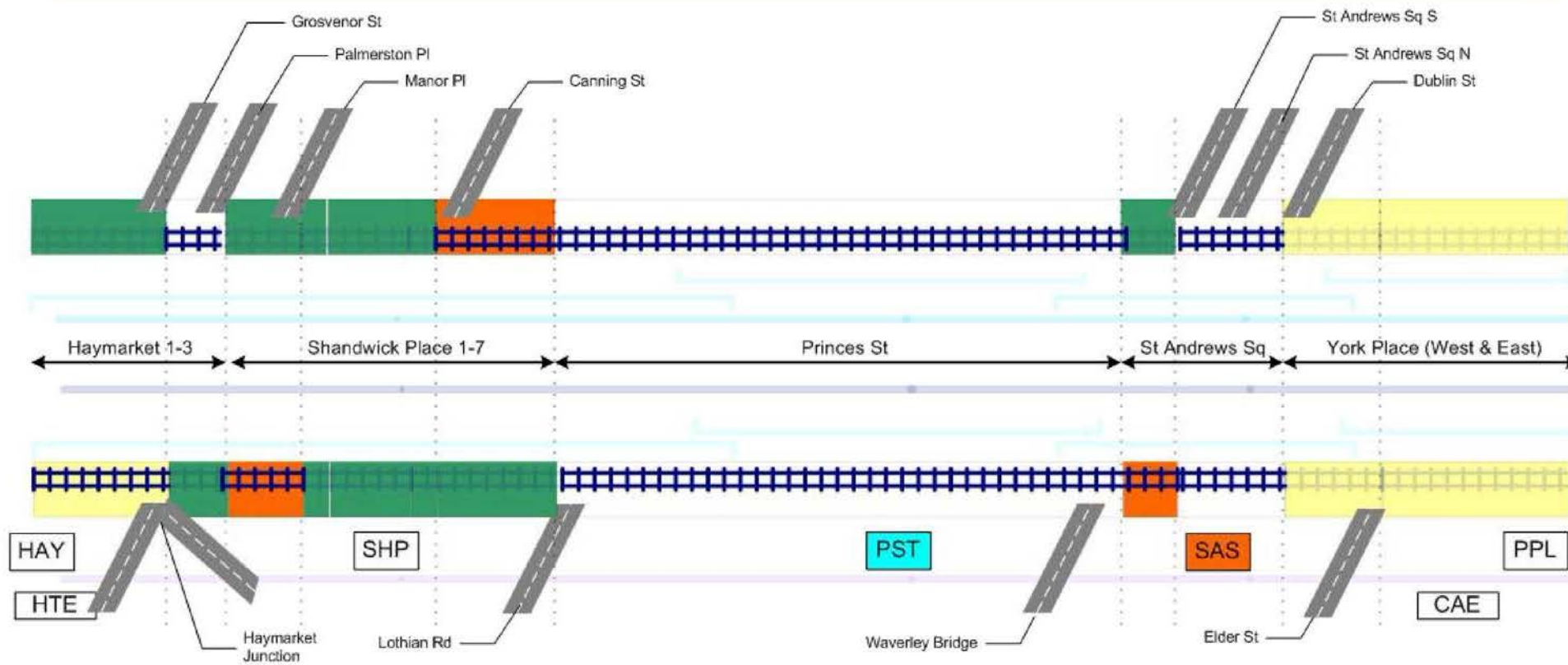
Edinburgh Term Project Risk Register

Risk ID	Risk Description	Risk Category	Risk Status	Risk Level				Risk Rating				Risk Owner	Risk Mitigation Strategy	Risk Review Date	Risk Review Frequency	Risk Review Status
				High	Medium	Low	Very Low	High	Medium	Low	Very Low					
				1	2	3	4	5	6	7	8					
ED001	Unavailability of critical resources for construction	Operational	Active	High	Medium	Low	Very Low	High	Medium	Low	Very Low	Project Manager	Identify critical resources early and secure them. Develop contingency plans.	15/01/2016	Quarterly	Active
ED002	Delays in construction progress due to weather	Operational	Active	High	Medium	Low	Very Low	High	Medium	Low	Very Low	Project Manager	Monitor weather forecasts and adjust construction schedule accordingly.	15/01/2016	Quarterly	Active
ED003	Cost overruns due to material price increases	Financial	Active	High	Medium	Low	Very Low	High	Medium	Low	Very Low	Project Manager	Lock in material prices early through fixed-price contracts.	15/01/2016	Quarterly	Active
ED004	Quality issues in construction work	Operational	Active	High	Medium	Low	Very Low	High	Medium	Low	Very Low	Project Manager	Implement strict quality control measures and regular inspections.	15/01/2016	Quarterly	Active
ED005	Health and safety incidents on site	Operational	Active	High	Medium	Low	Very Low	High	Medium	Low	Very Low	Project Manager	Conduct regular safety training and enforce strict safety protocols.	15/01/2016	Quarterly	Active
ED006	Delays in procurement of materials	Operational	Active	High	Medium	Low	Very Low	High	Medium	Low	Very Low	Project Manager	Identify alternative suppliers and maintain good relationships with key vendors.	15/01/2016	Quarterly	Active
ED007	Changes in project requirements	Operational	Active	High	Medium	Low	Very Low	High	Medium	Low	Very Low	Project Manager	Establish a clear change control process and communicate changes effectively.	15/01/2016	Quarterly	Active
ED008	Communication breakdown between stakeholders	Operational	Active	High	Medium	Low	Very Low	High	Medium	Low	Very Low	Project Manager	Hold regular stakeholder meetings and use clear communication channels.	15/01/2016	Quarterly	Active
ED009	Delays in construction progress due to site access issues	Operational	Active	High	Medium	Low	Very Low	High	Medium	Low	Very Low	Project Manager	Coordinate with local authorities to resolve access issues early.	15/01/2016	Quarterly	Active
ED010	Delays in construction progress due to planning permission	Operational	Active	High	Medium	Low	Very Low	High	Medium	Low	Very Low	Project Manager	Engage with planning authorities early and provide all necessary information.	15/01/2016	Quarterly	Active
ED011	Delays in construction progress due to design changes	Operational	Active	High	Medium	Low	Very Low	High	Medium	Low	Very Low	Project Manager	Finalize design early and implement a robust design change management process.	15/01/2016	Quarterly	Active
ED012	Delays in construction progress due to contractor selection	Operational	Active	High	Medium	Low	Very Low	High	Medium	Low	Very Low	Project Manager	Conduct thorough tender processes and select the most qualified contractor.	15/01/2016	Quarterly	Active
ED013	Delays in construction progress due to site preparation	Operational	Active	High	Medium	Low	Very Low	High	Medium	Low	Very Low	Project Manager	Complete site preparation work early and ensure it meets all requirements.	15/01/2016	Quarterly	Active
ED014	Delays in construction progress due to foundation work	Operational	Active	High	Medium	Low	Very Low	High	Medium	Low	Very Low	Project Manager	Monitor foundation work closely and address any issues immediately.	15/01/2016	Quarterly	Active
ED015	Delays in construction progress due to structural steelwork	Operational	Active	High	Medium	Low	Very Low	High	Medium	Low	Very Low	Project Manager	Coordinate with steel fabricator and ensure timely delivery of materials.	15/01/2016	Quarterly	Active
ED016	Delays in construction progress due to roof construction	Operational	Active	High	Medium	Low	Very Low	High	Medium	Low	Very Low	Project Manager	Monitor roof construction progress and ensure proper sequencing.	15/01/2016	Quarterly	Active
ED017	Delays in construction progress due to internal fit-out	Operational	Active	High	Medium	Low	Very Low	High	Medium	Low	Very Low	Project Manager	Coordinate with fit-out contractor and ensure timely start of work.	15/01/2016	Quarterly	Active
ED018	Delays in construction progress due to final inspection	Operational	Active	High	Medium	Low	Very Low	High	Medium	Low	Very Low	Project Manager	Prepare for final inspection early and address any outstanding issues.	15/01/2016	Quarterly	Active
ED019	Delays in construction progress due to handover	Operational	Active	High	Medium	Low	Very Low	High	Medium	Low	Very Low	Project Manager	Coordinate with client and ensure all handover requirements are met.	15/01/2016	Quarterly	Active
ED020	Delays in construction progress due to project completion	Operational	Active	High	Medium	Low	Very Low	High	Medium	Low	Very Low	Project Manager	Monitor overall project progress and ensure all milestones are met.	15/01/2016	Quarterly	Active

ID	Title	Description	Status	Priority	Risk Register				Risk Register				Risk Register						
					High	Medium	Low	Very Low	High	Medium	Low	Very Low	High	Medium	Low	Very Low			
ED001
ED002
ED003
ED004
ED005
ED006
ED007
ED008
ED009
ED010

Appendix 6 – On Street Schematic

On Street Progress Schematic

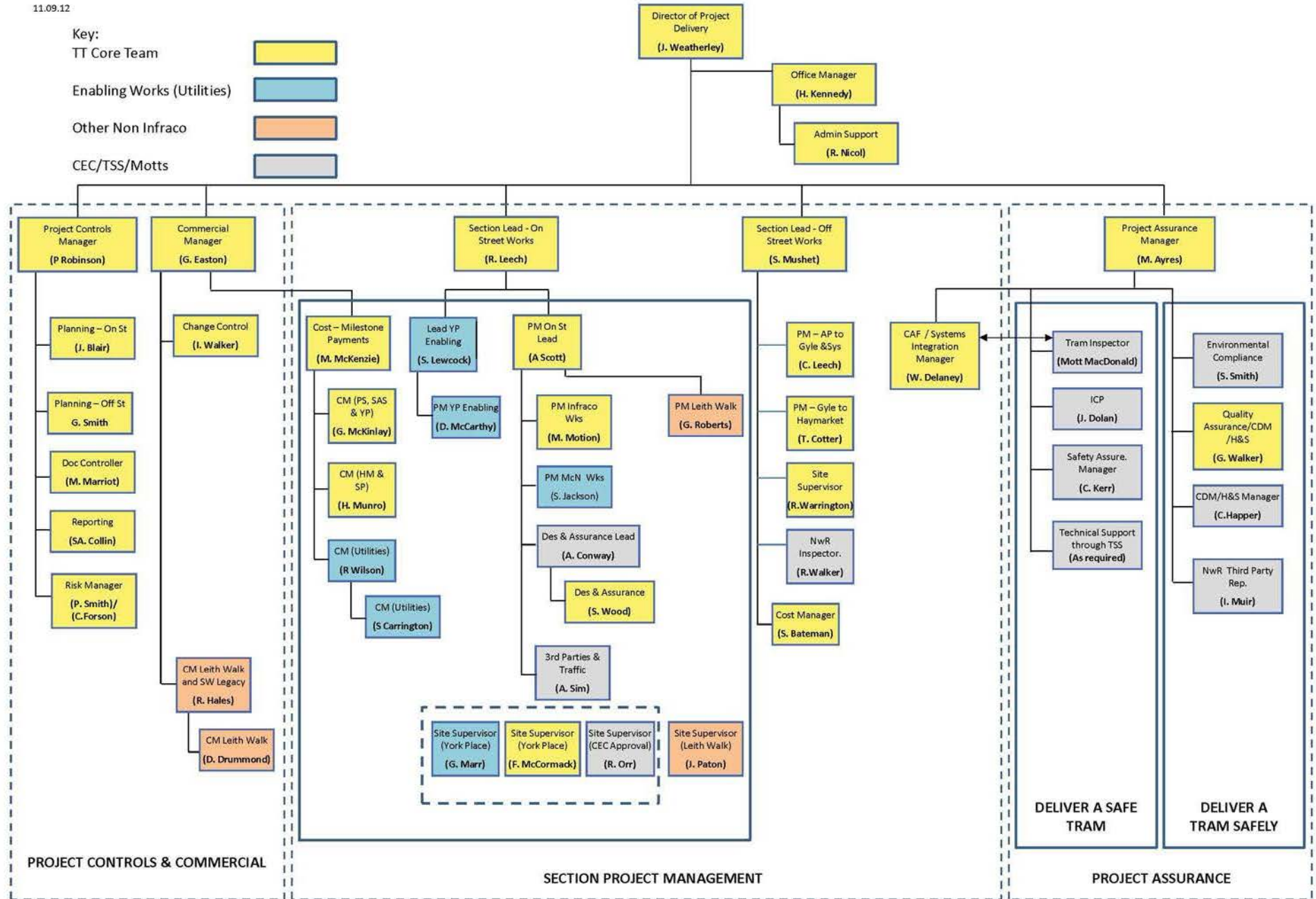


Appendix 7 – Organisation Chart

11.09.12

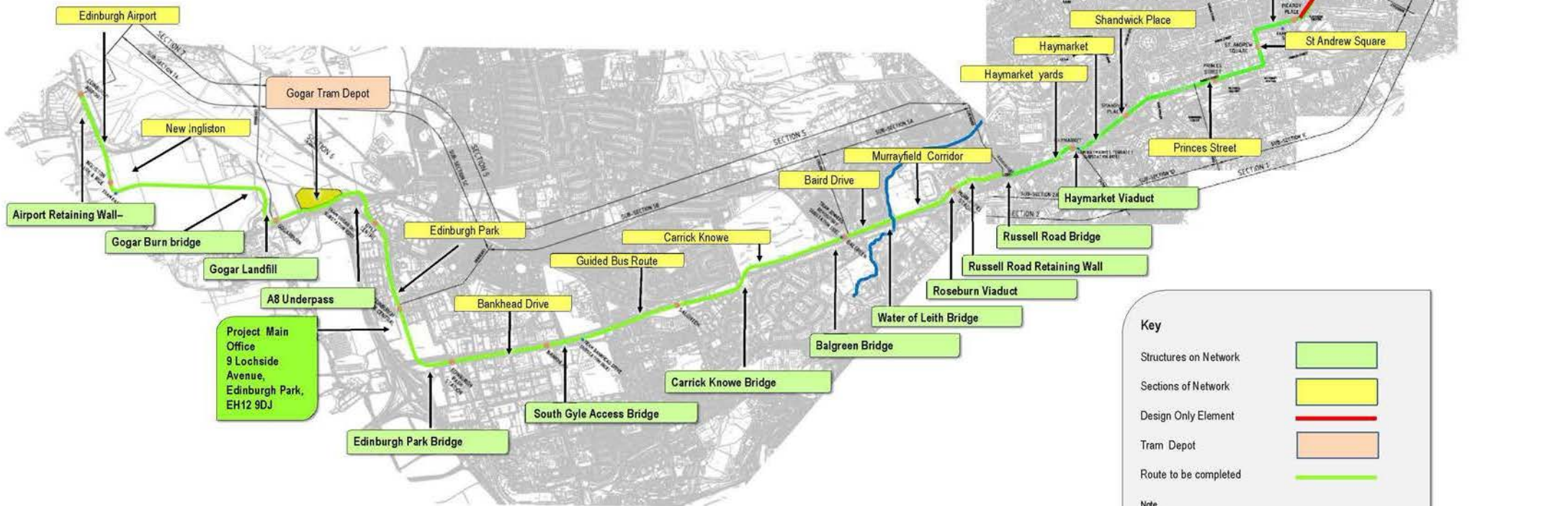
Key:

- TT Core Team
- Enabling Works (Utilities)
- Other Non Infraco
- CEC/TSS/Motts



Appendix 8 – Route Map

Edinburgh Tram Network – Route Map & Key Locations



Appendix 9 – Acronyms

ACRONYMS

ACCB	Accommodation and Boundary Works
AiP	Approval in Principle
ANC	Advice of Non Compliance
APPP	Prior Approvals – Detail Design
APPR	Approvals
APPT	Technical Approvals – Detail Design
ARCH	Architecture
AUXI	Auxilliary Power
BAA	British Airports Authority
BBS	Bilfinger Berger Siemens
BLDS	Buildings
BRDG	Bridges
BSC	Bilfinger Berger / Siemens / CAF - previous consortium
CAF	Tram Provider - (Construcciones y Auxiliar de Ferrocarriles)
CAR	Corrective Action Request
CAR	Water Environment (Controlled Activities) Regulations 2011
CDM	Construction (Design and Management) Regulations 2007
CEC	City of Edinburgh Council
CECS	CEC Services
CFS	Case for Safety
CHAR	Charette Changes
COCP	Code of Construction Practice
COMM	Commissioning
CVI	Confirmation of Verbal Instruction
DAS	Design Assurance Statement
DASB	Design – As Built
DaST	Deliver a Safe Tram
DDAP	Detailed Design Assurance Plan
DEMO	Demolition
DEPO	Depot
DKE	Dynamic Kinetic Envelope
DoC	Declaration of Conformity
DRAN	Drainage
DtTS	Deliver the Tram Safely
E&M	Electrical & Mechanical
EAL	Edinburgh Airport Limited
EART	Earthworks / Embankments
ELEC	Electricity
EMC	Electromagnetic Compatability
ENVI	Environmental
ER's	Employers Requirements
ESM	Engineering Safety Management
FAT	Factory Acceptance Test
FATs	Factory Acceptance Tests
GASS	Gas
GEOT	Geotechnical
HAZID	Hazard Identification Study
HAZOP	Hazard and Operability Study
HIGH	Highways
HIRA	Hazard Identification and Risk Assessment
HMRI	Railway Inspectorate
HS	Historic Scotland
HSE	Health and Safety Executive
HV	High Voltage
ICCO	Independent Certifiers Change Order
ICP	Independent Competent Person

IDC	Inter Disciplinary Check
IDR	Inter Disciplinary Review
Infraco	Infrastructure contract
ISA	Independent Safety Assessor
ISRP	Infrastructure Safety Review Panel
ITP	Inspection and Test Plan
JNCS	Junctions
KPI	Key Performance Indicator
LAND	Landscaping
LIGH	Lighting
LOLER	Lifting Operations and Lifting Equipment Regulations 1998
MANA	Management
MECH	Mechanical
MILE	Milestones
MISC	Miscellaneous
MODL	Modelling
MUDFA	Multi-Utility Diversions Framework Agreement
MUDFA	Multi Utility Diversions Framework Agreement
MULT	Multi-Discipline
NCR	Non Conformance Report
NR	Network Rail
NWR	Network Rail
O&M	Operation and Maintenance
OCC	Operational Control Centre
OCIP	Owner Controlled Insurance Policy
OCL	Overhead Catenary Line
OLE	Overhead Line Equipment
ORA	Operational Risk Assessment
ORR	Office of Rail Regulation
ORS	Operational Radio System
OTHW	Other Works
PHA	Preliminary Hazard Analysis
PLAT	Platforms
PM	Planned Maintenance
POWR	Power (Traction)
PSCC	Project Safety Certification Committee
QCRA	Quantified Cost Risk Analysis
QRA	Quantified Risk Analysis
QSRA -	Quantative Schedule Risk Analysis
RAIB	Rail Accident Investigation Branch
RAM	Reliability Availability Maintainability
REL	Railway Electrification
RFI	Request for Information
RFO	Request for Opinion
RIDDOR	Reporting of Injuries, Diseases and Dangerous Occurences Regulations 1995
ROGS	The Railway and other Guided Transport System (Safety) Regulations 2006
RSA	Road Safety Audit
RSAR	Road Safety Audit Report
S&T	Signalling and Telecoms
SAC	Safety Application Condition
SAT	System Acceptance Test
SATs	Site Acceptance tests
SCADA	Supervisory Control and Data Acquisition
SDS	System Design Services
SEPA	Scottish Environmental Protection Agency
SEWR	Sewerage
SFAIRP	So Far As Is Reasonably Practicable
SGN	Scotland Gas Networks
SI	Site Instruction
SIGN	Signalling
SIT	System Integration Test
SMS	Safety Management System
SNH	Scottish Natural Heritage
SP	Scottish Power
STAK	Stakeholder
STRL	Street Lighting
STRU	Structures / Retaining Structures
SUBM	Submissions
SUBS	Sub-Stations
SURV	Surveys

SW	Scottish Water
TPS	Traction Power Supply
T&T	Turner & Townsend
TCO	Tie Change Order
TM	Traffic Management
TNC	Tie Notice of Change
TS	Transport Scotland
TSS	Technical Support Services
UCO	Utilities Change Order
UNC	Utilities Notice of Change

Appendix 10 – DRAFT Rev 4c 22 Programme Saving - Advice Note

DRAFT Rev 4c 22 Programme Saving - Advice Note (subject to T&T internal approval and CEC final comment)

1 Introduction

1.1 Terms of reference

This note is a development of previous notes which respond to CEC's request for advice from Turner & Townsend. CEC have asked us to respond to two questions:

1. Change Order - In the first instance we were asked to advise on Infraco's entitlement to a Change Order amounting to £6.45M resulting from the removal of the embargoes and traffic management constraints on the On Street Section of the Works and how it should be evaluated commercially.
2. Consequences - The second item CEC asked us to advise on relates to the potential consequences if the contractor did not receive a Change Order for £6.45M, withdrew co-operation and pursued a dispute. In this instance CEC wish to review the wider costs and benefits of making different decisions.

In reading this advice the following should be noted:

- That there may be no merit in Infraco's claim to the £6.45M resulting from the value engineering initiatives and that Infraco are under a duty to complete by the contract completion date of 8th July 2014.
- That the value engineering programme saving is not contemplated in the Infraco Agreement or in Turner & Townsend's Contract. Turner & Townsend therefore consider there is no formal authority under its contract to advise on these matters however this note responds to a CEC request. CEC requested Turner & Townsend to provide a comparison of the possible commercial outcomes and a table is provided in Section 3 (Appraisal).
- That Turner & Townsend are not legal experts and as the contract is be-spoke, we have recommended that CEC should take legal advice regarding Infraco's entitlement to a Change Order. It is understood that legal advice has been provided, however at the time of writing CEC have requested that Turner & Townsend provide opinion without visibility of this advice.
- That this advice note does not address the issues relating to the Certifiers Opinion on the cost implications of moving from the Rev 3A programme to Rev 4 Programme which set a contract completion date of 8th July 2014.

2 Entitlement to a Change Order

There are two interpretations:

1. By entering into the VE arrangements, the parties intended to collaborate and work together to save time and money by the client removing programme embargoes (Edinburgh Festival August 2012 and 2013, and removal of Traffic Management constraints which provided the contractor larger working areas). A benefit of up to 22 weeks saving on the completion date could be realised giving up to a £12.9M saving (for a full saving of 22 weeks) which would be shared 50/50 between CEC and Infraco. Infraco are currently reimbursed their full prelims and have not suffered any loss. Under these arrangements they have an incentive to finish early.
2. Owing to ongoing issues with utilities diversions, the project would have been 22 weeks late if programme savings were not secured. Infraco have now suggested that the basis of the value engineering programme savings was that in return for them re-sequencing their programme, they should be re-imbursed 50% of the projected prelim prolongation costs that that would have resulted from an expected 22 week delay to the contract completion date of 8th July 2014.

In our view, it would appear that the purpose of the value engineering sessions were to save time and money. We also believe that value engineering programme savings are not contemplated by the Infraco Contract and that Infraco were aware that the application of programme savings was not governed by the Contract. The evidence for this is:

- The notes from the meetings, the Baseline Project Instructions Report (Jan-12) identify benefits and values. Infraco presented the costs as a saving and showed the time saving for each of the work sections. The overall project finish date was 5 February 2014. The Independent Certifier confirmed the 22 week programme saving and £6.45M cost saving to CEC and Infraco in the Report and Turner & Townsend confirmed the revised completion dates and the cost savings in their section of the report.
- Infraco presented their input to the Baseline Project Instructions report by making reference to a 22 week saving resulting in a finish date of 5th February 2014 and the resulting saving in prelims costs using the weekly prolongation costs in the contract.
- Turner & Townsend were not privy to all meetings between CEC and Infraco; however at no point in any of the value engineering meetings did Infraco seek acceleration to obviate the necessity for an extension of time as envisaged by clause 61.2. It also cannot be proven that a 22 week delay would have occurred as Infraco is under a duty to mitigate and other contract omissions and de-scoping have also reduced the volume of work to be completed by Infraco.
- Infraco maintained that the contract programme should remain as Rev 4, later to become Rev 5, and that a shadow programme Rev4C should be used to monitor any erosion of the 22 weeks saving in relation to the finish date of V.E. date of 5 February 2014. Refer to Planning Programming Meeting 1st February 2012. This arrangement is beyond the scope contemplated by the contract and reinforces Infraco's intent to work collaboratively. Turner & Townsend advised CEC on the issues associated with this approach at the time.

It is for these reasons that we believe the 1st interpretation is correct and that the final saving is determined by the principles of the intent of the value engineering. The Cost Engineering

Baseline Project Instructions did not specify how savings would be shared in the event that less than 22 weeks was saved however the Turner & Townsend paper advised that the contractual arrangements were yet to be determined. Infraco insisted that a change order was not issued at this time as this would indicate early completion and the time saving may be eroded by the requirement to delay Infraco in certain areas to enable utilities to be diverted.

We have also recently advised that there is no entitlement to standard contract Change Order for Infraco's original share of the saving and that the project is administered in accordance with the agreed project procedure of measuring the impacts (delays and time savings from ongoing de-scoping) on the original 22 week time saving. This is consistent with the intent of the value engineering, to save time and money.

The various commercial evaluation strategies and their implications are attached at Appendix B.

3 Appraisal

We have assumed that likely erosion of the 22 week saving is 11 weeks to date, based upon agreements with Infraco, *[plus a further erosion of 4 weeks owing to the opening of a single lane on the North of York Place to keep the bus station open and two lanes during the Christmas period – to be confirmed]*. This results in an overall saving of -7 weeks (-22 + 15 weeks). This does not take into account any gains from future activities, e.g. omission of new kerbs, footway and scope transfers (foundations and ducting for traffic signal poles etc). It also does not account for ongoing construction efficiencies brought about by the removal of the traffic management constraints and wider working areas.

All programme assessments are expressed in weeks as time savings or additions to the contract completion date of 8th July 2014. All cost variances are expressed against the cost report which assumes contract prelims to 8th July 2014. The scenarios are categorised under "Change Order" or "No Change Order" to identify the potential consequences as referred in Section 1.1 above. Note: All costs expressed at an average £0.59M per week as referenced in the value engineering calculations. The contract contains specific prolongations costs for each work section and sub contractor and the overall delay cost if all sections of the work were affected would be c. £0.8M excluding CEC on-costs.

In the scenarios where co-operation is withdrawn, it is assumed that a clear programme window of 8 weeks is required where Infraco vacate the sites to enable all utility diversions to be completed. In this situation Infraco would return to site and complete the works. We have not allowed for further extension of time claims or slow productivity based upon further events or poor behaviours causing delay.

In responding to CEC's request we have considered six potential scenarios and an appraisal of each is given below:

1. Change Order - BBS position, co-operate, no further ex contract claims pursued and project completed successfully
2. Change Order - BBS position, further ex contract claims pursued
3. No Change Order - Contract application, 22 week saving results in revised completion date, extensions of time granted for delay
4. No Change Order - CEC negotiation, BBS held to intent of VE and negotiation on the financial outcome
5. No Change Order CEC don't pay £6.45M Change Order, Infraco lack of co-operation, CEC win dispute
6. No Change Order - CEC don't pay £6.45M Change Order, Infraco lack of co-operation, CEC lose dispute

	Probability of a successful outcome	Programme Variance	Cost Variance	Working Arrangements (refer assumptions above)
1	Possible	-7 weeks	£6.45M	No guarantee that Infraco will co-operate going forward but the outcome may be a reduction in the risk of lack of co-operation. A number of ex contract commercial issues may still remain (mark-ups, TM, agreement of re-road re-construction re-measurement, sub-contractor claims for out of sequence working)
2	Probable - initially BBS expectation met, however no guarantee of continued co-operation.	- 7 weeks	>£6.45M to £11.2m+ dependant on basis for extension of time claims and level of disruption (Assumes 8 week extension of time c. £4.72M in excess of £6.45M)	Assumes that Infraco will pursue further ex contract claims in addition to current commercial issues (refer above)
3	Unlikely – given Infraco's stated position	- 7 weeks	> £2.35M, (based upon - (£6.45M) + £8.80M for a 15 week extension of time) plus any further extensions of time	Lack of co-operation as BBS expectation not met and possibility of further delays
4	Possible – dependent upon negotiation offer	- 7 weeks	-(£2.05M) (assuming no merit to claim and VE principle applies) to +£6.45M based upon reimbursement of contract prelims and offer to settle issue	BBS co-operation dependent upon intention to pursue a dispute, likelihood of success and amount offered in negotiation.
5	Uncertain	+ 8 weeks	£4.72M prolongation +? disruption	BBS withdraw co-operation and 8 week EoT required to conclude utilities
6	Uncertain	+ 8 weeks	£4.72M prolongation +? Disruption. £6.45M for the original VE cost share Total £11.2M+ dependant on basis for extension of time claims and level of disruption	BBS withdraw co-operation and 8 week EoT required to conclude utilities

4 Recommendation

4.1 Contract Change Order

From the papers submitted in the Baseline Project Instructions it would appear that there is no clear substantiation for Infraco to be reimbursed the contract prelims to the 8th of July 2014 and to be paid an additional £6.45M for part share of the 22 week prelim saving. The £6.45M overlaps with the contract period, i.e. the same prelims cannot be claimed twice. (Note: the exception to this could be the £0.5M additional supervisions costs included in Infraco's proposal).

From our reading of the contract, it would appear that it does not contemplate shared programme savings; however CEC should obtain advice on this point from their legal advisors.

Given these findings Turner & Townsend cannot support the issue of a standard contract change order for £6.45M.

Owing to these findings and that the contract does not contemplate shared time savings; we recommend that the issue of a standard contract change order is not applicable to this situation.

4.2 Infraco's position and wider consequences

Infraco have suggested that they may withdraw co-operation and escalate the matter to dispute resolution. This comment has been made informally and this could either be a serious threat or positioning for a negotiation.

In the event that Infraco withdraws co-operation then there may be significant time and cost consequences including the trigger to move the On-Street works to cost reimbursable if extensions of time are not provided within the contract timescales.

Infraco may consider applying for an extension of time based upon a delay analysis showing the impacts on the contract programme. The implications of the delays resulting from utilities diversions have been monitored on the delay tracker, progressed versions of the contract programme submitted each period. We have not at this stage undertaken a detailed review of the contract, however we believe that the claim for an extension of time would need to prove the mitigation measures adopted, and why unsuccessful, and acceleration measures which could be taken to mitigate the effect of delay. It would also need to recognise that the removal of the embargoes provided additional working time and also the removal of the traffic management constraints reduced the number of phases and thereby time.

Infraco can take the issue to Dispute Resolution, provided the difference of opinion arises from the Agreement. CEC should take legal advice on whether the intent of the value engineering to save time and money, the application of a shadow programme to monitor actual progress against the 22 weeks saving, falls within the scope of the Agreement.

It should also be recognised that there is no guarantee if sums are paid out that Infraco will not in the future withdraw co-operation. Infraco made commitments in the mediation agreement and the On Street Works Protocol, by withdrawing co-operation and pursuing a dispute Infraco is moving away from commitments made. In addition it should be recognised by CEC that

Infraco continue to seek maximum return on all commercial issues irrespective of the contract conditions.

Ultimately CEC will need to decide, having appraised the advice in this note along with the advice provided by their legal advisors, whether a negotiated settlement meets the best interests of the project. If it is decided to pursue a negotiated settlement, then a decision would need to be made regarding the method of payment. Our understanding is that this could take the form of the Certifier issuing a Certifier's Change Order following determination of the entitlement, or for CEC to agree to an ex contract payment which would require a side letter or other document to define what had been agreed and the commitments made by Infraco. Legal opinion should be sought on the method of certification. It should be noted that, if CEC make a decision to make a payment and to step out of the contract, then a contract amendment may be required.

The cost consequences of this solution could be -£2.05M to +£6.45M depending upon:

- Entitlement to a claim for £6.45M from the VE (i.e. would Infraco and can Infraco take the matter to dispute and win)
- Willingness of Infraco to accept that early programme completion savings provide benefit to them;
- Willingness of Infraco to commit to mediation agreements and not to pursue ex contract claims;
- CEC's interests to secure ongoing commitment and willingness to allocate funds to a negotiated settlement.

4.3 Governance

If CEC wish to pursue a negotiated route, we would advise that the CEC Senior Management Team and Project Board consider the financial impact on the overall project budget. This will depend on the amount proposed to retain Infraco's co-operation, the out-turn forecasts for all elements of the project and the need for a robust risk allowance to complete. This process complies with good governance; CEC's Delegated Authority Rules and provides an audit trail for record purposes.

The Settlement Agreement provides an escalation route through the contract provisions, the Joint Project Forum, the Principals Group and then Dispute Resolution. Turner & Townsend are not privy to the Joint Project Forum or the Principals Group therefore CEC would need to confirm how this issue has been addressed at these meetings.

4.4 Negotiation Strategy

Infraco have stated that they are not prepared to negotiate on the matter, however there is a concern that if CEC decide to make a payment in this instance, what assurances can be provided that similar threats will not be made in the future. For these reasons and to secure the best financial outcome for the project, a negotiated route could be promoted to Infraco by CEC. This proposal could be structured as follows:

- The Cost Engineering Instructions which have been endorsed by the Principals Forum represent the programme saving as a cost saving not a cost addition;
- Infraco have benefitted from an increase in working durations through the removal of embargoes, increased working efficiency through larger working areas and less risk through de-scoping of work;
- The current assessment of delay caused by utilities is c. 11 weeks; Infraco have been reimbursed their prelims and suffered no loss. In addition once retained logic is removed for de-scoped items such as retention of existing footways then further programme improvements are expected.
- Infraco committed to a "substantive cultural shift in the behaviour of all parties" in the mediation heads of terms and committed to the "On Street Works Protocol" in the Settlement Agreement. This envisages providing "reasonable access to working areas for all parties" and "collaborating in joint site co-ordination";
- CEC have met their commitment to co-operate and have shown flexibility through de-scoping works, removal of OHP/Prelims on value engineering items and snagging issues;
- Infraco cannot prove any loss from the arrangements and in fact stand to benefit by 50% from costs saved as a result of actual time saved;
- The backstop is that irrespective of the out workings of the intent from the value engineering, any claim from Infraco must have merit to pursue those time related rights and entitlements to client delay to the contract Completion date - if Infraco were to claim then presumably the contract measure would be accelerative measures to achieve a date prior to the original Completion date (usually requiring an express instruction). In this situation no acceleration measures were adopted owing to the length of durations in the contract programme and the time benefits from the relaxation of the Embargoes and Traffic Management constraints. In this situation prelims are paid based upon the contracted period (i.e. they cannot claim twice for £6.45M of prelims covering a period included in the contract period).

To aid resolution analysis of the further programme benefits based upon progress on site and the time savings resulting from the de-scoping of the pavement repairs and road reconstruction should be taken into account. Equally the impacts of residual utilities diversions and TM for the bus station should be taken into account.

We also recommend that CEC consider who should participate in the negotiations as the strategy should be to hold Infraco to commitments made at mediation and also statements made at the Joint Project Forum meetings.

4.5 Recommendations

We provide below our recommendations to the two questions to which CEC have requested a response:

1. Is the contractor entitled to a Change Order for the relaxation of the embargoes and traffic management constraints and re-programming the works?

From our analysis of the papers submitted for the value engineering and collaboration since the Baseline Project Instructions were issued in January 2012, we believe that there is no clear entitlement to a standard contract change order for £6.45M. The contract provides for the evaluation of losses that the contractor can prove he has incurred. This has not been provided by the contractor.

On this basis, and within the parameters of T&T's scope of service, T&T cannot recommend the issue of a standard change order for £6.45m. However it is recognised that CEC may wish to consider the issue a change order, through an Independent Certifier's Change Order or an ex contract payment by making a contract amendment. The amount would be based on a negotiated settlement; taking into account the potential consequences of the scenarios discussed within this paper (see below).

2. What are the potential consequences if the contractor does not receive a standard change order for £6.45M for the relaxation of the embargoes and traffic management constraints and re-programming the works

Infraco could withdraw co-operation and move the project into dispute whilst pursuing claims for extensions of time and disruption. This could have significant cost and time impacts (refer to scenarios within Section 3).

CEC should consider, having taken legal advice, whether all routes have been exhausted and whether the potential impacts are unacceptable given their wider project objectives.

If Infraco were to maintain current progress then it is likely that they will complete earlier than the contract completion date.

CEC may wish to consider a negotiated route to reduce the risk of future lack of cooperation by Infraco, provided sufficient funds have been allocated from the budget for this issue and the other risks that exist e.g. outcome on the Rev3A to Rev 4 programme change. The potential cost impact of the resulting Change Order or ex contract payment is difficult to determine as it depends upon the reasonableness of Infraco or their intransigence. It should be noted that there is no guarantee that Infraco will not withdraw co-operation in the future if a payment is made on this issue.

It is our understanding, not being legal experts, that the method of certification could either be an Independent Certifier's Change Order, following determination of the costs, or for CEC to agree an ex contract payment through a side letter or agreement amending the contract. This would be required to provide clarity on what has been agreed and what commitments have been secured.

Appendix A

The Infraco contract re-commenced October 2011 following mediation and execution of the Settlement Agreement. Following a review of the utilities diversions it became apparent that there were a significant number of utility conflicts arising from incomplete work on the original MUDFA utilities diversion contract, OLE foundation bases and traffic signal pole foundations clashing with utilities. It was apparent that the Infraco programme would be affected.

CEC, Infraco, Turner & Townsend and Transport Scotland took part in a value engineering process, November 2011 to January 2012. This culminated in a number of recommendations to de-scope elements of the project, implement value engineering initiatives and collaborate to achieve programme saving resulting from the removal of embargoes and traffic management constraints.

The recommendations were incorporated into the Baseline Project Instructions January 2012 which was endorsed by the parties at the Joint Project Forum.

Turner & Townsend advised that the removal of the constraints should be governed by an instruction however Infraco stated that they did not require a Change Order since this would reset the completion date. Turner & Townsend advised that informal arrangements suited Infraco. Following discussions with CEC and BBS it was agreed that a letter would be issued to confirm the relaxation of the constraints and that the impact of delays on the 22 week saving would be agreed at each reporting period.

It was understood that the costs savings resulting from the actual out-turn programme saving would be shared on a 50 / 50 basis. The Turner & Townsend cost reports did not include the benefit of saving prelims from the 22 weeks as forecast prelims expenditure was aligned with the master schedule which indicated completion slightly ahead of the 8th of July 14. This approach has been consistent as this reflects a position where BBS are reimbursed prelims for the forecast prelims expenditure rather than being entitled to a one off additional payment of £6.46M over and above contract prelims.

In July 2013 BBS changed their position and requested a Change Order for their share of the original 22 saving at £6.45M. Turner & Townsend advised that a Change Order should not be issued in this form as this extended beyond the contract provisions and that CEC should obtain legal advice. We understand that CEC have obtained legal advice, this has not been provided.

Turner & Townsend presented an analysis of the differing interpretations at the CEC Client Instruction Meeting 27th August 2012.

At the BBS valuation meeting on the 5th of September 2012, the issue was discussed. The Independent Certifier invited Turner & Townsend and Infraco to state their positions. Turner & Townsend stated that the intent of the value engineering programme initiatives was to save time and save money and therefore the actual cost saving would be determined by the actual time saving. BBS stated that their position was that they were entitled to all contract prelims and a Change Order for £6.45M. The matter was not resolved at the meeting.

Appendix B – Commercial Evaluation

	Option	Comments
1	BBS position	<p>BBS believe that they are entitled to the full contract prelims to 8th July 2014 and a Change Order for £6.45M in addition to their contract prelims. They believe that this position was understood by CEC and TS. They have implied that they will take the matter to Dispute Resolution if they do not receive a Change Order for the full amount including contract prelims.</p> <p>Under this scenario Infraco are benefitting from the relaxation of the constraints and are seeking 50% of their prelims costs for 22 weeks as well as being paid their original prelims. A loss has not been suffered and there is overlap of the same prelims costs. An element of double recovery would be secured which is not contemplated by the contract.</p> <p>Outcome:</p> <ul style="list-style-type: none"> ▪ BBS receive a change order for £6.45M however there is no guarantee that Infraco will co-operate, there is potential that further extension of time claims are pursued. ▪ If further extension of time claims were pursued, 8 weeks to remove utilities would equate to an additional £4.72M in prolongation costs and disruption costs would be in addition. This results in a total of £11.2M ▪ Probability of success: Possible
2	Intent of Value Engineering	<p>The intent of the value engineering was to save time and money and both parties would share the incentive the cost saving based upon a 50/50 share of prelims determined by actual time saved in relation to the original 22 weeks. (Note: the 50/50 basis is included in the contract for Infraco promoted changes and this was endorsed by the Baseline Project Instructions Report).</p> <p>If this option was pursued then a standard contract Change Order would not be issued (as agreed previously with Infraco). Commitment would be made for all parties to work together to mitigate any potential delays to the programme and identify programme saving opportunities. (This is mandated in the mediation heads of terms and also the On Street Works Protocol, refer Section 4 Recommendation below).</p> <p>Lack of co-operation could include a reversion to the contract programme Rev 5 to execute the works and confrontational working arrangements resulting in the need to deploy additional staff to prevent delay. Under this circumstance we confirm below in Section 4 Recommendation how this could be addressed.</p> <p>Outcome:</p> <ul style="list-style-type: none"> ▪ BBS is held to the intent of the value engineering however given Infraco's position a negotiated route may be required to be pursued. ▪ Probability of success: Possible, depending upon the amount required to secure agreement

3	Contract	<p>The contract does not contemplate how programme savings are governed, however it does provide for 50% of the cost of Infraco promoted changes to be added to the contract price after the saving has been made.</p> <p>This option would need to be governed by a variation to the contract setting out the changes to scope and constraints which brought about the programme saving. The financial adjustments would include:</p> <ul style="list-style-type: none"> ▪ A deduction for the full saving, (£12,920K) which includes the addition of the supervision costs; ▪ An addition for Infraco's share based upon 50% of the saving, (£6,460K); ▪ Reference to the agreement that additional supervision will be deployed and that the constraints on the number of track laying gangs have been removed; and ▪ Re-setting the completion date 22 weeks earlier. <p>Infraco would have a duty to mitigate the impacts of delays; however Infraco would be entitled to an extension of time with full prolongation costs if they were unable to mitigate the delay. If the delay was less than 11 weeks there would be a cost benefit to CEC. The cost per week beyond 11 weeks would be c. £0.59M per week and result in an addition to the cost forecast.</p> <p>Note: It should be noted that a consequence of this option is the potential lack of co-operation from BBS to complete the project diligently and they may look to finish on the completion date or look to exploit extensions of time.</p> <p>Lack of co-operation could include a reversion to the contract programme Rev 5 to execute the works and confrontational working arrangements resulting in the need to deploy additional staff to prevent delay. Under this circumstance we confirm below in Section 2 Recommendation how this could be addressed.</p> <p>Outcome:</p> <ul style="list-style-type: none"> ▪ BBS shares original saving with CEC, - (£6.45M) then a 15 week extension is provided from the revised earlier completion date. This assumes that Infraco co-operate and further extensions of time are not sought. ▪ Probability of success: Unlikely
4	Negotiated Agreement	<p>The consequences of Infraco not receiving what they believe their entitlement include; potential lack of co-operation, withdrawal of the shadow programme 4c/5c and a return to the execution of the works in the sequence envisaged by the contract programme (currently Rev 5). A return to the multi-phased sequence of the contract programme would be difficult given that Infraco has enjoyed the benefit of the removal of the TM constraints and wider working areas. In an extreme scenario they could reduce manpower on site and attempt to work to the contract activity dates. The contract does provide some protection where the contractor can be requested to re-programme when the works on site diverge from the contract programme.</p> <p>CEC could consider a negotiated route to ensure momentum is maintained to complete the On Street programme as quickly as possible and thereby minimise disruption to businesses and the public.</p> <p>A position could be built on the basis that the contractor has had the opportunity to benefit from the relaxation of embargoes and traffic management and that they retain a financial benefit from finishing early. In return for Infraco co-operating and aiming to finishing early, an alternative share arrangement could be agreed or depending on commitments made, the contract prelims could be paid in full should that be beneficial to CEC.</p>

		<p>This option has the benefit of providing certainty of outcome to CEC. Infraco would receive the financial benefit from early completion, e.g. 11 weeks were saved Infraco would benefit by £6.45M.</p> <p>This option could be governed by an Independent Certifier's Change Order or through a side letter confirming agreement between the parties. This would need to confirm agreements for the application of the shadow programme Rev 4c, now Rev5c and the Rev 5 Contract programme. It would also need to govern any impact of delay beyond the 22 week saving in accordance with the current time bank measures.</p> <p>Outcome and Probability: as intent of VE above at item 3.</p>
	No change order, dispute pursued	<p>Under this scenario a change order is not issued and the contract provisions are applied and the escalation route is followed. BBS are likely to withdraw co-operation and an 8 week extension is required to remove the remaining utilities.</p> <p>Outcome:</p> <ul style="list-style-type: none"> ▪ CEC win dispute and avoid paying for the change order, however an 8 week extension of time is awarded. This amounts to £4.72m plus disruption costs. ▪ CEC lose dispute and an 8 week extension of time is awarded. This amounts to £6.45M plus £4.72m = £11.2M ▪ Probability of success: Uncertain