Schedule 4

PRICING

NOTE: it is **tie**'s view that this schedule should not have any discrepancies or precedence issue in relation to the contract as is to explain the basis of the pricing only

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SCHEDULE FOUR PRICING

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- C Value Engineering taken into firm price but conditional
- D Further Value Engineering
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1.0 GENERALLY

- 1.1 The Infraco Construction Works Price is detailed in Appendix A to this Schedule 4.
- 1.2 The Construction Works Price is on a lump sum basis that is fixed until completion of the Infraco works and not subject to variation except in accordance with the provisions of this Agreement.
- 1.3 This Schedule sets out the various categories of items that may be subject to change, together with a mechanism for adjustment of the Construction Works Price / Contract Price* CHECK.
- 1.4 No provision within this Schedule shall entitle the Infraco to more than one payment for any item or other entitlement under the Infraco Contract.
- 1.5 References to clause numbers in this Schedule are to clauses in the Infraco Contract unless otherwise stated.
- 1.6 All rates, lump sums and the like contained in this Schedule 4 are exclusive of Value Added Tax and are in Pounds Sterling.

2.0 DEFINITIONS USED IN THIS SCHEDULE

- 2.1 The "Base Case Assumptions" means the... INSERT.
- 2.2 The "Base Date Design Information" means the by the design information drawings issued to Infraco up to and including the design information drop on 25th November 2007 save for the following:
 - Previously noted 'provisional' items in respect of:
 - Earthworks
 - Hard & Soft Landscaping
 - Traffic Signals civil
 - Noise & Vibration civil
 - Street Lighting
 - Tramstops new design provided
 - Balgreen Road Bridge new design provided
 - NOTE: above relates to BBS schedule attached to their letter dated 12th December 2007 addressed to Willie Gallagher but require further clarity here
 - Where design information has been superseded prior to the above date.
 - Where design information is no longer applicable NOTE: Technical Team needs to confirm what.
 - Where design information has been clarified buy assumption within this Schedule 4 such as:
 - The 'altered up' highway works drawings
 - > ?
 - Design information issued after 25th November 2007 in respect of:
 - NOTE: to be added where applicable
 - > ?
- 2.3 The "Base Tram Information" means the information contained in SDS Document ULE90130-SW-MAT-00014 v9 that reflects the 42.3m tram together with the CAF offer, information made available by CAF, the Tram Supply Agreement and the Employer's Requirements CHECK.

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2.4 The "Contract Price" comprises the following:

	£
Construction Works Price	
SDS	
Tram Supply Price	
Sub-total of capital expenditure	
ADD revenue expenditure	
Infraco Maintenance Price	
Tram Maintenance Price	
Contract Price	
NB excluding Value Added Tax	

- 2.4 "Defined Provisional Sum" means a sum included in the Construction Works Price which is provisional but for which Infraco has deemed to have made due allowance for programming, planning and pricing Preliminaries.
- 2.5 A "Notified Departure" is where the facts or circumstances that comprised the basis of the Base Case Assumptions are subsequently changed in a manner that results in a tie Change in accordance with this Agreement. Where Infraco or tie becomes aware of the same they are to notify the other Party.
- 2.6 "Ready for Construction" means that the design satisfies the following requirements:
 - It has been prepared in accordance with and satisfies the requirements of the Employer's Requirements and the Third Party Agreements; and
 - That the SDS Provider has procured that all Consents necessary to allow construction of the relevant part of the Infraco Works have been obtained including, without limitation, those necessary to satisfy the requirements of the Third Party Agreements.

2.7 An "**Undefined Provisional Sum**" means a sum included in the Construction Works Price which is provisional but for which Infraco has not deemed to have made due allowance for programming, planning and pricing Preliminaries.

3.0 CONSTRUCTION WORKS PRICE

- 3.1 The Construction Works Price is a lump sum, fixed and firm price for all elements of work required as specified in the Employer's Requirements version [3.4] and the Infraco Proposals [ref?] save only those items for which Provisional Sums are included within the Construction Works Price as noted in 4.0 below and excluding the Specified Exclusions listed in 3.3 below.
- 3.2 It is accepted that certain pricing assumptions have been necessary and these assumptions are listed and defined in 3.4 below.
- 3.3 Specified Exclusions from the Construction Works Price are:
 - a) Utilities Diversions, except:
 - the provisional amount of £3million included in the overall Provisional Sum allowance of £6,340,324 for Picardy Place, York Place and London Road
 - The Undefined Provisional Sum of £750,000 for minor utilities diversion as shown in Appendix B and described in Schedule 41.
 - b) Work in connection with the St Andrew Square public realm project beyond the tram works (for the avoidance of doubt tramstops, trackform, track bed, OHLE, road surface refurbishing and associated systems, link works and the like [to be clarified] are included).
 - c) Ground conditions that require works that could not be reasonably foreseen by an experienced civil engineering contractor based on the ground conditions reports provided to BBS on 20th and 27th of November and 6th December 2007. Additionally the BBS price does not include for dealing with replacement of any materials below the earthworks outline or below ground obstructions/voids, soft material or any contaminated materials. **NOTE**: review after meetings on ground conditions
 - d) Bernard Street public realm project as information provided on 28th November 2007. **NOTE**: BBS are supposed to be pricing this and it could perhaps be incorporated
 - e) Completing full footway reconstruction in Leith Walk beyond the allowance made where kerb lines are being re-sited. **NOTE**: check Infraco Proposals
 - f) Any scope required by Third Parties which is not included within the designs issued up to and including 25th November 2007.
 - g) Any material changes to the design resulting from the impact of the kinematic envelope of the CAF tram vehicle on the civils design. **NOTE**: is this still applicable?

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3.3 Assumptions in pricing of the Construction Works Price are:

a) Design

- The Infraco Construction Works Price includes for any impact thereon arising from the normal development and completion of designs based on the design intent for the scheme as represented by Base Date Design Information.
- For the avoidance of doubt normal development and completion of designs means the evolution of design through the stages of preliminary to construction stage and excludes changes of design principle, shape and form and outline specification.
- Design delivery by the SDS Provider has been aligned with the Infraco construction delivery programme as noted in Schedule 15.
- That the Design Prepared by the SDS Provider will not:
 - in terms of design principle, shape, and/or specification be materially amended from the drawings forming the Infraco Proposals (except in respect of Value Engineering or Changes under Third Party Agreements identified in Appendices C to E),
 - be materially amended from the drawings forming the Infraco Proposals as a consequence of any Third Party Agreement (except in connection with changes in respect of Forth Ports and the RBS enhancement of Gogarbum Tramstop identified in Appendix E) and
 - be materially amended from the drawings forming the Infraco Proposals as a consequence of the reasonable requirements of any Approval Body.

b) Tram

- The tram fleet shall initially comprise 27 trams but the design generally and the implementation of the Traction Power Supply System (including substations, OLE and cabling) specifically shall be capable of accommodating addition trams to support an 8 + 8 trams per hour service + a 50% addition in accordance with the Employer's Requirements.
- Others?
- ?:
 - > ?
 - > ?

> ?

c) Roads and pavings:

- in respect of the highways work in Princes Street, Shandwick Place and Haymarket Junction, Infraco's price is based on planing back the existing road structure to a sound base and replacement with an acceptable roads construction compliant with highways and CEC standards suitable for purpose and adoption by CEC to suit the revised road surface profile. Full depth reconstruction as the current designs in this area is not included in the Price.
- The Cost of the Highways and Drainage works at Picardy Place, London Road and York Place that is extra over the scope included in the price as at selection of preferred bidder. NOTE: currently in Provisional Sums, drawing ref to be added
- road construction shall be...NOTE: BBS to amplify
- the roads [as reconstructed in accordance with the SDS design] will be adopted by CEC and 'handed back' at Service Commencement and thereafter CEC shall undertake routine maintenance (sweeping, litter, salting, normal wear and tear and the like) at no cost to Infraco. However for the avoidance of doubt, Infraco remains responsible for any defects in design or construction.
- flexible footpath surfacing shall be...NOTE: BBS to amplify
- in respect of footways, existing kerbs and flags are to be re-used where available and associated reinstatement behind kerb lines is assumed. i.e. not wall to wall

d) Structures:

- in respect of Tower Place Bridge Infraco has included £1,937,179
- in respect of Victoria Dock Bridge Infraco has included £680,839
- in respect of Lindsay Road retaining wall Infraco has included £1,468,331
- in respect of Morrison Supermarket retaining wall Infraco has included ...
- NB: all the above are inclusive of Infraco's addition for overheads and profit

e) Depot:

 in respect of the excavation works, the price is fixed and firm against the finished floor level of ??.?? and on the assumption that the depot excavation will be handed over to Infraco with no major standing water.

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- Steelwork ?
- f) Network Rail immunisation: **NOTE**: as BBS letter dated 12th October 2007
 - Infraco will undertake all Network Rail immunisation including management
 of all associated works, programme and management of approvals in
 respect of the excavation works, the price is fixed and firm against the
 finished floor level of ??.?? and on the assumption that the depot excavation
 will be handed over to Infraco with no major standing water.
 - This is subject to Network Rail not unilaterally rejecting Infraco's immunisation strategy at the outset.
 - tie will pay 100% of Infraco's costs for Network Rail immunisation up to a cap of £3million for the total value (excluding Value Added Tax).
 - If the costs are lower than the cap of £3million referred to above, then the benefits are to be shared 331/3% each to tie, Network Rail and Infraco.
 - The strategy is based on Infraco carrying out the works and supplying all equipment.
 - In the event that Network Rail does not accept Infraco's strategy, tie will seek the direct input of CEC, Transport Scotland and the Scottish Executive / Government in order to gain acceptance.
 - Infraco agree to carry out further Network Rail immunisation value engineering investigations jointly with tie.
 - No Network Rail costs are included in the above figures.
- g) The programme for delivery of Phase 1A is as Schedule ?. **CHECK** covers all issues to BBS and **tie** satisfaction.
- h) that the Code of Construction Practice will be followed by Infraco expect in respect of the following agreed relaxations:
 - NOTE: Infraco to note specific areas here (requested from Scott McFadzen in person and by e-mail 08/02/2008)

however **tie** acknowledges that minor amendments to the above may be required and will use its reasonable endeavours to obtain CEC's agreement to such amendments provided that they are consistent in overall terms.

h) that in relation to Utilities that the MUDFA Contractor shall have completed the diversion of any Utilities Apparatus forming part of the MUDFA Works in accordance with the requirements of the Infraco Programme.

- i) the Network Rail Possessions...**NOTE**: BBS to amplify, may be in Programme schedule or require another appendix here
- j) the depth (to sub-formation) of track slab and grass track construction is based on cross sections and soil bearing capacity shown on figs 4.6a and 4.6b in the document entitled "Trackform Technology Review V6" prepared by the SDS Provider and dated 1 March 2007:
- k) there shall be no impact on the traction power supply system (as demonstrated by the power simulation modelling) as a consequence of a change to the vertical alignment of the track as compared against the alignment input into the [last simulation]; needs to be settled with Siemens and Technical Team
- [special requirements for noise and vibration] shall not be required in order to carry out the Infraco Works in accordance with this Agreement; - needs to be settled with Siemens and Technical Team
- m) no protective measures are required included in relation to [protected trees] however new trees will be provided for any trees removed in accordance with the [Environmental Management Plan];
- n) stray current protection proposals as contained within the Infraco Proposals shall be approved by all relevant Approval Bodies Utilities Companies;
- o) that Consent shall be obtained (within a reasonable time having regard to the progress of the Infraco Works) for the use of [Railway Ballast from Markle Mains Quarry] **NOTE**: BBS to are to provide the specification for this to enable a decision to be made
- p) NOTE: BBS to advise of any other technical issues to be inserted here
- q) Demolition or alteration of existing buildings is required as follows:

Demolition

- Caledonian Ale House (Plot 33)
- Redpath McLean Office Russell Road (Plot 68)
- Simloch Property Roseburn Street (Plot 75)
- Viking International Roseburn Street (Plot 79)
- JB McLean lean-to Roseburn Street (Plot 92)
- National Car Rental Roseburn Street (Plot 103)
- Busy Bee Catering Balgreen Road (Plot 130)
- ATC Hut Stenhouse Drive (plot 150)

Alteration

- Old bus depot on Leith Walk (Plot 15), altered to accommodate new substation
- Murrayfield Wanderers, alterations to side of club house NOTE: check what allowed and is Infraco doing this work?

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- r) The removal of Asbestos from buildings to be demolished or altered is excluded and if identified will be shall be adjusted in accordance with the provisions of Clause 80 (*tie changes*).
- s) Others?
- y) In all other respects the Infraco price is fixed and firm.
- z) The Construction Works Price has been fixed on the basis of inter alia the assumption and exclusions noted herein. If now or at any time the facts or circumstances differ in any way from these assumptions and exclusions (or any of them) the price will be adjusted for any amendment which arises in accordance with the provisions of Clause 80 (*tie changes*).

4.0 PROVISIONAL SUMS

- 4.1 Provisional Sums have been allowed for items listed in Appendix B.
- 4.2 These are in two tables. The first table represents Defined Provisional Sums for which Infraco has deemed to have made due allowance for programming, planning and pricing Preliminaries. The second table represents Undefined Provisional Sums for which Infraco has not deemed to have made due allowance for programming, planning and pricing Preliminaries.
- 4.3 The procedure for the expenditure of the Provisional Sums is as follows:
- 4.4 **tie** shall in conjunction with Infraco and its designers/sub contractors prepare the defined requirements and specification for each Provisional Sum item.
- 4.5 Infraco shall prepare and submit proposals to meet the requirements stated at 4.3 above.
- 4.6 Provisional Sums will be omitted and the Construction Works Price shall be adjusted in accordance with the provisions of Clause 80 (*tie changes*).
- 4.7 Within 60 Business Days of the execution of the Infraco Contract, **tie** and the Infraco will jointly agree the timescales for this process, failing which tie's Representative shall set the timescale.

5.0 VALUE ENGINEERING (VE) THAT HAS BEEN TAKEN INTO FIRM PRICE

- 5.1 The parties have agreed Value Engineering opportunities / savings as noted in Appendix C.
- 5.2 These VE opportunities / savings are not simply targets but are fixed and firm reductions, save for conditions (Key Qualifications) noted in Appendix C.

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5.3 In the event that the Key Qualifications noted cannot be achieved, any adjustment to the Contract Sum will be made by applying the provisions of Clause 80 (*tie Changes*).

6.0 FURTHER VALUE ENGINEERING (VE)

- 6.1 Further Value Engineering opportunities / savings as noted in Appendix D
- This further VE represents that which either one or both Parties is unable to commit to at this stage and will still be considered as a potential target. There are two sub-categories, those with an estimated saving carried to the summary and those as an unspecified item.
- These will be adjusted by applying the provisions of Clause 80 (*tie Changes*). For the avoidance of doubt, no VE that has already be considered by the Parties or that may subsequently be proposed by *tie* will be considered as a shared saving under Clause 81.3 (*Infraco Changes*).

7.0 CHANGES REQUIRED UNDER THIRD PARTY AGREEMENTS

- 7.1 Certain changes may be required to the design for the Infraco Works as a result of Third Party Agreements.
- 7.2 Those identified to date are noted in Appendix E.
- 7.3 For the purposes of calculating the value of these changes any adjustment will be made by applying the principles of Clause 80 (*tie Changes*).

8.0 UTILITIES DIVERSIONS TO BE CARRIED OUT BY INFRACO

- 8.1 Although **tie** has let the MUDFA Contract [Multiple Utilities Diversion Framework Arrangement] to carry out the diversion of utility apparatus in the path of the proposed tram route prior to Infraco Works, it will be necessary for some of these works to be delivered by Infraco for the following reasons:
 - they may be unrecorded and not discovered until the Infraco Works are commenced
 - they may be discovered under MUDFA but left to avoid a programme overlap or other technical reason
 - they may be intrinsically linked to the Infraco Works
 - they may require such significant reinstatement work that to carry out under MUDFA may result in significant abortive works
- Where Infraco has been advised of the existence of utility apparatus in advance, whether identified to date or following discovery by MUDFA, any adjustment to the Contract Sum will be made by applying the provisions of Clause 80 (*tie Changes*).

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8.3 Those identified to date are noted in Appendix F. **NOTE**: appendix to be developed / could be in Schedule 41

9.0 GROUND CONDITIONS

- 9.1 Under Clause 22 of the Contract...
- 9.2 The...

INSERT following re-arranged meeting on Monday 11th February 2008 and subsequent feedback from BBS & SDS

- 9.3 The basis of Infraco's pricing is set out in Appendix G. **NOTE**: still to do and requires BBS assumptions on CBRs etc.
- 9.4 Infraco's rates for excavation and earthworks are inclusive of any differences between differing sub-soils that may prevail.

10.0 SCHEDULES OF RATES AND QUANTIFIED SCHEDULES OF RATES

- 10.1 Rates for certain items have been established as noted in Appendix H. These include:
 - Rates for Accommodation Works
 - Rates for utilities diversions
 - Rates for Additional Trams and other items related to the Trams
 - Labour Rates
- The rates (net of overheads and profit) contained in the appendix are to be used for the purpose of agreeing changes (positive and negative) noted in Clause 1.2 of this Schedule 4.
- 10.3 The Quantified Schedules of Rates are also contained in Appendix H and they are included for reference only in determining the value of variations as outlined in Appendix I herein. For the avoidance of doubt the quantities have not been prepared in accordance with any Standard Method of Measurement, are not re-measurable and any errors or omissions contained therein are entirely at the risk of Infraco.

11.0 PHASE 1B

- 11.1 Under Clause 85 of the Contract **tie** can instruct execution of the Phase 1B Works as an option.
- 11.2 The basis of the option is set out in Schedule 37.
- 11.3 **NOTE**: this section requires further development

12.0 FINAL ACCOUNT REQUIREMENTS

- 12.1 The final account for the Works and Services shall be prepared progressively though the duration of the Agreement and the Infraco shall provide all necessary information in support within two months of Service Commencement such that:
 - a) the final account for the Construction Works is prepared within 3 months of Service Commencement

and

b) the final account for Maintenance Services delivered in respect of the foregoing Year is prepared within 3 months of the end of that Year.

APPENDIX A CONSTRUCTION WORKS PRICE ANALYSIS

A1 CONSTRUCTION WORKS PRICE ANALYSIS
A2 DETAILED SUMMARY OF CONSTRUCTION WORKS PRICE

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APPENDIX B PROVISIONAL SUMS AND THE MECHANISM FOR THEIR ADJUSTMENT

1.0 Summary of Provisional Sums

- 1.1 The following tables summarises the Provisional Sums included within the Infraco Works:
- 1.2 Table 1 notes the Defined Provisional Sums for which Infraco has deemed to have made due allowance for programming, planning and pricing Preliminaries.
- 1.3 Table 2 notes the Undefined Provisional Sums for which Infraco has not deemed to have made due allowance for programming, planning and pricing Preliminaries.

2.0 Table 1 - Defined Provisional Sums

Item	Description of Provision Sum	Base Cost	OH&P	Total
1	Pumped surface water outfall at A8 underpass (by depot)			£100,000
2	Scottish Power connections to the Depot and Ingliston Park & Ride			£750,000
4	Relocation of Ancient Monuments – this relates to those monuments noted on the route [SDS drawings ULE 90130-01-HRL 0003B, 6B, 7B, 10B, 12B, 13B, 14B, 15B & 24B refer]			
	 it does not include cleaning and/or restoration 			£53,700
4	Additional cost of Network Rail compliant ballast			£300,000
5	Extra over for revised alignment to Picardy Place, York Place and London Road junctions NOTE : this amount may be reviewed			00 040 004
	against latest proposals			£6,340,324
6	Extra over for shell grip at junctions			£319,343
	Carried forward			£7,863,367

Item	Description of Provision Sum	Base Cost	OH&P	Total
	Brought forward			£7,863,367
7	Allowance for Scottish Power connections to new street lights and new traffic signals			£115,287
8	PICOPS / COSS as Network Rail possession support when undertaking works adjacent or over the railway			
	- see also 2.2 below			£755,307
9	Allowance for demolition of existing Leith Walk substation (if required) [SDS drawings ULE 90130-01-SUB- 00023 rev 2, 00046 rev 1,00047 rev 1 and 00051 row 1 refer levels.			CEE 662
	00051 rev 1 refer]			£55,662
10	Urban Traffic Controls [UTC]			£2,500,000
11	Scottish Power connections to Phase 1a sub-stations (8nr x £50,000)			£400,000
	Total	£00,000,000	TO CHECK	£11,689,623

2.1 Basis

- a) Relocation of Ancient Monuments applies to those on the route only. Any works in respect of ancient monuments in George Street are undefined.
- b) Any costs in connection with PICOPS / COSS as Network Rail possession support when undertaking works adjacent or over the railway in respect of item 8 above shall relate solely to the possessions planned at signature of the Infraco Contract. This possession support will be adjusted in the event that Network Rail varies the requirement for PICOPS / COSS or otherwise amends the possession arrangement. However if the possession is amended or extended due to Infraco over-running then any additional possession support will not be recoverable.

3.0 Table 2 – Undefined Provisional Sums

ltem	Description of Provision Sum	Base Cost	OH&P	Total
1	Accommodation Works			£1,000,000
2	Allowance for minor utility diversions			£750,000
3	Archaeological Officer – impact on productivity NOTE : this amount may be adjusted			£405,755
4	Additional Crew Relief Facilities at Haymarket [SDS drawings ULE 90130-02-STP-000126 REV 1 and 000127 rev 1 refer]			£49,950
	Total	£0,000,000	TO CHECK	£2,205,705

APPENDIX C IDENTIFIED VALUE ENGINEERING [VE]

1.0 The following table summarises the agreed identified VE opportunities / savings which are fixed and firm reductions, save for the Key Qualifications noted:

Item	Description of Identified VE Saving	Base Cost	OH&P	Total	Key Qualifications
	Savilly				Qualifications
1	Delete depot pumping station / storm tanks by utilizing existing gravity system			-£193,526	If a small pump is needed then this to be added as a tie Change.
2	Build part of Depot now with				Agreed initial
_	provision to expand in the future / reduce size of car park facilities				supply is 100 car park
	'			-£230,000	spaces.
3	Delete under floor lift plant to				
	Depot and utilize mobile jacks (including mobile future proofing)			-£250,000	
	(including mobile ruture probling)			-£230,000	
4	Delete split vehicle				
	accommodation system at Depot - requirement dependant on tram				Accommodation bogies are in
	vehicle selection – don't we know				CAF sub-
	this firm one way or the other?			-£27,500	contract.
5	Rationalise scope requirement				
	Track Maintenance Equipment at Depot and consider renting			-£27,500	
	Depot and consider renting			-£27,500	
6	Deletion of one pavement (inner)				As shown on
	to Depot			-£36,000	SDS drawing insert.
				-£30,000	iliseit.
7	Delete requirement for concrete				
	apron to security fence at Depot			-£6,080	
8	Delete compressed air system to				
	Depot and utilize 1 or 2 local / mobile compressors			-£54,400	
	mobile compressors			-204,400	
	Carried forward			-£825,006	

Item Description of Identified VE	Base Cost	OH&P	Total	Key Qualifications
Saving Brought forward			-£825,006	Qualifications
9 Consolidated VE items including those which result from changes to initial design driven by proximity to BAA runway and EARL decision as follows:			-2020,000	
 changes to initial Depot design driven by proximity to BAA runway (reduced bulk excavation) reductions in structural loadings (gantry crane reduced in capacity and size impacting on building frame and envelope) reduction in staff accommodation provision (reduced operational workforce reducing messing facilities, changing rooms, locker space, etc.) reduction in fit out specification reduction in domestic utility capacity (reduced building volume and accommodation provision) 			-£2,200,000	
Delete standby generator and substitute with hardstanding and power connection for portable generator			-£150,000	
11 Material recovery and reprocessing (Infraco); 2 options - reconstituted planings & Type 1R Carried forward			-£500,000 -£3,675,006	Level of saving is subject to adjustment of quantity of this item base on the final design.

ltem	Description of Identified VE Saving	Base Cost	OH&P	Total	Key Qualifications
	Brought forward			-£3,675,006	Qualifications
12	Reduce kerb and associated re- instatement of pavement			-£100,000	Level of saving is subject to adjustment of quantity of this item base on the final design.
13	Reduce drainage run from guideway			-£100,000	Level of saving is subject to adjustment of quantity of this item base on the final design.
14	Rationalise specification for overhead contact system – switchgear is considered "quite onerous" – need to review this description for contract			-£160,000	Price changes requested for manual, three position cubicle mounted isolators throughout, with exception of the Depot where they can be pole mounted. Status of isolator to be shown via SCADA.
15	Edinburgh Park Viaduct 7 spans reduced to 2 with steel beams utilized in lieu of concrete			-£1,470,000	Subject to approval of NEL / CEC
16	Carricknowe Bridge parapet – downgrade from P6 / P5 to N2 (reduce cost of parapet plus knock on effect on deck design / cost) Is this now firm?			-£85,000	Subject to approval of design by Network Rail
17	A8 Underpass – various initiatives			-£850,000	Change to a contiguous piled wall / leaner design.
	Carried forward			-£6,440,006	

Item	Description of Identified VE Saving	Base Cost	ОН&Р	Total	Key Qualifications
	Brought forward			-£6,440,006	- Quamiouiono
18	Roseburn Street Viaduct – various initiatives			-£1,375,000	Subject to approval of stakeholders – Network Rail and SRU.
19	Water of Leith initiatives			-£150,000	
20	Eight maintenance walkway structures – delete or reduce			-£250,000	
21	Class 7 material conversion			-£300,000	Level of saving is subject to adjustment of quantity of fill required by the final design.
22	Optimize the work site lengths wherever practical to ensure efficient construction outputs			-£300,000	
23	Accept more disruption over shorter period to maximize efficiency of construction operations			-£100,000	
24	Option to lease UPS provision from supplier rather than purchase			-£300,000	Subject to agreement of Operator / TEL
25	Rationalizing spares supplied with the Infraco bid			-£300,000	Subject to agreement of Operator / TEL
	Carried forward			-£9,515,006	

Item	Description of Identified VE Saving	Base Cost	OH&P	Total	Key Qualifications
	Brought forward			-£9,515,006	***
26	PM integration including shared resources and co-location			-£1,000,000	Subject to BBS / tie agreeing savings in resources and facilities items from BBS and tie costs NOTE: a detailed preliminaries build up will be needed to verify this
27	Noise attenuation (outside of Roseburn Corridor) 3,650m of fencing			-£50,000	Subject to property owners' protests.
28	Reduce ballasted track thickness from 300mm to 200mm			-£200,000	
29	Power supply (up to passenger operation) – possible over allowance in DFBC			-£300,000	Subject to tie demonstrating evidence.
30	Space for any others?			-£ ,000	
	Total			-£11,065,006	

APPENDIX D FURTHER VALUE ENGINEERING [VE]

1.0 The following table summarises provisional further VE opportunities / savings:

ltem	Description of Identified VE Saving	Base Cost	OH&P	Total	Comments
	Caving				
1	Further project management integration over 3 years			-£500,000	Joint target
2	SDS design scope economy, variation and reduction			-£500,000	Joint target
3	Tramstops – standard finishes to circa 20% - 30% of stops			-£500,000	Joint target
4	Picardy Place level flexing – MUDFA savings			-£500,000	tie led initiative
5	Picardy Place level flexing – construction savings			-£500,000	Joint initiative
6	Value engineer finishes on Edinburgh Park Viaduct and other structures			-£170,000	Subject to approval of NEL / CEC
7	Omission of crossover at Ocean Terminal and associated savings through reductions to OLE, signalling etc.			-£ ,000	Recently proposed item – see e-mail to BBS 04/02/08
8	Rationalize Depot Access Bridges – is BBS's proposal acceptable?			-£ ,000	
9	Space for any others?			-£ ,000	
10					
	Total			-£2,670,000	

APPENDIX E IDENTIFIED TIE CHANGES REQUIRED UNDER THIRD PARTY AGREEMENTS

1.0 The following table summarises the **tie** Changes that are required under various Third Party Agreements:

Item	Description of Identified tie Change	Base Cost	OH&P	Total	Comments
1	Revised alignment of track at Casino Square, relocated tramstop, junction amendments and removal of 'kink' in alignment from Constitution Street				Forth Ports TPA
2	Footpath on south side of Tower Place Bridge				Forth Ports TPA
3	Victoria Dock Bridge				Forth Ports TPA
4	Ocean Terminal amendments and				Forth Ports TPA
5	Design and construction of by- pass road to adoptable standard				Forth Ports TPA
6	Lindsay Road amendments				Forth Ports TPA
7	Enhancement of Gogarburn Tramstop				Royal Bank of Scotland
8	OTHERS? – assumes work to the Wanderers Club and other reconfiguration work for SRU is carried out by others				
9					
10					
	Total				

2.0 Infraco shall co-operate with **tie** in the provision of design and pricing information required under the Forth Ports Agreement.

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APPENDIX F UTILITIES DIVERSIONS TO BE CARRIED OUT BY INFRACO

NOTE: see also Schedule 41

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APPENDIX G GROUND CONDITIONS

NOTE: below is an example of how schedule will be populated with info' on GPR, CBR assumptions etc.

Further work required

PHASE 1a – Ground Penetrating Radar

Section	Notional C	Chainages	Location	Aperio Information		
1A	100,000	110,000	Newhaven to Foot of the Walk	2934 -8	Location of possible obstructions Southern end of Leith Walk by Brunswick Road	
				2934 -9	Location of possible obstructions Leith Walk by Iona Street	
				2934 -10	Location of possible obstructions Leith Walk leading to Constitution Street	
				2934 -11	Location of possible obstructions Constitution Street leading to Ocean Terminal	
				2934 -12	Location of possible obstructions Ocean Drive	
				2934 -13	Location of possible obstructions Western End Ocean Dr and Eastern end Lindsay Rd	
				2934 -14	Location of possible obstructions Lindsay Road, leading to Starbank Road	
1B	110,000	120,000	Foot of the Walk to McDonald Road	2934 -18	Location of possible obstructions Area 6, Leith Walk	

APPENDIX H SCHEDULE OF RATES AND QUANTIFIED SCHEDULE OF RATES

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APPENDIX I PROCESS FOR AGREEMENT OF VALUE OF VARIATIONS

1.0 Generally

- 1.1 The **tie** Representative shall value the Variations in accordance with the following principles:
 - (a) Where the Works or Services performed are of similar character and executed under similar conditions to that reflected by the unit rates in this Schedule then such Works or Services shall be valued at the unit rates contained therein as applicable.
 - (b) Where Works or Services are not of a similar character, are not executed under similar conditions or involve asset quantities significantly different from those reflected by this Schedule then such Works or Services shall be valued using such Rates contained therein as the basis for valuation so far as this may be reasonable.
 - (c) Where the principles of (a) and (b) are considered inappropriate by the **tie** Representative the Services shall be valued on the basis of Actual Cost where possible or estimated Actual Cost, failing which a fair valuation shall be made.
- 1.2 In respect of a valuation of any work under 1.1(c) the **tie** Representative shall apply overheads and profit percentages to the appropriate elements of Actual Cost as follows:
 - (a) Civil Engineering works

10%

(b) Systems and Track works

17%

1.3 The amount of the overheads and profit percentage calculated as part of the valuation of Variations shall be added in the case where the valuation results in an addition and shall be deducted where the valuation results in an omission.

2.0 Maintenance Services

- 2.1 Variations in respect of Maintenance Services shall be in accordance with the Schedule 6?
- 2.2 The Infraco's Whole life Model shall be base-lined to reflect the Agreement and any variation shall be calculated therein.

APPENDIX I DISALLOWED COSTS

If Actual Cost is the basis of the valuation of variations or Changes then the following items are specifically agreed as Disallowed Costs and shall not be included as Actual Costs under the Infraco Contract.

Generally:

For items 1 to 21 inclusive below, costs shall mean the Infraco's own costs but will not include costs levied by **tie** for any default by the Infraco or are taken as a set off in respect of Maintenance Services.

- 1. Costs not justified by the Infraco's accounts and records.
- 2. Costs not payable under the Infraco Contract.
- 3. Costs arising from the Infraco's Design errors.
- 4. Costs arising from Materials, plant, equipment and tooling not used to provide the Services (after allowing for reasonable wastage) and subject to variations omitting work.
- 5. Costs arising from resources not used to provide the services (after allowing for reasonable availability and utilisation) and not taken away from working areas when **tie**'s Representative has instructed.
- 6. Costs arising where the Infraco was delayed or disrupted during Traffic Hours except where such delay or disruption occurs where the Infraco is undertaking work in Traffic Hours under the Working Time Adjustments regime or it has been specifically agreed in advance by **tie** Representative that work should be undertaken in traffic hours.
- 7. Costs of correcting or making good defects in the Infraco's Services unless otherwise authorised by **tie**'s Representative.
- 8. Costs deemed by **tie**'s Representative to be included in the Infraco's other allowances under the terms of the Agreement (e.g. Head Office Overhead).
- Costs arising from loss or damage covered under insurance in accordance with Clause?
 of the Infraco Contract unless otherwise authorised by tie's Representative.
- 10. Costs arising related to claims for excesses on insurance policies.
- 11. Costs which should have not been paid to a sub-contractor in accordance with the relevant sub-contract.
- 12. Costs as incurred only because the Infraco did not follow an acceptance or procurement procedure stated in the Agreement to the extent that this has increased Actual Costs from what they otherwise would have been i.e. the extra over cost is disallowed.

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- 13. Costs as incurred only because the Infraco did not proceed regularly and diligently with the Services.
- 14. Costs are in respect of delayed, disrupted or cancelled.
- 15. Costs arising where the work was delayed, disrupted, or cancelled due to the default of the Infraco (including where the Infraco's default was the cause of an emergency).
- 16. Costs arising where the Infraco did not make a bona fide attempt to use arranged Access (which includes having the appropriate physical presence on site required to utilise the access) except where the Infraco was instructed by **tie**'s Representative not to use the access.
- 17. Costs arising where the Infraco failed to notify **tie**'s Representative within 28 calendar days of the disruption or impediment being incurred.
- 18. Costs arising from the additional cost of a Variation resulting where the Infraco failed to give an early warning and/or notification of in accordance with the requirements of the Infraco Contract or failed to submit for the information required by Clause?
- 19. Costs arising from correcting defects caused by the Infraco not complying with a requirement for how he is to provide the Services stated in the Infraco Contract.
- 20 Costs incurred outside the LoD or LLAU.
- 21. Costs arising from people who are part of the Head Office Overhead.