

## Schedule 4

### PRICING

**NOTE:** updated 12<sup>th</sup> March following meetings on 11<sup>th</sup> & 12<sup>th</sup> March 2008

**SCHEDULE FOUR  
PRICING**

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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 Contract Price including the Construction Works Price.
- 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 Base Date Design Information, the Base Tram Information, the Pricing Assumptions and the Specified Exclusions.
- 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 25<sup>th</sup> November 2007 save for where design information has been superseded prior to the above date.
- 2.3 The "**Base Tram Information**" means the information contained in CAF's technical response in relation to the Employer's Requirements and the Tram Supply Agreement. **CHECK** with Andy + Robert.

2.4 The “**Contract Price**” comprises the following:

	£
Construction Works Price	
SDS Price (as defined in the SDS Agreement and the Novation Agreement)	
Tram Supply Price (as defined in the Tram Supply Agreement)	
<b>Sub-total of capital expenditure</b>	
<b><u>ADD</u> revenue expenditure</b>	
Infraco Maintenance Price	
Tram Maintenance Price (as defined in the Tram Maintenance Agreement)	
<b>Contract Price</b>	
<b>NB</b> excluding Value Added Tax	

- 2.5 “**Defined Provisional Sum**” means a sum included in the Construction Works Price which is provisional but for which Infraco has deemed to have made allowance for programming, planning and pricing Preliminaries.
- 2.6 “**Issued for Construction**” shall have the meaning as used in the SDS Novation Agreement **CHECK**.
- 2.7 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 and not as a result of an Infraco Change or as a result of an Infraco Breach. Where Infraco or **tie** becomes aware of a Notified Departure they are to notify the other Party. **NOTE: tie** has accepted the principle of Notified Departure but have kept matters simple and as a **tie** Change as per Richard Walker / Geoff Gilbert discussions – Pinsent Masons to check for consistency
- 2.8 “**Pricing Assumptions**” means the assumptions in respect of the Construction Works Price as noted in Section 3.4 below.

2.9 **"Ready for Construction"** means (**NOTE:** check any conflict or overlap with Issued for Construction Definition) 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.

2.10 **"Specified Exclusions"** means items for which Infraco has made no allowance within the Construction Works Price as noted in Section 3.3 below.

2.11 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 as Schedule 2 and the Infraco Proposals as Schedule [33] 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 that are to be undertaken by under MUDFA save for the Provisional Sums for those utilities diversions that are to be undertaken by Infraco.
- 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, associated systems and link works together with any other work shown on the Base Case Design Information 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 20<sup>th</sup> and 27<sup>th</sup> of November and 6<sup>th</sup> 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. However the price for excavation and earthworks are inclusive of any differences between differing sub-soils that may prevail.
- d) Bernard Street public realm project as information provided on 28<sup>th</sup> November 2007.

### 3.4 Pricing Assumptions in respect 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.
- Subject to the above, the Design Prepared by the SDS Provider will not:
  - in terms of design principle, shape, form and/or specification be amended from the drawings forming the Base Date Design Information (except in respect of Value Engineering identified in Appendices C or D),
  - be amended from the drawings forming the Infraco Proposals as a consequence of any Third Party Agreement (except in connection with changes in respect of Provisional Sums identified in Appendix B) and
  - be amended from the drawings forming the Infraco Proposals as a consequence of the requirements of any Approval Body.
- Design delivery by the SDS Provider has been aligned with the Infraco construction delivery programme as noted in Schedule [15].


#### b) Tram

- The tram fleet shall initially comprise 27 trams. **CHECK** this does not cut across the Employer's Requirements that 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
- **NOTE:** BBS (Michael Flynn to provide further wording for agreement here in respect of power, DKE etc.
- The price includes for all work necessary to enable the tram vehicles to operate and comprehensively integrate with the infrastructure designed and installed by Infraco.
- 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 by Andy + Robert

- Any material changes to the design resulting from the impact of the kinematic envelope of the CAF tram vehicle on the civils design. **NOTE:** to be deleted when the DKE issue is resolved
- that the Urban Traffic Controls (UTC) will allow and have no and have no adverse impact on the Tram operations including run time and punctuality of services as set out in the Employer's Requirements

c) Roads and pavings:

- in respect of the highways work in Princes Street, Shandwick Place, Haymarket Junction and St Andrew Square, Infraco's price is based on planing back the existing road structure to a sound base and replacement suitable for purpose to suit the revised road surface profile. Full depth reconstruction as the current designs in this area is not included in the Price.
- in respect of the Highways and Drainage works at Picardy Place, London Road and York Place and St Andrew Square, Infraco's price is based on the scope as at the Base Date Design Information.
- road construction shall be  **NOTE:** BBS (Scott McFadzen) to amplify
- the roads as reconstructed in accordance with the SDS design will be adopted by CEC and 'handed back' on or prior to 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 30mm HRA on 50mm DBM on 150mm Type 1 base
- in respect of footways, existing kerbs and flags are to be re-used where available and minimal reinstatement behind kerb lines is assumed. i.e. not wall to wall.
- Completing full footway reconstruction in Leith Walk beyond the allowance made where kerb lines are being re-sited.

## d) Structures:

- in respect of Tower Place Bridge, Victoria Dock Bridge and Lindsay Road retaining wall, Infraco's price is based on the scope as at the Base Date Design Information.
- in respect of Morrison Supermarket retaining wall Infraco's price assumes that it is not required to undertake.

## e) Depot:

- in respect of the excavation works, the price is fixed and firm against the profile (to be defined) and on the assumption that the depot excavation will be handed over to Infraco with no major standing water and with any soil that may have been damaged by standing water being above formation level.

f) Network Rail immunisation: **NOTE:** as BBS letter dated 12<sup>th</sup> October 2007

- Infraco will undertake all Network Rail immunisation including management of all associated works, programme and management of approvals.
- 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 33⅓% 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.

If Network Rail rejects Infraco's proposals due to technical reasons, the responsibility lies with Infraco. However if Infraco's proposals is otherwise technically acceptable but Network Rail has applied discretion in its rejection then the responsibility lies with **tie**.



- g) The programme for delivery of Phase 1A is as Schedule [15] **CHECK:** covers all issues to BBS and **tie** satisfaction.
- h) that the Code of Construction Practice will be followed by Infraco except where specifically stated otherwise in Schedule [15]. 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; **NOTE:** BBS (Steve Sharp and Scott McFadzen to review)
- i) that in relation to Utilities Works that the MUDFA Contractor and/or Utility shall have completed the diversion of any Utilities Apparatus forming part of the MUDFA Works in accordance with the requirements of the Infraco Programme save for utilities diversions to be carried out under Infraco under the Provisional Sums noted in Appendix B;
- j) the Network Rail Possessions shall be as noted in Schedule [15];
- k) 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;
- l) there shall be no special floating track measures required for vibration; **NOTE:** rates to be insert in appendix
- m) the price includes for all earthworks quantities within the earthworks outline;
- n) no protective measures are required in relation to [protected trees] however new trees will be provided for any trees removed in accordance with the [Environmental Management Plan];
- o) stray current protection proposals as contained within the Infraco Proposals shall be approved by all relevant Approval Bodies except in respect of immunisation of Network Rail which shall be dealt with in accordance with that noted in the Pricing Assumptions in [?] above and Infraco shall provide all management support and technical back-up to achieve the approvals;
- p) 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
- 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 sub-station
  - Murrayfield Wanderers, alterations to side of club house **NOTE:** check what allowed and is Infracore doing this work? Susan is checking, is yes do we need to add a provisional sum?
- 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) All CCTV cameras and other road equipment will be connected back to the nearest Open Transport Network (OTN) node in either a sub-station or Tramstop and onward to the Depot Control Room.

- 3.5 The Contract Price has been fixed on the basis of inter alia the Base Case Assumptions noted herein. If now or at any time the facts or circumstances differ in any way from the Base Case Assumptions (or any part of them) such Notified Departure will be deemed to be a Mandatory **tie** Change in respect of which **tie** will be deemed to have issued a **tie** Change on the date that such Notified Departure is notified by either Party to the other.

#### 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 allowance for programming, planning and pricing Preliminaries. The second table represents Undefined Provisional Sums for which Infraco has not deemed to have made allowance for programming, planning and pricing Preliminaries.

4.3 The procedure for the expenditure of the Provisional Sums is as follows: **TO TIDY**

- **tie** shall in conjunction with Infraco and its designers/sub contractors prepare the defined requirements and specification for each Provisional Sum item.
- Infraco shall prepare and submit initial proposals as to how the work will be designed, a design programme and an outline design to meet the requirements stated at 4.4 above to **tie** for agreement.
- Thereafter, and subject to satisfying the requirements of the Design Management Plan, Infraco shall prepare detailed proposals and a finally approved design.
- Provisional Sums will be omitted and the Construction Works Price shall be adjusted in accordance with the provisions of Clause 80 (**tie changes**) and formalized by the issue of an instruction by **tie**.
- **NOTE:** dates etc. – to be added

4.4 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.

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

6.2 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.

6.3 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 UTILITIES DIVERSIONS TO BE CARRIED OUT BY INFRACO

7.1 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

7.2 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*).

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

## 8.0 SCHEDULES OF RATES AND QUANTIFIED SCHEDULES OF RATES

8.1 Rates for certain items have been established for determining the value of **tie Changes** as noted in Appendix H. These include:

- Rates for utilities diversions
- Rates for Additional Trams and other items related to the Trams

8.2 The rates contained in the appendix are inclusive of overheads and profit are to be used for the purpose of agreeing changes (positive and negative) noted in Clause 1.2 of this Schedule 4.

8.3 The Quantified Schedules of Rates are also contained in Appendix F and they are included for reference only in determining the value of changes as outlined in Appendix ?

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 Infracore.

- 8.4 Rates for SDS are as noted in the SDS Agreement / SDS Novation Agreement which also set out the mechanism that shall apply in respect of any design associated with **tie** Changes.

## 9.0 PHASE 1B

- 9.1 Under Clause 85 of the Contract **tie** can instruct execution of the Phase 1B Works as an option.

- 9.2 The basis of the option is set out in Schedule [37].

- 9.3 **NOTE:** this section requires further development

## 10.0 FINAL ACCOUNT REQUIREMENTS

- 10.1 The final account for the Works and Services shall be prepared progressively though the duration of the Agreement and the Infracore 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**

## 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 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 allowance for programming, planning and pricing Preliminaries.

### 2.0 Table 1 – Defined Provisional Sums

Item	Description of Provision Sum	trigger date	duration	£
1	Pumped surface water outfall at A8 underpass (by depot)	01 June 08		£100,000
2	Scottish Power connections to the Depot and Ingliston Park & Ride	not applicable		£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	20 Business Day after BBS raise any queries in respect of issued information		£53,700
4	Additional cost of Network Rail compliant ballast	20 Business Day after BBS provide spec.		£300,000
5	Extra over for revised alignment to Picardy Place, York Place and London Road junctions (see also next item)	01 January 08		£3,340,324
6	Extra over for major utility diversions Picardy Place, York Place and London Road junctions	01 January 08		£3,000,000
7	Extra over for shell grip at junctions	01 August 08		£319,343
<b>Carried forward</b>				<b>£7,863,367</b>

Item	Description of Provision Sum	trigger date	duration	£
	<b>Brought forward</b>			£7,863,367
8	Allowance for Scottish Power connections to new street lights and new traffic signals	not applicable		£115,287
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 rev 1 refer]	20 Business Day after BBS raise any queries in respect of issued information		£55,662
10	Urban Traffic Controls [UTC] associated with the delivery of the alignment	01 August 08		£2,500,000
11	Scottish Power connections to Phase 1a sub-stations (8nr x £50,000)	not applicable		£400,000
12	Various Forth Ports requirements including the revised alignment of track at Casino Square, relocated tramstop, junction amendments and removal of 'kink' in alignment from Constitution Street, footpath on south side of Tower Place Bridge and Victoria Dock Bridge	01 October 08		£150,000
13	Forth Ports requirements at Ocean Terminal amendments	01 October 08		£350,000
<b>Total</b>				<b>£11,434,316</b>



### 3.0 Table 2 – Undefined Provisional Sums

Item	Description of Provision Sum	Trigger date	£
1	Accommodation Works	not applicable	£1,000,000
2	Allowance for minor utility diversions	01 October 08	£750,000
3	PICOPS / COSS / Possession Protection Staff support when undertaking works adjacent or over the railway  – see also 4b) below	not applicable	£755,307
4	Archaeological Officer – impact on productivity	not applicable	£405,755
5	Additional Crew Relief Facilities at Haymarket [SDS drawings ULE 90130-02-STP-000126 REV 1 and 000127 rev 1 refer]	20 Business Day after BBS raise any queries in respect of issued information	£49,950
6	Urban Traffic Controls [UTC] associated with the wider area impacts	01 January 10	£2,500,000
7	Forth Ports requirements for design and construction of bypass road to adoptable standard	01 October 08	£400,000
8	Forth Ports requirements for Lindsay Road amendments	01 October 08	£1,750,000
9	Royal Bank of Scotland requirement for enhancement of Gogarburn Tramstop	01 October 08	£400,000
<b>Total</b>			<b>£8,011,012</b>

### 4.0 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 / Possession Protection Staff as Network Rail possession support when undertaking works adjacent or over the railway in respect of item 3 of Table 2 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.

**5.0 Requirement to co-operate**

- 5.1 Infraco shall co-operate with **tie** in the provision of design and pricing information required to satisfy the requirements of the Forth Ports Agreement.
- 5.2 Infraco shall co-operate with **tie** in the provision of pricing information required to satisfy the requirements of the Royal Bank of Scotland Agreement in connection with Gogarburn Tramstop (outline design provided by others).

**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: 'Designed to cost' added where this was agreed but this is to be clarified / defined

Item	Description of Identified VE Saving	trigger date		£	Key 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 provision to expand in the future / reduce size of car park facilities			-£230,000	Agreed initial supply is 100 car park spaces.
3	Delete under floor lift plant to Depot and utilize mobile jacks (including mobile future proofing)			-£250,000	
4	Delete split vehicle accommodation system at Depot - requirement dependant on tram vehicle selection – don't we know this firm one way or the other?			-£27,500	Accommodation bogies are in CAF sub-contract.
5	Rationalise scope requirement Track Maintenance Equipment at Depot and consider renting			-£27,500	
6	Deletion of one pavement (inner) to Depot			-£36,000	As shown on SDS drawing insert.
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	
<b>Carried forward</b>				<b>-£825,006</b>	

Item	Description of Identified VE Saving	trigger date	£	Key Qualifications			
<b>Brought forward</b>			-£825,006				
9	<p>Consolidated VE items including those which result from changes to initial design driven by proximity to BAA runway and EARL decision as follows:</p> <ul style="list-style-type: none"> <li>• changes to initial Depot design driven by proximity to BAA runway (reduced bulk excavation)</li> <li>• reductions in structural loadings (gantry crane reduced in capacity and size impacting on building frame and envelope)</li> <li>• reduction in staff accommodation provision (reduced operational workforce reducing messing facilities, changing rooms, locker space, etc.)</li> <li>• reduction in fit out specification</li> <li>• reduction in domestic utility capacity (reduced building volume and accommodation provision)</li> </ul>				-£2,200,000		
10	Delete standby generator and substitute with hardstanding and power connection for portable generator					-£150,000	
11	Material recovery and reprocessing (Infracore); 2 options - reconstituted planings & Type 1R					-£500,000	Level of saving is subject to adjustment of quantity of this item based on the final design.
<b>Carried forward</b>			-£3,675,006				

Item	Description of Identified VE Saving	trigger date		£	Key Qualifications
<b>Brought forward</b>				-£3,675,006	
12	Reduce kerb and associated re-instatement of pavement			-£100,000	Level of saving is subject to adjustment of quantity of this item based on the final design.
13	Reduce drainage run from guideway			-£100,000	Level of saving is subject to adjustment of quantity of this item based 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 and being Designed to Cost
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
<b>Carried forward</b>				-£5,590,006	

Item	Description of Identified VE Saving	trigger date		£	Key Qualifications
<b>Brought forward</b>				-£5,590,006	
17	A8 Underpass – various initiatives			-£850,000	Change to a contiguous piled wall / leaner design.
18	Roseburn Street Viaduct – various initiatives			-£1,375,000	Subject to approval of stakeholders – Network Rail and SRU and being Designed to Cost.
19	Water of Leith initiatives			-£150,000	Subject to being Designed to Cost
20	Eight maintenance walkway structures – delete or reduce			-£250,000	Subject to being Designed to Cost
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 Infracore bid			-£300,000	Subject to agreement of Operator / TEL
<b>Carried forward</b>				-£9,515,006	

Item	Description of Identified VE Saving	trigger date		£	Key Qualifications
	<b>Brought forward</b>			-£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	Spare				
<b>Total</b>				<b>-£11,065,006</b>	

**APPENDIX D  
FURTHER VALUE ENGINEERING [VE]**

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

Item	Description of Identified VE Saving	trigger date		£	Comments
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	<b>tie</b> 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 from <b>tie</b> – saving to be agreed
8	Rationalize Depot Access Bridges			-£ ,000	Recently proposed item from BBS – saving to be agreed
9	Spare				
10	Spare				
<b>Total</b>				<b>-£2,670,000</b>	



**APPENDIX E  
UTILITIES DIVERSIONS TO BE CARRIED OUT BY INFRACO**

**NOTE:** information to be inserted by Val

**APPENDIX F  
SCHEDULE OF RATES AND QUANTIFIED SCHEDULE OF RATES**

## APPENDIX G 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.

1.4 Where 1.1(c) above is the basis of the valuation of variations or Changes then the following items shall not be included as Actual Costs under the Infraco Contract.

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 in respect of loss or damage except as provided for under the Agreement.
5. Costs which should have not been paid to a sub-contractor in accordance with the relevant sub-contract.
6. Costs arising from people who are part of the Head Office Overhead.