

Schedule 4

PRICING

1. NOTE : BBS'S COMMENTS IN RELATION TO THIS DRAFT SCHEDULE ARE INITIAL COMMENTS BASED ON A LEGAL REVIEW.

2. AS A GENERAL OBSERVATION, THERE IS AN URGENT NEED FOR JOINT DEVELOPMENT BY THE TECHNICAL/COMMERCIAL AND LEGAL TEAMS OF THE TERMS OF THIS SCHEDULE. WHILST IT MAY CORRECTLY CAPTURE THE COMMERCIAL UNDERSTANDING OF THE PARTIES, IT IS NOT EXPRESSED CONSISTENTLY WITH THE INFRACO CONTRACT AND REQUIRES SIGNIFICANT WORK TO ENSURE THAT THE COMMERCIAL INTENTION IS APPROPRIATELY EXPRESSED IN A WAY WHICH BEARS SCRUTINY AND IS SUFFICIENTLY ROBUST TO AVOID THE POTENTIAL FOR FUTURE DISPUTE.

3. BBS POSITION IS THAT THIS SCHEDULE MUST (DUE TO POTENTIAL DISCREPANCIES BETWEEN THIS AND THE "FRONT END" OF THE INFRACO CONTRACT) TAKE PRECEDENCE.

SCHEDULE FOUR

PRICING

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1.0 GENERALLY

- 1.1 The Infraco Construction Works Price¹ is detailed in Appendix A to this Schedule 4.
- 1.2 ~~Unless expressly stated otherwise herein the~~The Infraco Contract ~~Sum~~Price is on a lump sum basis ~~fixed and firm until completion of the Infraco works~~^{11,12} and not subject to variation ~~unless changed pursuant to one of the following clauses:~~¹³ except in accordance with the provisions of this Agreement.²
- ~~16~~• ~~Clause 80 – tie Changes~~
 - ~~17~~• ~~Clause 81 – Infraco Changes~~
 - ~~18~~• ~~Clause 82 – Small Works Changes~~
 - ~~19~~• ~~Clause 83 – Accommodation Works Changes~~
 - ~~20~~• ~~Clause 84 – Qualifying Changes in Law~~
 - ~~21~~• ~~Clause 85 – Phase 1B Option~~
- 1.3 This Schedule sets out the various categories of items that may be subject to change, together with a mechanism for adjustment²².
- ~~23~~1.4 ~~The Infraco is not entitled to any other amounts, save as set out in this Schedule or as otherwise set out in the Infraco Contract~~²⁴ of the Contract Price.
- 1.4 ~~1.5~~²⁵ 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 ~~1.6~~²⁶ References to clause numbers in this Schedule are to clauses in the Infraco Contract unless otherwise stated.
- 1.6 ~~1.7~~²⁷ All rates, lump sums and the like contained in this Schedule 4 are exclusive of Value Added Tax and are in Pounds Sterling.

¹ This Schedule must link to the remainder of the Infraco Contract. If terms such as "Infraco Construction Works Price" are to be used then they will need to be defined. Our response on Schedule 4 is subject to review when these proposed definitions have been provided.

² This description is consistent with the approach taken in Clause 68.3.4 of the Infraco Contract where payment is made for "any other sums due or from the Infraco under and/or arising out of this Agreement in accordance with its terms".

2.0 INFRACO CONSTRUCTION WORKS PRICE

2.1 The ²⁸[Construction Works Price²⁹] is a lump sum, fixed and firm price for all Elements of work required as specified in the Employer's Requirements version [3.3] and the Infraco Proposals [ref ?] excluding³⁰ ~~only these~~³¹ ~~items for which Provisional Sums are included as noted in 3.0 below~~³² and specified³³ ~~exclusions listed in 2.3 below~~³⁴⁻³⁵.

(a) ^{36 37}items for which Provisional Sums are included as noted in 3.0 below³⁸;

(b) ^{39 40}the⁴¹ exclusions listed in 2.3 below⁴²; and

(c) ^{43 44}any loss, damage or liability arising from a Notified Departure.

2.2 It is accepted that certain pricing assumptions have been necessary and these assumptions are listed and defined in 2.4 below.

2.3 Specified exclusions from the ⁴⁵[Construction Works Price⁴⁶] are:

a) Utilities Diversions⁴⁷³, 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 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**⁴⁹⁴ are included).

c) 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 bidder⁵¹⁵. **NOTE:** currently in Provisional Sums, drawing ref to be added

d) 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

⁴⁸³ What is the proposed definition of "Utilities Diversion"? See also later comments on the Provisional Sum mechanism.

⁵⁰⁴ The potential for dispute as to what this means is significant. It is in the interests of both BBS and tie to ensure there is adequate certainty as to what is in and what is outside the price.

⁵²⁵ So what is the scope included in the price? The relationship between cost and scope also needs to be adequately addressed. **We suggest that the technical teams sit down with the legal teams (Pinsent Masons, Biggart Baillie and DLA Piper) and go through the descriptions set out in this Schedule.**

the earthworks outline or below ground obstructions/voids, soft material or any contaminated materials. **NOTE:** review after meetings on ground conditions⁵³⁶

- e) 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
- f) Completing full footway reconstruction in Leith Walk beyond the allowance made where kerb lines are being re-sited. **NOTE:** check Infraco Proposals
- g) Any scope required by Third Parties which is not included within the designs issued up to and including 25th November 2007. ~~55 Infraco and tie will consult with Third Parties prior to contract award to agree local Codes of Construction Practice. The price will be adjusted for any amendment to constraints and additional scope which arises out of these agreements in accordance with the provisions of Clause 80 (tie changes)~~
- h) 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?
- i) ~~56 57 Any work (i) to the Tower Place and/or Victoria Dock Bridges (ii) in respect of the Lindsay Plce retaining wall and associated highways works together with the Morrison supermarket retaining wall, (iii) any [fencing at [●], and (iv) [others]?;~~

2.4 Assumptions in ~~58 pricing of the Construction Works Price are:~~⁵⁹ relation to the Contract Price are:

60 Conceptually, the pricing assumptions are statements which underpin the build up of the Contract Price. They are not statements as to what BBS will or will not do in carrying out the Infraco Works (ultimately BBS is required to deliver the whole of the Infraco Works). So, in that regard, we consider that the correct approach is not to state here what is included for or excluded from the Contract Price but to make factual statements as to the assumptions upon which that price is based. This approach will require an alteration to the way in which many of the pricing assumptions are expressed but has no impact on the commercial intention.

a) Design

- The ⁶¹[Infraco Construction Works Price⁶²] includes for any impact thereon arising from the **normal development**⁶³⁷ and completion of designs based on the design intent for the scheme as represented by the design information drawings issued to Infraco up to and including the design

⁵⁴⁶ We are not clear as to the approach here. Why is this "excluded"? If, for example, contaminated material is discovered, this must be dealt with in order that BBS can proceed with the Infraco Works. To that extent, the works are not "excluded" (there is no option here) it is just that the price does not allow for them. In the circumstances, we consider that the correct approach is to treat this as a pricing assumption. This same approach appears to be desirable in relation to items (f), (g) and (h).

information drop on 25th November ~~67~~⁶⁷2007-~~68~~⁶⁸2007; and NOTE: any specific issues after then?

- ~~69~~ ⁷⁰[Design delivery by the SDS Provider ready for Construction will be consistent with and allow the Infraco Works to be progressed in accordance with the Programme];
- ~~71~~ ⁷¹Design delivery~~72~~ that the design prepared by the SDS Provider has been ~~73~~ ⁷³aligned with the Infraco construction delivery programme~~74~~ and will be prepared so as to ensure compliance with the Employer's Requirements and the Infraco's Proposals and so as to meet the requirements of the Employer's Requirements;
- ~~75~~ ⁷⁵[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~~76~~ and~~77~~ ⁷⁷form and~~78~~ ⁷⁸outline~~79~~ ⁷⁹or specification~~80~~ ⁸⁰];
- that the Design ~~81~~ ⁸¹Prepared by the SDS Provider will not:
 - in terms of design principle, shape, ~~83~~ ⁸³form and/or specification be~~84~~ ⁸⁴materially amended from the drawings forming the Infraco Proposals~~85~~ (except in respect of Identified tie Changes or Value Engineering),
 - be ~~86~~ ⁸⁶materially~~87~~ ⁸⁷amended from the drawings forming the Infraco Proposals as a consequence of any Third Party Agreement~~89~~ (except Identified tie Changes in connection with Forth Ports and the RBS enhancement of Gogarburn Tramstop)~~90~~ ⁹⁰; and
 - be~~91~~ ⁹¹materially amended from the drawings forming the Infraco Proposals as a consequence of the reasonable requirements of any Approval Body.

b) Tram

⁷ Please provide a proposed definition. What is "design drop". Can we not use the proposed definition of "Base Date Design Information" previously discussed and (in principle we thought) agreed? It was agreed at recent meetings that this definition had the advantage that it cross referred to a Base Date Design Information Schedule (which would list every drafting issued on or prior to 25th November on which the price was based) and gave greater certainty as to what the base information was. For ease of reference, the proposed definition was:

⁶⁵ **"Base Date Design Information"** means save to the extent qualified by the Pricing Assumptions, the design issued to Infraco on or before 25 November 2007 as identified in the Base Date Design Information Schedule excluding [the Accommodation Works]"

⁶⁶ The description of "normal development and completion" is not satisfactory. Input will be required by the legal teams but it would be helpful to understand what is intended to be included in such "normal development"? In any event this definition should be a definition rather than a stand alone pricing assumption as currently presented.

⁸⁸ ⁸ Materiality is not acceptable here. It simply begs the question what is material and what is not. The commercial position is that these are tie risks. Furthermore a "minor" change may have a material cost/time impact and a material change may not.

- The "**Base Tram Information**" means the information contained in SDS Document ULE90130-SW-MAT-00014 v⁹²~~9~~ that reflects the 42.3m tram and the information made available by CAF / Tram Supply Agreement and the ~~Employer's Requirements~~⁹³ 9 [this is a definition only, not a pricing assumption]
- 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.
- ~~94~~⁹⁴ ~~95~~⁹⁵ That the design of the Trams supplied by the Tram Supplier is consistent in all material respects with the Base Tram Information
- ~~96~~⁹⁶ ~~97~~⁹⁷ That the UTC will allow and have no adverse impact on Tram operations including Round Trip Times and punctuality of services as set out in the Employer's Requirements.
 - ?
 - ?
 - ?

c) Roads and pavings:

- in respect of the highways work ~~98~~⁹⁸ in ~~Princes Street, Shandwick Place and Haymarket Junction~~⁹⁹ the Infraco¹⁰⁰ ~~101~~¹⁰¹'s price ~~102~~¹⁰² (in carrying out the works in accordance with this Agreement) is based on planing back the existing road structure to a sound base and replacement ~~103~~¹⁰³ with an acceptable roads construction compliant with highways and CEC standards suitable for purpose and adoption by CEC¹⁰⁴ in accordance with the SDS design to suit the revised road surface profile. Full depth reconstruction as the current designs in this area is not included in the Price.
- road construction shall be¹⁰⁵...**NOTE:** BBS to amplify¹⁰⁶:
 - (i) ¹⁰⁷ ¹⁰⁸ [in the limited areas where full depth construction is identified in the Base Date Design Information be 40mm or 25mm HRA on 60mm DBM binder course on 100mm base as shown on [●]
 - (ii) ¹⁰⁹ ¹¹⁰ In all other areas shall be [●] [BBS to specify]
- the roads [as reconstructed in accordance with the SDS design] will be adopted by CEC and 'handed back' ¹¹¹ at ¹¹² on or prior to the Service Commencement ¹¹³ Date and thereafter CEC shall ¹¹⁴ undertake routine maintenance ~~(115)~~ thereafter maintain the roads in accordance with Good Industry Practice at no cost to Infraco (and shall be responsible for

sweeping, litter¹¹⁶, removal, salting, normal wear and tear and the like)¹¹⁷ 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 be¹¹⁸ ~~NOTE: BBS to amplify~~¹¹⁹ 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 ¹²⁰ ~~associated~~¹²¹ minimal reinstatement behind kerb lines is assumed. i.e. not wall to wall¹²²⁹
- d) In respect of the Depot excavation works, the price is ¹²⁴ ~~fixed and firm~~ against the finished floor level of ?? ?? and on the assumption that the depot excavation will be handed over to Infraco ¹²⁵ ~~with no major standing water~~¹²⁶ pumped dry and with a firm sound formation.
- e) The programme for delivery of Phase 1A is:
- by the programme provided by Infraco dated ? which shows a completion of ?, **NOTE:** BBS are now submitting a revised programme on Friday 22nd February 2008
 - based on the constraints and methodologies as agreed between BBS, tie, TEL and CEC (ref ?),
 - assumes that Scotrail move the [fuel tanks] at Haymarket Depot¹²⁷ by no later than [date], and
 - Network Rail permits BBS to undertake the immunisation works by [date].
 - requires confirmation of design for Edinburgh Park Viaduct by [date] in order to construct within the two 18 hour possession booked for [17th & 24th January 2009]
 - ¹²⁸ ~~others~~¹²⁹ [that the Network Rail Possessions shall be available]
 - ~~It is agreed that all~~¹³⁰ ¹³¹ That the parties ¹³² ~~must work together~~¹³³ successfully to achieve the rationalisation of city centre constraints to achieve programme delivery¹³⁴. ~~BBS have not allowed in the Price for completion beyond March + 3 months? 2011-~~¹³⁵ by no later than March 2001 [+ 3 months].
- f) that the Code of Construction Practice will be followed by Infraco expect in respect of the following agreed relaxations:

¹²³⁹ Whilst it is understood that there may be a common commercial understanding as to the extent of work required, this does need to be expressed in an objective way and assistance will be required from the technical teams.

- **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.

- g) that in relation to Utilities that the MUDFA Contractor shall have completed the diversion of ¹³⁶any¹³⁷all Utilities Apparatus¹⁰¹³⁹ so as to ensure that the Infraco shall not be required to undertake any works to Utilities Apparatus ¹⁴⁰forming part of¹⁴¹ in carrying out the ¹⁴²MUDFA Works in accordance with the requirements of the Infraco Programme¹⁴³Infraco Works.
- h) the Network Rail Possessions...**NOTE:** BBS to amplify, may require another appendix
- i) 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;
- j) 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
- k) [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
- l) no protective measures are required ¹⁴⁴included in relation to [protected trees] however new trees will be provided for any trees removed in accordance with the [Environmental Management Plan];
- m) stray current protection proposals as contained within the Infraco Proposals shall be approved by all relevant Approval Bodies¹⁴⁵Utilities Companies;
- n) 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
- o) **NOTE:** insert any other technical issues here
- p) ¹⁴⁶ ¹⁴⁷[That in complying with Clause 18.20 of this Agreement, the Infraco shall not (other than arising from compliance with the Third Party Obligations set out in Schedule 13) incur any loss and expense and there shall be no delay to the Programme.]

¹³⁸ ¹⁰ Definition required.

q) ~~p) Demolition~~^{148 149}That the only demolition or alteration of existing buildings ¹⁵⁰is required¹⁵¹ in order to carry out and complete the Infraco Works in accordance with this Agreement are 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:** is Infraco doing this work?

r) ~~q) The removal of~~^{152 153}That Asbestos ¹⁵⁴from¹⁵⁵shall not be discovered in buildings to be demolished or altered ¹⁵⁶is excluded and if identified will be shall be adjusted in accordance with the provisions of Clause 80 ~~(tie changes)~~¹⁵⁷as part of the Infraco Works;

s) ~~r)~~¹⁵⁸"ready for Construction" means that the design satisfies the following requirements:¹⁵⁹ [this is a definition only, not a pricing assumption]

- 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.

t) ^{160 161}That the Infraco shall not incur loss and expense in complying with the requirements of the Archaeological Officer;

u) ~~s)~~¹⁶²Others?

~~y)~~¹⁶³In all other respects the Infraco price is fixed and firm.

~~z)~~¹⁶⁴The Construction Works Price has been fixed on the basis of inter alia the assumption¹⁶⁵s and exclusions ¹⁶⁶noted herein¹⁶⁷listed in paragraphs 2.3 and 2.4 above. If now or at any time the facts or circumstances differ in any way from these assumptions

and exclusions (or any of them) ¹⁶⁸(a "**Notified Departure**") the price will be adjusted for any amendment which arises in accordance with the provisions of Clause 80 (*tie changes*)

¹⁶⁹We are not clear why the drafting proposed by BBS has not been adopted here. Clause 80 contains a procedure which in practice is unlikely to be appropriate for pricing assumptions. The reason is that clause 80 envisages a change mechanism and agreement as to the price of the change prior to the change being implemented. This, in turn, envisages that there may be circumstances where the change is then withdrawn. That would not be an option for a notified departure. If the concern is to link the valuation to the methodology set out in clause 80, the intention of the BBS drafting was to capture this principle. We will also require a discussion as to payment for actual costs as they are incurred in the event that there is a dispute as to the value of the impact of the notified departure. As has been discussed previously, BBS cannot assume the cash flow risk on notified departures.

¹⁷⁰Please also not that BBS require that the Infraco will be deemed not be in breach of the Infraco contract to the extent that any breach arises as a consequence of the occurrence of a Notified Departure. The reasons for this can be illustrated by the assumption agreed (in principle) with Willie Gallagher on 21.2.08:

¹⁷¹"that the design prepared by the SDS provider has been and will be prepared so as to ensure compliance with the Employer's Requirements and the Infraco's Proposals and so as to meet the requirements of the Employer's Requirements"

¹⁷²This assumption would not itself protect Infraco from a claim for breach of contract in circumstances where there was a Notified Departure.

3.0 PROVISIONAL SUMS

3.1 Provisional Sums have been allowed for items listed in Appendix B.

3.2 The procedure for the expenditure of the Provisional Sums are as follows :

3.3 *tie* shall in conjunction with Infraco and its designers/sub contractors prepare the defined requirements and specification for each Provisional Sum item.

3.4 Infraco shall prepare and submit proposals to meet the requirements stated at 3.3 above.

3.5 Provisional Sums will be omitted and the Construction Works Price shall be adjusted in accordance with the provisions of Clause 80 (*tie changes*)

3.6 ¹⁷³~~Infraco is, as far as is practicable, deemed to have made due~~¹⁷⁴~~No allowance~~ ¹⁷⁵has been made in ¹⁷⁶~~its~~ ¹⁷⁷the ¹⁷⁸~~Programme~~ ¹⁷⁹Programme for the Provisional Sum works noted herein.

180 Note : this amendment obviously needs to be considered against the current Programme. The principal reason for the amendment is addressed by General Rule 10 of the Standard Method of Measurement (emphasis added):

181 "A Provisional Sum for defined work is a sum provided for work which is not completely designed but for which the following information is provided:

182 (a) the nature and construction of the work;

183 (b) a statement of how and where the work is fixed to the building and what other work is fixed thereto;

184 (c) a quantity or quantities which indicate the scope and extent of the work;

185 (d) any specific limitations and the like.

186 Where Provisional Sums are given for defined work the Contractor will be deemed to have made due allowance in programming, planning and pricing Preliminaries.....

187 Where Provisional Sums are given for undefined work the Contractor will be deemed not to have made any allowance in programming, planning and pricing Preliminaries."

188 Having regard to the information required to categorise work as "defined work" we do not consider these requirements can be satisfied. That being the case SMM7 would deem that the Contractor could not have allowed for the undefined work in its programme etc.

3.7 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.

189 The mechanism for the treatment of provisional sums is not understood. We refer to our previous comments:

190 *"If the sums identified below are to be treated as "provisional" which there appears to be agreement they should (subject to treating any of them as Pricing Assumptions), there needs to be a clear baseline description of each item of provisional work (i.e. "Additional Accommodation Works" – additional to what?). However, consideration will need to be given in relation to each item, whether it is truly a provisional sum (in the sense that the work may or not be required and, if it is, it will be on the instruction of tie) or simply an assumption on which the price is based. Where the work should not be "optional" (where it is required in order to deliver the Infraco Works in accordance with the Agreement), it should be a Pricing Assumption."*

191 These comments are yet to be addressed. It certainly appears on an initial review that most of these sums will need to be spent (in other words, they are not optional). That being the case, a clear process is required to ensure that the Infraco knows what is to be done well in advance of the works (so as to ensure the programme is not prejudiced as a consequence of uncertainty over the provisional sums works. We would welcome the opportunity to discuss what tie want to achieve here and how they envisage the process working in practice.

4.0 IDENTIFIED VALUE ENGINEERING (VE)

- 4.1 The parties have agreed Identified Value Engineering opportunities / savings as noted in Appendix C.
- 4.2 These VE opportunities / savings are not simply targets but are fixed and firm reductions, save for conditions (Key Qualifications) noted in Appendix C.
- 4.3 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*).

¹⁹²The mechanism for dealing with key qualifications (and the link to the Base Date Design Information) is not understood and we would welcome the opportunity to discuss.

¹⁹³Similar issues arise in relation to 5.0 below.

5.0 FURTHER VALUE ENGINEERING (VE)

- 5.1 Further Value Engineering opportunities / savings as noted in Appendix D
- 5.2 Other Identified 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.
- 5.3 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*).

6.0 IDENTIFIED TIE CHANGES REQUIRED UNDER THIRD PARTY AGREEMENTS

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

¹⁹⁴Why has this been introduced? Have we not agreed that a change to the Base Date Design Information as a consequence of the requirements of a third party is a Notified Departure?

7.0 TRANSFER OF MUDFA SCOPE

7.1 **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 Works¹⁹⁵ and so as to ensure that the Infraco will not be required to undertake any works in relation to [infrastructure owned by] the Utilities or other any other utilities. However it will be necessary for some of this scope 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 ~~¹⁹⁶Where 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*).~~¹⁹⁷¹¹

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

8.0 GROUND CONDITIONS

8.1 Under Clause 22 of the Contract...

8.2 The...

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

8.3 The basis of Infraco's pricing is set out in Appendix G. **NOTE:** still to do and requires BBS assumptions on CBRs etc.

9.0 SCHEDULES OF RATES AND BILLS OF QUANTITIES

9.1 Rates for certain items have been established as noted in Appendix H. These include:

¹⁹⁸¹¹ What if the Infraco has not been advised of the existence of the utilities apparatus in advance? The same principle should apply, namely that this is a tie risk.

¹⁹⁹In broad terms, we think the appropriate mechanism is simply to delete this section 7 in its entirety. There is already a pricing assumption that the Infraco shall not be required to undertake utilities diversions etc. If utilities are discovered (as they will be for the reasons identified) then the diversion of those utilities is not optional (in other words, it cannot be a tie Change as that could be withdrawn and there may be significant delay whilst the change procedure is gone through). It is quite possible that utilities may simply be discovered during the carrying out of the Infraco Works. It is not in any party's interest to stop work until the change procedure is complied with. For that reason, this should be treated as a pricing assumption (with a similar mechanism for price adjustment/EoT as for Compensation Events).

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

9.2 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 ~~2004-2014~~.

9.3 Bills of Quantities are 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.

10.0 PHASE 1B

10.1 Under Clause 85 of the Contract ~~tie~~ can instruct execution of the Phase 1B Works as an option.

10.2 The basis of the option is set out in Schedule 37.

202As previously noted, pricing assumptions will be required for Phase 1B. As these will be directly linked to the make up of the Phase 1B price, the pricing assumptions cannot currently be developed.

11.0 FINAL ACCOUNT REQUIREMENTS

11.1 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**

APPENDIX B
PROVISIONAL SUMS AND THE MECHANISM FOR THEIR ADJUSTMENT

1.0 Summary of Provisional Sums

The following table summarises the Provisional Sums included within the Infraco Works:

Item	Description of Provision Sum	Base Cost	OH&P	Total
1	Accommodation Works			£1,000,000
2	Pumped surface water outfall at A8 underpass (by depot)			£100,000
3	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
5	Allowance for minor utility diversions			£750,000
6	Archaeological Officer – impact on productivity NOTE: this amount may be adjusted			£405,755
7	Additional cost of Network Rail compliant ballast			£300,000
8	Extra over for revised alignment to Picardy Place, York Place and London Road junctions NOTE: this amount may be reviewed against latest proposals			£6,340,324
9	Extra over for shell grip at junctions			£319,343
	Carried forward			£10,019,122

Schedule 4 - Pricing (issued to BBS 19 Feb 08)

Item	Description of Provision Sum	Base Cost	OH&P	Total
	Brought forward			£10,019,122
10	Allowance for Scottish Power connections to new street lights and new traffic signals			£115,287
11	PICOPS / COSS as Network Rail possession support when undertaking works adjacent or over the railway – see also 2.2 below			£755,307
12	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]			£55,662
13	Additional Crew Relief Facilities at Haymarket [SDS drawings ULE 90130-02-STP-000126 REV 1 and 000127 rev 1 refer]			£49,950
14	Urban Traffic Controls [UTC]			£2,500,000
15	Scottish Power connections to Phase 1a sub-stations (8nr x £50,000)			£400,000
	Total	£00,000,000	TO CHECK	£13,895,328

2.0 Basis

~~2.03~~ 2.1 The above Provisional Sums are categorised as defined for which purposes Infraco has deemed to have made due allowance for programming, planning and pricing Preliminaries.

2.1 2.2-204 Any costs in connection with PICOPS / COSS as Network Rail possession support when undertaking works adjacent or over the railway in respect of item 11 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.

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
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	
Carried forward				-£825,006	

Schedule 4 - Pricing (issued to BBS 19 Feb 08)

Item	Description of Identified VE Saving	Base Cost	OH&P	Total	Key Qualifications
	Brought forward			-£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"> • 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	
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 base on the final design.
	Carried forward			-£3,675,006	

Schedule 4 - Pricing (issued to BBS 19 Feb 08)

Item	Description of Identified VE Saving	Base Cost	OH&P	Total	Key Qualifications
	Brought forward			-£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 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	

Schedule 4 - Pricing (issued to BBS 19 Feb 08)

Item	Description of Identified VE Saving	Base Cost	OH&P	Total	Key Qualifications
	Brought forward			-£6,440,006	
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 Infracore bid			-£300,000	Subject to agreement of Operator / TEL
	Carried forward			-£9,515,006	

Schedule 4 - Pricing (issued to BBS 19 Feb 08)

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:

Item	Description of Identified VE Saving	Base Cost	OH&P	Total	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	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.

APPENDIX F

205 ~~TRANSFER OF MUDFA SCOPE~~

206 ~~NOT USED.~~

207 ~~NOTE: see also Schedule 41~~

208 ¹²

209 ¹² See footnote 11.

APPENDIX G

GROUND CONDITIONS

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

Further work required²¹⁰. Further work is indeed required as is a clear explanation as to how this links with the remainder of this Schedule and the Infraco Contract generally.

²¹¹ Note that "obstructions/voids" are expressly excluded from the Contract Price (see Specified Exclusion (d))

PHASE 1a – Ground Penetrating Radar

Section	Notional 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 BILLS OF QUANTITIES

**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 ²¹²on a fair and reasonable basis (using such Rates contained therein as the basis for ²¹³valuation so far²¹⁴such fair and reasonable assessment insofar as this may be ²¹⁵reasonable²¹⁶appropriate).
- (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.

²¹⁷[Note, a definition of Actual Cost (which it is assumed applies only to Services and not to Works) is required but would this not be better done on a Open Book Basis with a %age uplift as set out in 1.2?] We have deleted the approach previously set out in relation to Actual Cost because we believe that an Open Book approach is likely to be less contentious and therefore we easier to agree.]

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.

218

219 **APPENDIX I**

220 **DISALLOWED COSTS**

221 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.

222 Generally;

223 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.

224 1. — Costs not justified by the Infraco's accounts and records.

225 2. — Costs not payable under the Infraco Contract.

226 3. — Costs arising from the Infraco's Design errors.

227 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.

228 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.

229 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.

230 7. — Costs of correcting or making good defects in the Infraco's Services unless otherwise authorised by tie's Representative.

231 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).

232 9. — Costs arising from loss or damage covered under insurance in accordance with Clause ? of the Infraco Contract unless otherwise authorised by tie's Representative.

233 10. — Costs arising related to claims for excesses on insurance policies.

234 11. — Costs which should have not been paid to a sub-contractor in accordance with the relevant sub-contract.

235 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.

- ~~236~~13. — ~~Costs as incurred only because the Infraco did not proceed regularly and diligently with the Services.~~
- ~~237~~14. — ~~Costs are in respect of delayed, disrupted or cancelled.~~
- ~~238~~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).~~
- ~~239~~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.~~
- ~~240~~17. — ~~Costs arising where the Infraco failed to notify tie's Representative within 28 calendar days of the disruption or impediment being incurred.~~
- ~~241~~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 7.~~
- ~~242~~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.~~
- ~~243~~20. — ~~Costs incurred outside the LoD or LLAU.~~
- ~~244~~21. — ~~Costs arising from people who are part of the Head Office Overhead.~~

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Legend:	
Insertion	
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Deleted cell	
Moved cell	
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Padding cell	

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Moved to	2
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