

THIS IS SCHEDULE PART 4 REFERRED TO IN THE FOREGOING AGREEMENT BETWEEN TIE AND THE INFRACO

SCHEDULE PART 4

PRICING

CONTENTS

1 0	C 11
1.0	Generally

- 2.0 Definitions used in this Schedule
- 3.0 Construction Works Price
- 4.0 Provisional Sums
- 5.0 Value Engineering taken into firm price but conditional
- 6.0 Further Value Engineering
- 7.0 Utilities Diversions to be carried out by Infraco
- 8.0 Schedules of Rates
- 9.0 Roads Reconstruction

Appendices

- A Construction Works Price
- B Provisional Sums and the Mechanism for their Adjustment
- C Value Engineering taken into firm price but conditional
- D Further Value Engineering
- E Utilities Diversions to be carried out by Infraco
- F Schedules of Rates
- G Process for the agreement of Value of tie Changes
- H Base Date Design Information
- I Network Rail Immunisation

1.0 GENERALLY

- 1.1 The Infraco Construction Works Price is detailed in Appendix A to this Schedule Part 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 Part 4 of the 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 Part 4 of the 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 Part 4 of 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 Part 4 are exclusive of Value Added Tax and are in Pounds Sterling.

2.0 DEFINITIONS USED IN THIS SCHEDULE

- 2.1 "Archaeological Officer" means the archaeological officer appointed by CEC from time to time.
- 2.2 The "**Base Case Assumptions**" means the Base Date Design Information, the Base Tram Information, the Pricing Assumptions and the Specified Exclusions.
- 2.3 The "Base Date Design Information" means the design information drawings issued to Infraco up to and including 25th November 2007 listed in Appendix H to this Schedule Part 4.
- 2.4 The "Base Tram Information" means the information contained in Tram Supplier's technical response in relation to the Employer's Requirements and in the Tram Supply Agreement (including, for the avoidance of doubt Schedule 23 of the Tram Supply Agreement (Tram Technical Information Data Version 11)
- 2.5 The "Contract Price" comprises capital expenditure and revenue expenditure as follows:

	£
Construction Works Price	238,607,664
SDS Price (as defined in the SDS Agreement and the Novation Agreement)	3,308,815
SDS Provisional Sums (as set out in Appendix 4 to SDS Novation Agreement)	
Extended Construction Support	1,000,000
Design Support Team	675,000
Tram Supply Price (as defined in the Tram Supply Agreement)	55,781,634
Infraco Maintenance Mobilisation	1,782,292
Tram Maintenance Mobilisation	2,275,806
Infraco Spare Parts	1,013,090
Total of capital expenditure	£304,444,301

Revenue expenditure comprises amounts payable to the Infraco from the Service Commencement Date.

- 2.6 **"Defined Provisional Sum"** means a sum included in the Construction Works Price which is provisional but for which Infraco has deemed to have made a provisional allowance for programming and planning (but not Preliminaries).
- 2.7 "Issued for Construction Drawings" shall have the meaning as used in Schedule Part 1 (*Definitions and Interpretations*).
- 2.8 A "Notified Departure" is where now or at any time the facts or circumstances differ in any way from the Base Case Assumptions save to the extent caused by a breach of contract by the Infraco, an Infraco Change or a Change in Law.
- 2.9 "Pricing Assumptions" means the assumptions in respect of the Contract Price as noted in Section 3.4 below.
- 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 **"Traction Power Simulation Modelling"** means the technical modelling simulation prepared by the Infraco dated 2 April 2008, reference TSELEN2/484.01r04/STS.
- 2.12 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

NH/NH/310299/15/UKM/19240659.1

- 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 Part 2 and the Infraco Proposals as Schedule Part 31 and is not subject to variation except in accordance with the provisions of this Agreement.
- 3.2.1 It is accepted by tie that certain Pricing Assumptions have been necessary and these are listed and defined in Section 3.4 below. The Parties acknowledge that certain of these Pricing Assumptions may result in the notification of a Notified Departure immediately following execution of this Agreement. This arises as a consequence of the need to fix the Contract Price against a developing factual background. In order to fix the Contract Price at the date of this Agreement certain Pricing Assumptions represent factual statements that the Parties acknowledge represent facts and circumstances that are not consistent with the actual facts and circumstances that apply. For the avoidance of doubt, the commercial intention of the Parties is that in such circumstances the Notified Departure mechanism will apply.
- 3.3 Specified Exclusions from the Construction Works Price are:
 - a) Utilities diversions (including both the diversion of Utilities and the diversion of any other utilities) and protective works associated with utilities save for the Defined 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 20th and 27th of November and 6th December 2007. Additionally the Constructions Works 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.
 - d) Bernard Street public realm project as information provided to Infraco on 28th November 2007.
 - 3.3.1 In the event that the Infraco is required to carry out any of the Specified Exclusions, this shall be a Notified Departure.
- 3.4 Pricing Assumptions are:
 - 1 The Design prepared by the SDS Provider will not (other than amendments arising from the normal development and completion of designs):
 - 1.1 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 to this Schedule Part 4);
 - 1.2 be amended from the scope shown on the Base Date Design Information and 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

NH/NH/310299/15/UKM/19240659.1

1.3 be amended from the drawings forming the Base Date Design Information and Infraco Proposals as a consequence of the requirements of any Approval Body.

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.

- 2 Design delivery by the SDS Provider has been aligned with the Infraco construction delivery programme as set out in Schedule Part 15 (*Programme*).
- 3 The Deliverables prepared by the SDS Provider prior to the date of this Agreement comply with the Infraco Proposals and the Employer's Requirements.
- 4 That the Design Delivery Programme as defined in the SDS Agreement is the same as the programme set out in Schedule Part 15 (*Programme*).
- 5 That the Infraco shall not suffer any loss and expense of whatever nature as a consequence of any matter identified in the "Assumptions and Constraints Report" in Appendix 2 of the SDS Novation Agreement, including without prejudice to the foregoing generality the following:
 - 5.1 the modifications to the SDS Provider's design process and approvals and consents periods;
 - 5.2 any assumptions or dependencies;
 - 5.3 any matter identified as being at the risk of **tie** or subject to instruction from **tie**;
 - 5.4 any instruction issued by tie;
 - 5.5 subject to Clause 10.18, any acceleration (save where Infraco itself decides to accelerate); or
 - 5.6 any strategy.
- 6 That the tram fleet shall comprise 27 Trams.
- 7 That the Trams meet the DKE parameters mentioned in the track alignment criteria document (ULE90130-SW-SPN-00001 v2.1).
- 8 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 input parameters used in the Traction Power Simulation Modelling.
- 9 Except for normal development and completion of designs (as defined in 1 above), there shall be no changes to the design resulting from the impact of the kinematic envelope of the Trams on the civils design.
- 10 The Urban Traffic Controls (UTC) will allow and have no adverse impact on the Tram operations including run time and punctuality of services as set out in the Employer's Requirements.
- 11 That in carrying out the Infraco Works in accordance with this Agreement, it shall not be necessary to undertake any works outwith the "Earthworks Outline" (as

defined in paragraph 3.6 below). The Infraco shall not encounter any below ground obstructions or voids, soft material or any contamination however the price for excavation and earthworks is inclusive of any differences between differing subsoils that may prevail within the Earthworks Outline.

- 12 Subject to paragraph 9 below, in respect of the highways work in Princes Street, Shandwick Place, Haymarket Junction and St Andrew Square, Infraco shall be required only to plane back the existing road structure to a sound base at the underside of the new surface course and replacement of surface course suitable for purpose to suit the revised road surface profile. Full depth reconstruction as the current designs in this area shall not be required.
- 13 In respect of the Highways and Drainage works at Picardy Place, London Road and York Place and St Andrew Square, Infraco shall only be obliged to carry out works to the extent shown on the Base Date Design Information.
- 14 Road construction shall be 35mm thin surface course on 55mm binder course on 110mm base course and 250mm type 1 sub-base.
- 15 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.
- 16 Flexible footpath surfacing shall be 30mm HRA on 50mm DBM on 150mm Type 1 base.
- 17 In respect of footways provided the Infraco has used reasonable endeavours to protect existing kerbs and flags, during the carrying out of the Infraco Works, these existing kerbs and flags can be re-used where available and minimal reinstatement behind kerb lines is required i.e. not wall to wall.
- 18 Full footway reconstruction in Leith Walk is not required beyond the allowance made in areas where kerb lines are being re-sited.
- 19 That in respect of Tower Place Bridge, Victoria Dock Bridge and Lindsay Road retaining wall, Infraco shall only be obliged to carry out works to the extent shown in accordance with the Base Date Design Information.
- 20 That in respect of Morrison Supermarket at the Gyle the Infraco shall not be required to carry out any works in respect of the retaining wall.
- 21 That in respect of the Depot excavation works, (i) the volume of excavation shall be 80,000m³, and (ii) the depot excavation will be handed over to Infraco pumped dry with a firm sound formation.
- 22 That in circumstances where, to maintain the Programme, the Infraco carries out works or procures materials or works prior to the issue of Issue for Construction drawings, no amendment to the works carried out, or works or materials procured shall be required as a consequence of the subsequent issue of the relevant Issue for Construction drawings.
- 23 That the Code of Construction Practice will be followed by Infraco except where relaxations from the hours of working outside the hours specified in the Code of

Construction Practice are specifically stated in Schedule Part 15 (*Programme*) and that CEC shall grant such relaxations in circumstances where the Infraco has submitted a competent application in order to achieve such relaxation.

- 24 That in relation to Utilities the MUDFA Contractor and/or Utility shall have completed the diversion of any utilities in accordance with the requirements of the Programme save for utilities diversions to be carried out by the Infraco pursuant to the expenditure of the Provisional Sums noted in Appendix B.
- 25 That the Possessions (as defined in Clause 16.1) shall be available as noted in the Programme at Schedule Part 15 (Programme).
- 26 Network Rail shall comply with its obligations under the Asset Protection Agreement and the Bridge Agreements as defined in Clause 16.1.
- 27 That, save to the extent that the Infraco fails to comply with its obligations under Clause 16 of this Agreement to provide information properly and reasonably requested in a full and timely manner to Network Rail in the process of developing the APA Works Programme, that neither the timing nor the terms of Network Rail's approval of the APA Works Programme shall adversely affect the Programme.
- 28 Trackslab depth is 385mm with formation condition of 10% CBR.
- 29 That there shall be no special floating track measures required for vibration
- 30 That 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.
- 31 That the Archaeological Officer shall not delay or disrupt the Infraco Works.
- 32 That the programming assumptions set out in Schedule Part 15 (*Programme*) remain true in all respects.
- 33 That third parties shall not carry out works which impact upon the Infraco Works.
- 34 That stray current protection proposals as contained within the Infraco Proposals shall be approved by all relevant Approval Bodies where Infraco has made a competent application .
- 35 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.
- 36 Demolition or alteration of existing buildings shall only be 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)
- 37 Asbestos shall not be discovered or identified in buildings to be demolished or altered.
- 38 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 Transtop.
- 39 That compliance with the Infraco's obligation pursuant to Clause 18.17B and under Schedule Part 13 Section A (Third Party Agreements) to give "due and proper cognisance to third party requirements" (and similar obligations such as to have "due and proper regard to such third party requirements") under the Third Party Agreements shall not cause any delay or disruption to the carrying out of the Infraco Works, on the basis that the Infraco shall have used reasonable endeavours to mitigate the impact of such compliance and that any such third party requirements could not reasonably have been foreseen by an experienced contractor executing works in the operating environment of a UK city.
- 40 That any conditions attaching to any licence or similar arrangement entered into between **tie** and a third party entered into pursuant to any agreement included in Schedule Part 13 Section A (Third Party Agreements) shall not cause any delay or disruption to the carrying out of the Infraco Works, on the basis that the Infraco shall provide all reasonable assistance to **tie** to ensure compliance at all times with any such conditions and shall use all reasonable endeavours to mitigate the impact of such conditions in the carrying out of the Infraco Works.
- 41 That the Standards (as defined in Clause 16.1):
 - (a) In relation to NR Immunisation (as defined in Appendix I to this Part 4 of the Schedule) shall be and shall be in the same terms as those which were in force on 12th October 2007; and
 - (b) In relation to the remainder of the APA Works (as defined in Clause 16.1) shall be and shall be in the same terms as those which were in force at the date of this Agreement.
- 42 That design support during the construction period will be provided by the SDS Provider.
- 43 The Public Realm Design Workbook will not introduce any new requirements into the Prior Approvals process which are in addition to the existing requirements set out in the Tram Design Manual and the City of Edinburgh Council's Standard for Streets.
- 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 requiring a change to the Employer's Requirements and/or the Infraco Proposals or otherwise requiring the Infraco to take account of the Notified Departure in the

NH/NH/310299/15/UKM/19240659.1

Contract Price and/or Programme in respect of which tie will be deemed to have issued a tie Notice of Change on the date that such Notified Departure is notified by either Party to the other. For the avoidance of doubt tie shall pay to the Infraco, to the extent not taken into account in the Estimate provided pursuant to Clause 80.24.1, any additional loss and expense incurred by the Infraco as a consequence of the delay between the notification of the Notified Departure and the actual date (not the deemed date) that tie issues a tie Change Order, such payment to be made by tie following evaluation, agreement or determination of such additional loss and expense pursuant to Clause 65 (Compensation Events) as if the delay was itself a Compensation Event.

- 3.6 Earthworks Outline in this Schedule Part 4 means:
 - 3.6.1 the finished earthworks levels and dimensions (prior to topsoiling) for the construction, where specified, of
 - (a) carriageway, hard shoulder, hard strip, footway, paved area, central reserve, verge, side slope;
 - (b) underside of (i) trackslab, (ii) grasstrack concrete, and (iii) ballast;
 - (c) sub-base;
 - (d) fill on sub-base material, base and capping;
 - (e) contiguous filer material, lightweight aggregate infill;
 - (f) surface water channels;
 - (g) landscape areas, environmental bunds.

In all cases of filter drains, except narrow filter drains, the Earthworks Outline shall be the top of the filter material.

- 3.6.2 Where capping or stabilisation to form capping is required by the design in cutting or embankment, the Earthworks Outline shall be as defined in paragraph 3.6.1 i.e. as the top of capping.
- 3.6.3 Where an embankment is required by the design to be surcharged, the Earthworks Outline shall be defined as in paragraph 3.6.1 and exclude the surcharge.
- 3.6.4 Where permanent storage or stockpiling of topsoil is required, the Earthworks Outline shall be as defined in paragraph 3.6.1 and exclude stored topsoil.
- 3.6.5 Where the ground has been subjected to the treatment in respect of ground improvement, mine workings, swallow holes and the like, for the purpose of the definition of Earthworks Outline the existing ground level shall be the level obtained on completion of any such treatment of the areas affected.

Sub-soil Level is defined as the level of the ground after the removal of topsoil.

Surcharge is defined as material placed for the purpose of loading for the periods specified in the design.

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. The second table represents Undefined Provisional Sums.
- 4.3 The procedure for the expenditure of the Provisional Sums is as set out in this section.
- 4.4 Provisional Sums requiring an instruction are those for which a "trigger date" has been identified in Tables 1 and 2 below. Where the "trigger date" is stated to be "not applicable", this is a Provisional Sum not requiring instruction.
- 4.5 Provisional Sums requiring Instruction
 - 4.5.1 **tie** shall, in conjunction with (where reasonably requested by **tie**) the Infraco and the Infraco Parties, prepare the defined requirements and specification for Provisional Sums which require an instruction sufficiently ahead of Programme so as to achieve the **tie** Notice of Change by the date shown as the trigger date in Tables 1 and 2 below.
 - 4.5.2 Not later than the dates set out in column entitled "trigger date" of the Provisional Sums Tables tie shall issue a tie Notice of Change instructing the works to which the Provisional Sums requiring Instruction apply, which tie Change shall be a Mandatory tie Change. Failure by tie to issue a tie Notice of Change in accordance with this paragraph shall be a Compensation Event to which Clause 65 applies
 - 4.5.3 After agreement or determination of a **tie** Change for works to which a Provisional Sum applies, the Provisional Sum and, in the case of Defined Provisional Sums the provisional allowance for programming, planning and pricing Preliminaries shall be removed from the Contract Price and Milestone Schedule and the Programme and shall be replaced by the value of the **tie** Change and programme adjustment determined in accordance with Clause 80.
- 4.6 Provisional Sums not requiring an Instruction
 - 4.6.1 Where work is carried out in respect of a Provisional Sum which is not a Provisional Sum requiring Instruction, the carrying out of such works will be deemed to be a **tie** Change.
 - 4.6.2 After agreement or determination of the **tie** Change which is deemed to have occurred pursuant to paragraph 4.6.1, the Provisional Sum and, in the case of Defined Provisional Sums the provisional allowance for programming, planning and pricing Preliminaries shall be removed from the Contract Price and Milestone Schedule and the Programme and shall be replaced by the value of the **tie** Change and programme adjustment determined in accordance with Clause 80.
- 4.7 SDS Provisional Sums
 - 4.7.1 In addition to the SDS Price Infraco shall be entitled to be paid and include in any Application for Milestone Payment amounts properly due to be paid to the SDS Provider pursuant to the SDS Agreement in respect of Extended Construction Support and Design Support Team notwithstanding the amount set out as SDS Provisional Sums in paragraph 2.5.
 - 4.7.2 Infraco will be entitled to add a head office overhead and profit percentage of 10% to amounts payable to the SDS Provider under the SDS Agreement where such amounts when aggregated with amounts previously paid to the SDS Provider

exceed £5,000,000 but, for the avoidance of doubt, such percentage shall only be applied to the amount in excess of \pounds 5,000,000.

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.
- 5.2.1 Subject to the provisions applying to Value Engineering opportunities which are Design to Cost these VE opportunities / savings are not simply targets but are fixed and firm reductions which are reflected in the Contract Price as at the date of this Agreement.
- 5.3 Infraco shall implement a Value Engineering opportunity provided that:
 - 5.3.1 where the implementation of the Value Engineering opportunity requires instruction by tie, tie have issued such instruction (which shall be a tie Change) sufficiently ahead of the Programme to allow the Value Engineering opportunity to be realised;
 - 5.3.2 the Value Engineering opportunity is technically feasible;
 - 5.3.3 any Consents required for the implementation of the Value Engineering opportunity are obtained and designs Issued for Construction by the date set out in the Programme; and
 - 5.3.4 any other Key Qualification applying to the Value Engineering opportunity have been achieved.
- 5.4 NOT USED.
- 5.5 To the extent that a Value Engineering opportunity is implemented:
 - 5.5.1 the Employer's Requirements and Infraco Proposals shall be amended to take into account the changes to the Infraco Works as a result of such implementation;
- 5.6 To the extent that a Value Engineering opportunity is not implemented:
 - 5.6.1 Infraco shall carry out the Infraco Works without the amendment to the Employer's Requirements and Infraco Proposals which would have been made had the Value Engineering opportunity been implemented; and
 - 5.6.2 Infraco and tie shall agree amendments to the Schedule Part 5 (*Milestone Payments*)to increase the Contract Price by the saving applying to the Value Engineering opportunity set out in Appendix C and Infraco shall be entitled to include in its next Application for Payment and tie shall pay to Infraco the design costs incurred by Infraco in considering the Value Engineering opportunity up to a maximum amount of £25,000 per Value Engineering opportunity.
- 5.7 Where a Key Condition to achieving a Value Engineering opportunity is "Design to Cost":
 - 5.7.1 before implementing the Value Engineering opportunity and sufficiently ahead of the Programme so as not to prejudice the delivery of the Value Engineering opportunity Infraco shall deliver to tie an Estimate setting out the net cost or saving of implementing the Value Engineering opportunity (including design costs); and

NH/NH/310299/15/UKM/19240659.1

- 5.7.2 **tie** shall confirm within 10 Business Days of receipt of the Estimate if **tie** wishes Infraco to proceed with the Value Engineering opportunity.
- 5.7.3 If tie confirms that it wishes Infraco to proceed with the Value Engineering opportunity,
 - (a) the Employer's Requirements and Infraco Proposals shall be amended to take into account the changes to the Infraco Works as a result of such implementation; and
 - (b) Infraco and tie shall agree amendments to the Schedule Part 5 (Milestone Schedule) to amend the Contract Price by the difference (if any) between the saving applying to the Value Engineering opportunity set out in Appendix C and the actual saving set out in the Estimate provided to tie in accordance with paragraph 5.7.1 and Infraco shall be entitled to claim in its next Application for Payment and tie shall pay to Infraco the design costs incurred by Infraco in considering the Value Engineering opportunity up to a maximum amount of £25,000 per Value Engineering opportunity.
- 5.7.4 If tie confirms that it does not wish Infraco to proceed with the Value Engineering opportunity paragraph 5.6 shall apply. tie shall be deemed not to wish Infraco to proceed with a Value Engineering opportunity which is design to cost if it fails to respond to an Estimate in accordance with paragraph 5.7.2;
- 5.7.5 Infraco shall use reasonable endeavours to achieve the savings for each Value Engineering opportunity.

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 reasons such as:
 - they may be unrecorded and not discovered until the Infraco Works are commenced
 - they may be discovered during the MUDFA Works 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
- 7.2.1 Where Infraco has been advised of the existence of utility apparatus in advance, whether identified to date or following discovery during the MUDFA Works, 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.

8.0 SCHEDULES OF RATES

- 8.1 Rates for certain items have been established for determining the value of tie Changes as noted in Appendix F.
- 8.2 The rates contained in the appendix F are inclusive of overheads and profit are to be used for the purpose of agreeing changes (positive and negative)
- 8.3 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 ROADS RECONSTRUCTION

- 9.1 **tie** shall (and shall procure that CEC shall) support re-design proposals through the Development Workshop (as defined in the SDS Novation Agreement) which the SDS Provider may develop to align their design deliverables with Pricing Assumption 12.
- 9.2 The maximum aggregated entitlement for the Infraco shall be eight weeks in relation to a Notified Departure (including any relief, time or additional cost) concerning the combined effect of Pricing Assumption 12 and programming assumption 9.1.4.
- 9.3 The recovery of additional cost by the Infraco under Clause 80 (*tie Change*) following a Notified Departure with regard to Pricing Assumption 12 shall be capped at an aggregate amount of $\pounds1,500,000$ (one million five hundred thousand pounds), save with regard to any claim for additional cost arising from delay caused by the SDS Provider's redesign of any roads reconstruction or the requirement to revert to the SDS Provider's initial design for such roads reconstruction.

APPENDIX A

CONSTRUCTION WORKS PRICE ANALYSIS

A1 CONSTRUCTION WORKS PRICE ANALYSIS

Lump Sum Firm and Fixed Price		£ 231,797,342
Deduct Identified Value Engineering	Taken To Firm Price	£ 9,965,006
	(See Appendix C)	
Firm Price		£ 221,832,336
Deduct Further Value Engineering	(see Appendix D)	£ 2,670,000
Sub Total		£ 219,162,336
Add Defined Provisional Sums	(see Appendix B)	£ 11,434,316
Add Undefined Provisional Sums	(see Appendix B)	£ 8,011,012
Construction Works Price		£ 238,607,664

APPENDIX A2

Item	DESCRIPTION	UNIT	QTY	Unit Rate	TOTAL
Code					£
	PRELIMINARIES AND GENERAL ITEMS				
	Contractual Requirements				
A110	Contractor's bond	sum	1.00	£1,317,093.79	£1,317,093.79
A120	Professional Indemnity Insurance	sum	1.00	£0.00	£0.00
84047535979		Sum	18.80.80	1083000000	045433023
A130	Marine Cargo Insurance	sum	1.00	£0.00	£0.00
A140	All other insurance required by the Contract	sum	1.00	£1,633,046.22	£1,633,046.22
A150	Administration of all insurances required under the Contract including but without limitation Employee's Compensation and Statutory Employee's Compensation Levy.	sum	1.00	£0.00	£0.00
A160	Progress Reporting in accordance with the Contract.	sum	1.00	£0.00	£0.00
	Specified Requirements				
	Accommodation for the Engineer's and Client's Staff; establish and remove				
A211.1	offices	sum	1.00	£82,309.91	£82,309.91
	Accommodation for the Engineer's and Client's Staff for Railway Systems and Operations and Maintenance Departments; establish and handover				
A211.2	offices	sum	1.00	£0.00	£0.00
A211.3	depot office	sum	1.00	£0.00	£0.00
	Accommodation for the Community Liaison Officers; establish and remove				
A211.4	offices	sum	1.00	£0.00	£0.00
	Accommodation for O&M maintenance staffs; establish and remove				
A211.5	container offices	sum	1.00	£0.00	£0.00
	Facilities for the O&M maintenance; establish and handover				
A211.6	diesel fuel station	sum	1.00	£0.00	£0.00
	Accommodation for the Engineer's and Client's Staff; maintain and operate				
A211.7	offices	wk	169.00	£1,900.51	£321,186.78
		Prelime	s and Genera	I Items - Page 1	£3,353,636.70

Item	DESCRIPTION	UNIT	QTY	Unit Rate	TOTAL
Code					£
	Accommodation for the Engineer's and Client's staff for Tram Systems and Operations and Maintenance Departments; maintain and operate				
A211.8	offices	wk			
A211.9	depot office	wk			
	Accommodation for the Community Liaison Officers; maintain and operate				
A211.10	offices	wk			
	Accommodation for O&M maintenance staffs; maintain and operate				
A211.11	container offices	wk			
2	Facilities for the O&M maintenance; maintain and operate				
A211.12	diesel fuel station	wk			
4001.4	Services for Engineer's and Client's Staff; establish and remove		1.00		- CA AA
A221.1	transport vehicles	sum	1.00	£0.00	£0.00
	Services for Engineer's and Client's Staff; maintain and operate				
A221.2	transport vehicles	wk	169.00	£1,219.95	£206,171.25
	Services for Engineer's and Client's Staff; establish and remove				
A222.1	telephone	sum	1.00	£0.00	£0.00
A229.1	computing and networking facilities	sum	1.00	£0.00	£0.00
	Services for Engineer's and Client's Staff for Tram Systems and Operations and Maintenance Department; maintain and operate				
A222.2	telephone	sum	1.00	£0.00	£0.00
A229.2	computing and networking facilities	sum	1.00	£0.00	£0.00
				Items - Page 2	£206,171.25

Item	DESCRIPTION	UNIT	QTY	Unit Rate	TOTAL
Code					£
	O mine for a second				
	Services for community Liaison Officers; establish and remove				
A222.3	telephone	sum	1.00	£0.00	£0.00
A229.3	computing facilities	sum	1.00	£0.00	£0.00
	Services for Engineer's and Client's Staff; maintain and operate				
A222.4	telephone	wk			
A229.4	computing and networking facilities	wk			
	Services for Engineer's and Client's Staff for Railway Systems and Operations and Maintenance Department; maintain and operate				
A222.5	telephone	wk			
A229.5	computing and networking facilities	wk			
	Services for Community Liaison Officers; maintain and operate				
A222.6	telephone	wk			
A229.6	computing facilities	wk			
	Equipment for use by the Engineer's and Client's Staff; establish and handover				
A231.1	office equipment	sum	1.00	£0.00	£0.00
A233.1	surveying equipment	sum	1.00	£0.00	£0.00
A239.1	photographic equipment	sum	1.00	£0.00	£0.00
A239.2	safety equipment	sum	1.00	£0.00	£0.00
A239.3	audio and visual equipment	sum	1.00	£0.00	£0.00
	Equipment for use by the Engineer's and Client's Staff for Railway Systems and Operations and Maintenance Departments; establish and handover				
A231.2	office equipment	sum	1.00	£0.00	£0.00
A239.4	safety equipment	sum	1.00	£0.00	£0.00
		Prelims	and General	Items - Page 3	£0.00

Item	DESCRIPTION	UNIT	QTY	Unit Rate	TOTAL
Code					£
	Equipment for use by the Community Liaison Officers; establish and handover				
A231.3	office equipment	sum	1.00	£0.00	£0.00
L.	Equipment for use by the Engineer's and Client's Staff; maintain and operate				
A231.4	office equipment	wk			
A233.2	surveying equipment	wk	169.00	£0.00	£0.00
A239.5	photographic equipment	wk	169.00	£112.61	£19,031.33
A239.6	safety equipment	wk			
A239.7	audio and visual equipment	wk			
	Equipment for use by the Engineer's and Client's Staff for Tramway Systems and Operations and Maintenance Departments; maintain and operate				
A231.5	office equipment	wk			
A239.8	safety equipment	wk			
	Equipment for use by the Community Liaison Officers; maintain and operate				
A231.6	office equipment	wk			
	Attendance upon the Engineer's and Client's Staff; establish and remove				
A241.1	drivers	sum	1.00	£0.00	£0.00
A250.1	testing of materials	sum	1.00	£0.00	£0.00
A260.1	testing of the works	sum	1.00	£0.00	£0.00
	Attendance upon the Engineer's and Client's Staff for Tram Systems and Operations and Maintenance Departments; establish and remove				
A249.1	general cleaning and tea services	sum	1.00	£0.00	£0.00
		Prelim	s and General	Items - Page 4	£19,031.33

Item	DESCRIPTION	UNIT	QTY	Unit Rate	TOTAL
Code					£
	Attendance upon the Engineeric and Clientic				
	Attendance upon the Engineer's and Client's Staff; maintain and operate				
A241.2	drivers	wk			
A250.2	testing of materials	wk			
A260.2	testing of the works	wk			
	Attendance upon the Engineer's and Client's Staff for Tram Systems and Operation and Maintenance Departments; maintain and operate				
A249.2	general cleaning and tea services	wk			
	Other Specified Requirements				
	General and special attendances for Project Contractors & Third Parties				
A710.1	TRAMCO	sum	1.00	£0.00	£0.00
A710.2	MUDFA	sum	1.00	£0.00	£0.00
A710.3	Advance Works Contractor	sum	1.00	£0.00	£0.00
A710.4	Network Rail	sum	1.00	£0.00	£0.00
A710.5	First Scotrail	sum	1.00	£0.00	£0.00
A710.6	Others (ref Schedule 13)	sum	1.00	£0.00	£0.00
	Environmental requirements and Environmental Monitoring and Assessment Programme; establish and remove				
A790.1	air pollution	sum	1.00	£0.00	£0.00
A790.2	noise pollution	sum	1.00	£0.00	£0.00
A790.3	water pollution	sum	1.00	£0.00	£0.00
		Prelime	s and General	Items - Page 5	£0.00

ltem	DESCRIPTION	UNIT	QTY	Unit Rate	TOTAL
Code					£
	Environmental requirements and Environmental Monitoring and Assessment Programme; maintain, monitor and report				
A790.4	air pollution	wk			
A790.5	noise pollution	wk			
A790.6	water pollution	wk			
	Other requirements				
A790.7	quality management; establish, remove, maintain and operate	sum	1.00	£0.00	£0.00
A790.8	site cleaning; establish, remove maintain and operate	sum	1.00	£0.00	£0.00
A790.9	compliance of existing trees protection, treatment and transplantation requirements; establish, remove, maintain and operate	sum	1.00	£0.00	£0.00
A790.10	durability requirements; establish, remove, maitain and operate	sum	1.00	£0.00	£0.00
A790.11	reliability demonstration plan, establish, remove, maintain and operate	sum	1.00	£0.00	£0.00
A790.12	instrumentation and monitoring works for all elements of the Works; establish and remove	sum	1.00	£0.00	£0.00
A790.13	instrumentation and monitoring works for all elements of the Works; maintain, monitor, audit and report	wk			
A790.14	independent checking engineer	sum	1.00	£0.00	£0.00
A790.15	building services coordination team	sum	1.00	£0.00	£0.00
5	Contractor's Requirements				
~	Contractor's design costs	sum	1.00	£0.00	£0.00
A810.01	develop, complete and design of all outstanding works associated with Onboard Supervisory and Comms Equipment - Item Code A1(1)	sum	1.00	£0.00	£0.00
A810.02	develop, complete and design of all outstanding works associated with Track and Formation - Item Code B1	sum	1.00	£0.00	£0.00
A810.03	develop, complete and design of all outstanding works associated with Tamstops - Item Code B2	sum	1.00	£0.00	£0.00
		Prelims	and General	Items - Page 6	£0.00

ltem	DESCRIPTION	UNIT	QTY	Unit Rate	TOTAL
Code		2			£
A810.04	develop, complete and design of all outstanding Architectural Builder's Works and Finishes Works - Item Code B3	sum	1.00	£0.00	£0.00
A810.05	develop, complete and design of all outstanding electrical and mechanical works - Item Code B3	sum	1.00	£0.00	£0.00
A810.06	develop, complete and design of all outstanding structural works - Item Code B3	sum	1.00	£0.00	£0.00
A810.07	develop, complete and design of all outstanding depot maintenance equipment works - Item Code B3	sum	1.00	£0.00	£0.00
A810.08	develop, complete and design of all outstanding highways works - Item Code B4	sum	1.00	£0.00	£0.00
A810.09	develop, complete and design of all outstanding Substation Building works - Item Code B5	sum	1.00	£0.00	£0.00
A810.10	develop, complete and design of all oustanding wayside equipment cabinet works - Item Code B5	sum	1.00	£0.00	£0.00
A810.11	develop, complete and design of all outstanding structure works cabinets - Item Code B6	sum	1.00	£0.00	£0.00
A810.12	develop, complete and design of all outstanding Supervisory and Control Systems works - Item Codes C, C1 and C2	sum	1.00	£0.00	£0.00
A810.13	develop, complete and design of all outstanding Tramstop Equipment works - Item Code C3	sum	1.00	£0.00	£0.00
A810.14	develop, complete and design of all outstanding Depot Equipment works - Item Code C4	sum	1.00	£0.00	£0.00
A810.15	develop, complete and design of all outstanding traction power system works - Item Code D1	sum	1.00	£0.00	£0.00
A810.16	develop, complete and design of all outstanding OHLE works - Item Code D2	sum	1.00	£0.00	£0.00
	Documentation and Manuals				
A810.17	prepare, submit and update Operation and Maintenance Manuals for all Civil and Building works	sum	1.00	£0.00	£0.00
A810.18	prepare, submit and update all Operation and Maintenance Manuals for Onboard Supervisory and Comms Equipment	sum	1.00	£0.00	£0.00
		Prelims	and General	l Items - Page 7	£0.00

ltem	DESCRIPTION	UNIT	QTY	Unit Rate	TOTAL
Code					£
A810.19	prepare, submit and update all Operation and Maintenance Manuals for Track and Formation works	sum	1.00	£0.00	£0.00
A810.20	prepare, submit and update Operation and Maintenance Manuals for depot maintenance equipment	sum	1.00	£0.00	£0.00
A810.21	prepare, submit and update Operation and Maintenance Manuals for all Supervisory and Control systems	sum	1.00	£0.00	£0.00
A810.22	prepare, submit and update Operation and Maintenance Manuals for all Tramstop Equipment	sum	1.00	£0.00	£0.00
A810.23	prepare, submit and update Operation and Maintenance Manuals for all Traction Power systems, equipment and works	sum	1.00	£0.00	£0.00
A810.24	prepare, submit and update Operation and Maintenance Manuals for all OHLE systems, equipment and works	sum	1.00	£0.00	£0.00
A810.25	prepare, maintain and submit necessary as- constructed drawings and survey records	sum	1.00	£0.00	£0.00
A810.26	prepare and submit Manufacturers' Design Warranties for all equipment installed as part of the Tram System	sum	1.00	£0.00	£0.00
A810.27	prepare, submit and update hazard analysis report for depot maintenance equipment	sum	1.00	£0.00	£0.00
A810.28	prepare, submit and update life cycle cost report for depot maintenance equipment	sum	1.00	£0.00	£0.00
A810.29	prepare and conduct training courses on operation and maintenance of depot maintenance equipment	sum	1.00	£0.00	£0.00
A810.30	prepare and conduct training courses on operation and maintenance of all Supervisory and Control Systems	sum	1.00	£0.00	£0.00
A810.31	prepare and conduct training courses on operation and maintenance of all Traction Power and OHLE systems	sum	1.00	£0.00	£0.00
A810.32	prepare and conduct training courses on operation and maintenance of all Tramstop Equipment	sum	1.00	£0.00	£0.00
		Prelims	and General	Items - Page 8	£0.00

Item	DESCRIPTION	UNIT	QTY	Unit Rate	TOTAL
Code					£
	Supply, erect and remove on completion				
A821	offices - Main and Satellite	sum	1.00	£0.00	£0.00
= 20094y			232)	3154.525	19225.5
A822	laboratories	sum	1.00	£0.00	£0.00
A823	cabins	sum	1.00	£0.00	£0.00
A824	stores and workshops	sum	1.00	£0.00	£0.00
A825	canteens and mess rooms	sum	1.00	£0.00	£0.00
	Supply, install and remove on completion	+ +			
A831	electricity supply	sum	1.00	£0.00	£0.00
A832	water supply	sum	1.00	£0.00	£0.00
A833	site communication facilities	sum	1.00	£0.00	£0.00
A834	temporary drainage and sewage disposal	sum	1.00	£0.00	£0.00
A271	Temporary works				
A27 1					
	The Contractor shall insert hereinafter such temporary works items and sums required to carry out the works under Section A of the Project.				
		+ +			
		+			
		+			
		Prelims	s and Genera	I Items - Page 9	£0.00

ltem	DESCRIPTION	UNIT	QTY	Unit Rate	TOTAL
Code					£
	-				
A271	Temporary works (Cont'd)				
	2				
	-				
	-			-	
	-				
		Prelims	s and General	Items - Page 10	£0.0

ltem	DESCRIPTION	UNIT	QTY	Unit Rate	TOTAL
ode					£
	Contractor's Other Charges				
	The Contractor has entered hereunder any specific item of work or obligation or service or any other thing which is necessary for the execution of the Works, as required by the Contract, which has been omitted from or has not been separately itemised elsewhere within the Pricing Schedule and for which a separate charge is required. The Contractor shall insert hereinafter such additional items and pages as he deems necessary and include same on the Collection Summary Sheets				
	The unit of measurement for any Contractor's Other Charges shall be "sum".				
	Consortium Supervision	wk	169.00	£15,895.71	£2,686,374.45
	Consortium Office Hire	wk	169.00	£1,195.55	£202,048.19
	Consortium Office Maintenance	wk	169.00	£3,498.82	£591,300.11
	Consortium Surveying Instruments Maintenance	wk	169.00	£153.71	£25,977.83
		WK.	20 5476-667224		
	Consortium IT Equipment	wk	169.00	£1,804.65	£304,986.18
	Consortium Testing	wk	169.00	£3,609.31	£609,974.18
	Consortium Establish/Remove Offices	sum	1.00	£292,755.86	£292,755.86
	Consortium Establish/Remove Surveying Equipment	sum	1.00	£18,299.22	£18,299.22
	Consortium costs Incurred during facilitated negotiation phase	sum	1.00	£2,198,311.80	£2,198,311.80
				Items - Page 11	£6,930,027.82

tem	DESCRIPTION	UNIT	QTY	Unit Rate	TOTAL
ode					£
	METHOD RELATED CHARGES				
	METHOD RELATED CHARGES				
Α	Site management and supervision				
	Sub-Section 2A	sum	1.00	£0.00	£0.00
	Sub-Section 5A	sum	1.00	£0.00	£0.00
	Sub-Section 5B	sum	1.00	£0.00	£0.00
	Sub-Section 5C	sum	1.00	£0.00	£0.00
	Sub-Section 6	sum	1.00	£0.00	£0.00
	Sub-Section 7A	sum	1.00	£0.00	£0.00
	The Contractor shall insert hereinafter such additional items and pages as he deems necessary and include same on the Collection Summary Sheets				
	High Level Section A Establish Sections & Sites (fixed)	sum	1.00	£1,468,820.91	£1,468,820.91
	High Level Section A Supervision (Time Related)	sum	1.00	£2,722,909.01	£2,722,909.01
	High Level Section A Maintain Section Offices(Time Related)	wks	169.00	£3,338.23	£564,160.76
	Depot Subcontractor Section A Supervision	sum	1.00	£1,147,709.95	£1,147,709.95
	Depot Subcontractor Section A Establish Site Services Welfare etc.	sum	1.00	£272,581.11	£272,581.11
	Depot Subcontractor Section A Scaffolding & Misc Plant	sum	1.00	£717,318.72	£717,318.72
	Depot Subcontractor Section A Insurance & Bond	sum	1.00	£243,888.36	£243,888.36
	Depot Subcontractor Section A Establish and Maintain Compound	sum	1.00	£54,734.29	£54,734.29
	Depot Subcontractor Section A Non productive Labour	sum	1.00	£283,893.23	£283,893.23
	BB1 Section A Preliminaries	sum	1.00	£6,735,461.39	£6,735,461.39
	SC1 Section A Supervision (Time Related)	sum	1.00	£2,508,921.74	£2,508,921.74
	SC1 Section A Preliminaries (Fixed)	sum	1.00	£1,131,799.42	£1,131,799.42
	SC1 Section A Preliminaries (Time Related)	sum	1.00	£2,689,179.73	£2,689,179.73
	SC1 Section A Insurance & Bond	sum	1.00	£197,862.46	£197,862.46
	SC2 Section A Preliminaries (Fixed)	sum	1.00	£319,460.04	£319,460.04
	SC2 Section A Preliminaries (Time related)	sum	1.00	£1,432,030.43	£1,432,030.43

	Method	Related C	harges - Page	£22,637,613.65
SC2 Section A Provisional Sum for Landowner Compensation Payments for land taken outside wayleave during construction period	sum	1.00	£146,882.09	£146,882.09

ltem Code	DESCRIPTION	UNIT	QTY	Unit Rate	TOTAL £
	PRELIMINARIES AND GENERAL ITEMS				
	Contractual Requirements				
A110	Contractor's bond	sum	1.00	£670,742.81	£670,742.81
A120	Professional Indemnity Insurance	sum	1.00	£0.00	£0.00
A130	Marine Cargo Insurance	sum	1.00	£0.00	£0.00
A140	All other insurance required by the Contract	sum	1.00	£881,247.16	£881,247.16
A150	Administration of all insurances required under the Contract including but without limitation Employee's Compensation and Statutory Employee's Compensation Levy.	sum	1.00	£0.00	£0.00
A160	Progress Reporting in accordance with the Contract.	sum	1.00	£0.00	£0.00
	Specified Requirements				
	Accommodation for the Engineer's and Client's Staff; establish and remove				
A211.1	offices	sum	1.00	£44,320.72	£44,320.72
	Accommodation for the Engineer's and Client's Staff for Railway Systems and Operations and Maintenance Departments; establish and handover				
A211.2	offices	sum	1.00	£0.00	£0.0
A211.3	depot office	sum	1.00	£0.00	£0.00
	Accommodation for the Community Liaison Officers; establish and remove				
A211.4	offices	sum	1.00	£0.00	£0.0
	Accommodation for O&M maintenance staffs; establish and remove				
A211.5	container offices	sum	1.00	£0.00	£0.00
	Facilities for the O&M maintenance; establish and handover				
A211.6	diesel fuel station	sum	1.00	£0.00	£0.00

	Accommodation for the Engineer's and Client's Staff; maintain and operate				
A211.7	offices	wk	169.00	£1,023.35	£172,946.73
		Prelim	is and General It	ems - Page 1	£1,769,257.42

ltem Code	DESCRIPTION	UNIT	QTY	Unit Rate	TOTAL £
	PRELIMINARIES AND GENERAL ITEMS				
	Accommodation for the Engineer's and Client's staff for Tram Systems and Operations and Maintenance Departments; maintain and operate				
A211.8	offices	wk			
A211.9	depot office	wk			
	Accommodation for the Community Liaison Officers; maintain and operate				
A211.10	offices	wk			
	Accommodation for O&M maintenance staffs;				
	maintain and operate				
A211.11	container offices	wk			
	Facilities for the O&M maintenance; maintain and operate				
A211.12	diesel fuel station	wk			
	Services for Engineer's and Client's Staff; establish and remove		-		
A221.1	transport vehicles	sum			
	Services for Engineer's and Client's Staff; maintain and operate				
A221.2	transport vehicles	wk	169.00	£656.90	£111,015.29
	Services for Engineer's and Client's Staff; establish and remove				
A222.1	telephone	sum	1.00	£0.00	£0.00
A229.1	computing and networking facilities	sum	1.00	£0.00	£0.00
	Services for Engineer's and Client's Staff for Tram Systems and Operations and Maintenance Department; maintain and operate				
A222.2	telephone	sum	1.00	£0.00	£0.00
A229.2	computing and networking facilities	sum	1.00	£0.00	£0.00

	s and General	Items - Page 2	£111,015.29

ltem Code	DESCRIPTION	UNIT	QTY	Unit Rate	TOTAL £
	PRELIMINARIES AND GENERAL ITEMS				
	Services for community Liaison Officers; establish and remove				
A222.3	telephone	sum	1.00	£0.00	£0.00
A229.3	computing facilities	sum	1.00	£0.00	£0.00
	Services for Engineer's and Client's Staff; maintain and operate				
A222.4	telephone	wk			
A229.4	computing and networking facilities	wk			
	Services for Engineer's and Client's Staff for Railway Systems and Operations and Maintenance Department; maintain and operate				
A222.5	telephone	wk			
A229.5	computing and networking facilities	wk			
	Services for Community Liaison Officers; maintain and operate				
A222.6	telephone	wk			
A229.6	computing facilities	wk			
	Equipment for use by the Engineer's and Client's Staff; establish and handover				
A231.1	office equipment	sum	1.00	£0.00	£0.00
A233.1	surveying equipment	sum	1.00	£0.00	£0.00
A239.1	photographic equipment	sum	1.00	£0.00	£0.00
A239.2	safety equipment	sum	1.00	£0.00	£0.00
A239.3	audio and visual equipment	sum	1.00	£0.00	£0.00
	Equipment for use by the Engineer's and Client's Staff for Railway Systems and Operations and Maintenance Departments; establish and handover				
A231.2	office equipment	sum	1.00	£0.00	£0.00
A239.4	safety equipment	sum	1.00	£0.00	£0.00
		Prelime	s and General I	ems - Page 3	£0.00

ltem Code	DESCRIPTION	UNIT	QTY	Unit Rate	TOTAL £
	PRELIMINARIES AND GENERAL ITEMS				
	Equipment for use by the Community Liaison				
A231.3	Officers; establish and handover office equipment	sum	1.00	£0.00	£0.00
				20.00	20.00
	Equipment for use by the Engineer's and Client's Staff; maintain and operate				
A231.4	office equipment	wk			
A233.2	surveying equipment	wk	169.00	£0.00	£0.00
A239.5	photographic equipment	wk	169.00	£60.64	£10,247.64
A239.6	safety equipment	wk			M
A239.7	audio and visual equipment	wk			
	Equipment for use by the Engineer's and Client's Staff for Tramway Systems and Operations and Maintenance Departments; maintain and operate				
A231.5	office equipment	wk			
A239.8	safety equipment	wk			
	Equipment for use by the Community Liaison Officers; maintain and operate				
A231.6	office equipment	wk			
	Attendance upon the Engineer's and Client's Staff; establish and remove				
A241.1	drivers	sum	1.00	£0.00	£0.00
A250.1	testing of materials	sum	1.00	£0.00	£0.00
A260.1	testing of the works	sum	1.00	£0.00	£0.00
	Attendance upon the Engineer's and Client's Staff for Tram Systems and Operations and Maintenance Departments; establish and remove				
A249.1	general cleaning and tea services	sum	1.00	£0.00	£0.00
		Prelim	s and General It	ems - Page 4	£10,247.64

ltem Code	DESCRIPTION	UNIT	QTY	Unit Rate	TOTAL £
	PRELIMINARIES AND GENERAL ITEMS				
	Attendance upon the Engineer's and Client's Staff; maintain and operate				
A241.2	drivers	wk			
A250.2	testing of materials	wk			
A260.2	testing of the works	wk			
	Attendance upon the Engineer's and Client's Staff for Tram Systems and Operation and Maintenance Departments; maintain and operate				
A249.2	general cleaning and tea services	wk			
	Other Specified Requirements				
	General and special attendances for Project Contractors & Third Parties				
A710.1	TRAMCO	sum	1.00	£0.00	£0.00
A710.2	MUDFA	sum	1.00	£0.00	£0.00
A710.3	Advance Works Contractor	sum	1.00	£0.00	£0.00
A710.4	Network Rail	sum	1.00	£0.00	£0.00
A710.5	First Scotrail	sum	1.00	£0.00	£0.00
A710.6	Others (ref Schedule 13)	sum	1.00	£0.00	£0.00
	Environmental requirements and Environmental Monitoring and Assessment Programme; establish and remove				
A790.1	air pollution	sum	1.00	£0.00	£0.00
A790.2	noise pollution	sum	1.00	£0.00	£0.00
A790.3	water pollution	sum	1.00	£0.00	£0.00
	Environmental requirements and Environmental Monitoring and Assessment Programme; maintain, monitor and report				
A790.4	air pollution	wk			
A790.5	noise pollution	wk			
		Prelims	s and General I	tems - Page 5	£0.00

ltem Code	DESCRIPTION	UNIT	QTY	Unit Rate	TOTAL £
	PRELIMINARIES AND GENERAL ITEMS				
A790.6	water pollution	wk			
	<u>.</u>				
	Other requirements				
A790.7	quality management; establish, remove, maintain and operate	sum	1.00	£0.00	£0.00
A790.8	site cleaning; establish, remove maintain and operate	sum	1.00	£0.00	£0.00
A790.9	compliance of existing trees protection, treatment and transplantation requirements; establish, remove, maintain and operate	sum	1.00	£0.00	£0.00
A790.10	durability requirements; establish, remove, maitain and operate	sum	1.00	£0.00	£0.00
A790.11	reliability demonstration plan, establish, remove, maintain and operate	sum	1.00	£0.00	£0.00
A790.12	instrumentation and monitoring works for all elements of the Works; establish and remove	sum	1.00	£0.00	£0.00
A790.13	instrumentation and monitoring works for all elements of the Works; maintain, monitor, audit and report	wk			
A790.14	independent checking engineer	sum	1.00	£0.00	£0.00
A790.15	building services coordination team	sum	1.00	£0.00	£0.00
	Contractor's Requirements				
1	Contractor's design costs	sum	1	£0.00	£0.00
A810.01	develop, complete and design of all outstanding works associated with Onboard Supervisory and Comms Equipment - Item Code A1(1)	sum	1.00	£0.00	£0.00
A810.02	develop, complete and design of all outstanding works associated with Track and Formation - Item Code B1	sum	1.00	£0.00	£0.00
A810.03	develop, complete and design of all outstanding works associated with Tamstops - Item Code B2	sum	1.00	£0.00	£0.00
A810.04	develop, complete and design of all outstanding Architectural Builder's Works and Finishes Works - Item Code B3	sum	1.00	£0.00	£0.00
A810.05	develop, complete and design of all outstanding electrical and mechanical works - Item Code B3	sum	1.00	£0.00	£0.00
		Prelims	and General I	tems - Page 6	£0.00

ltem Code	DESCRIPTION	UNIT	QTY	Unit Rate	TOTAL £
	PRELIMINARIES AND GENERAL ITEMS				
A810.06	develop, complete and design of all outstanding structural works - Item Code B3	sum	1.00	£0.00	£0.00
A810.07	develop, complete and design of all outstanding depot maintenance equipment works - Item Code B3	sum	1.00	£0.00	£0.00
A810.08	develop, complete and design of all outstanding highways works - Item Code B4	sum	1.00	£0.00	£0.00
A810.09	develop, complete and design of all outstanding Substation Building works - Item Code B5	sum	1.00	£0.00	£0.00
A810.10	develop, complete and design of all oustanding wayside equipment cabinet works - Item Code B5	sum	1.00	£0.00	£0.00
A810.11	develop, complete and design of all outstanding structure works cabinets - Item Code B6	sum	1.00	£0.00	£0.00
A810.12	develop, complete and design of all outstanding Supervisory and Control Systems works - Item Codes C, C1 and C2	sum	1.00	£0.00	£0.00
A810.13	develop, complete and design of all outstanding Tramstop Equipment works - Item Code C3	sum	1.00	£0.00	£0.00
A810.14	develop, complete and design of all outstanding Depot Equipment works - Item Code C4	sum	1.00	£0.00	£0.00
A810.15	develop, complete and design of all outstanding traction power system works - Item Code D1	sum	1.00	£0.00	£0.00
A810.16	develop, complete and design of all outstanding OHLE works - Item Code D2	sum	1.00	£0.00	£0.00
	Documentation and Manuals				
A810.17	prepare, submit and update Operation and Maintenance Manuals for all Civil and Building works	sum	1.00	£0.00	£0.00
A810.18	prepare, submit and update all Operation and Maintenance Manuals for Onboard Supervisory and Comms Equipment	sum	1.00	£0.00	£0.00
A810.19	prepare, submit and update all Operation and Maintenance Manuals for Track and Formation works	sum	1.00	£0.00	£0.00
A810.20	prepare, submit and update Operation and Maintenance Manuals for depot maintenance equipment	sum	1.00	£0.00	£0.00
		Prelims	and General I	tems - Page 7	£0.00

ltem Code	DESCRIPTION	UNIT	QTY	Unit Rate	TOTAL £
	PRELIMINARIES AND GENERAL ITEMS				
A810.21	prepare, submit and update Operation and Maintenance Manuals for all Supervisory and Control systems	sum	1.00	£0.00	£0.00
A810.22	prepare, submit and update Operation and Maintenance Manuals for all Tramstop Equipment	sum	1.00	£0.00	£0.00
A810.23	prepare, submit and update Operation and Maintenance Manuals for all Traction Power systems, equipment and works	sum	1.00	£0.00	£0.00
A810.24	prepare, submit and update Operation and Maintenance Manuals for all OHLE systems, equipment and works	sum	1.00	£0.00	£0.00
A810.25	prepare, maintain and submit necessary as- constructed drawings and survey records	sum	1.00	£0.00	£0.00
A810.26	prepare and submit Manufacturers' Design Warranties for all equipment installed as part of the Tram System	sum	1.00	£0.00	£0.00
A810.27	prepare, submit and update hazard analysis report for depot maintenance equipment	sum	1.00	£0.00	£0.00
A810.28	prepare, submit and update life cycle cost report for depot maintenance equipment	sum	1.00	£0.00	£0.00
A810.29	prepare and conduct training courses on operation and maintenance of depot maintenance equipment	sum	1.00	£0.00	£0.00
A810.30	prepare and conduct training courses on operation and maintenance of all Supervisory and Control Systems	sum	1.00	£0.00	£0.00
A810.31	prepare and conduct training courses on operation and maintenance of all Traction Power and OHLE systems	sum	1.00	£0.00	£0.00
A810.32	prepare and conduct training courses on operation and maintenance of all Tramstop Equipment	sum	1.00	£0.00	£0.00
	Supply, erect and remove on completion				
A821	offices - Main and Satellite	sum	1.00	£0.00	£0.00
A822	laboratories	sum	1.00	£0.00	£0.00
A823	cabins	sum	1.00	£0.00	£0.00
A824	stores and workshops	sum	1.00	£0.00	£0.00
A825	canteens and mess rooms	sum	1.00	£0.00	£0.00
			and General I	-	£0.00

ltem Code	DESCRIPTION	UNIT	QTY	Unit Rate	TOTAL £
	PRELIMINARIES AND GENERAL ITEMS				
	Supply, install and remove on completion				
A831	electricity supply	sum	1.00	£0.00	£0.0
A832	water supply	sum	1.00	£0.00	£0.0
A833	site communication facilities	sum	1.00	£0.00	£0.0
A834	temporary drainage and sewage disposal	sum	1.00	£0.00	£0.0
A271	Temporary works				
	The Contractor shall insert hereinafter such temporary works items and sums required to carry out the works under Section B of the Project.				
		+			
		+			
	[+			
		Drolling	s and General I	tomo Dava C	£0.0

ltem Code	DESCRIPTION	UNIT	QTY	Unit Rate	TOTAL £
	PRELIMINARIES AND GENERAL ITEMS				
A271	Temporary works (Cont'd)				
A2/1					
		-			
		Deali		town Down 40	00.00
		Prelim	s and General	Items - Page 10	£0.00

ltem Code	DESCRIPTION	UNIT	QTY	Unit Rate	TOTAL £
	PRELIMINARIES AND GENERAL ITEMS				
	Contractor's Other Charges				
	The Contractor has entered hereunder any specific item of work or obligation or service or any other thing which is necessary for the execution of the Works, as required by the Contract, which has been omitted from or has not been separately itemised elsewhere within the Pricing Schedule and for which a separate charge is required. The Contractor shall insert hereinafter such additional items and pages as he deems necessary and include same on the Collection Summary Sheets				
	The unit of measurement for any Contractor's Other Charges shall be "sum".				
	Consortium Supervision	wk	169.00	£8,559.23	£1,446,509.32
	Consortium Office Hire	wk	169.00	£643.76	£108,795.18
	Consortium Office Maintenance	wk	169.00	£1,883.98	£318,392.37
	Consortium Surveying Instruments Maintenance	wk	169.00	£82.77	£13,988.06
	Consortium IT Equipment	wk	169.00	£971.74	£164,223.33
	Consortium Testing	wk	169.00	£1,943.48	£328,447.64
	Consortium Establish/Remove Offices	sum	1.00	£157,637.77	£157,637.77
	Consortium Establish/Remove Surveying Equipment	sum	1.00	£9,853.43	£9,853.43
		Prelim	s and General I	tems - Page 11	£2,547,847.09

ltem Code	DESCRIPTION	UNIT	QTY	Unit Rate	TOTAL £
	METHOD RELATED CHARGES				
	METHOD RELATED CHARGES				
Α					
A	Site management and supervision	0.000	Marchene M		
	Sub-Section 1A	sum	1.00	£0.00	£0.00
	Sub-Section 1B	sum	1.00	£0.00	£0.00
	Sub-Section 1C	sum	1.00	£0.00	£0.00
	Sub-Section 1D	sum	1.00	£0.00	£0.00
	The Contractor shall insert hereinafter such additional items and pages as he deems necessary and include same on the Collection Summary Sheets				
	BB Section B Preliminaries (Fixed)	sum	1.00	£636,770.13	£636,770.13
	BB Section B Preliminaries (Time Related))	sum	1.00	£1,853,812.54	£1,853,812.54
	SC1 Section B Preliminaries	sum	1.00	Included	£0.00
	SC2 Section B Preliminaries	sum	1.00	£2,868,332.94	£2,868,332.94
	SC3 Section B Preliminaries (Fixed)	sum	1.00	£2,536,622.51	£2,536,622.51
	SC3 Section B Preliminaries (Time Related)	sum	1.00	£2,270,208.00	£2,270,208.00
	SC3 Section B Supervision (Time Related)	sum	1.00	£2,153,869.77	£2,153,869.77
	High Level Section B Establish Sections & Sites (fixed)	sum	1.00	£801,175.04	£801,175.04
	High Level Section B Packages Supervision	sum	1.00	£1,485,223.10	£1,485,223.10
	High Level Section B Maintain Section Offices(Time Related)	wks	169.00	£3,338.23	£564,160.76

Method Related Charges - Page 1			£15,170,174.79	

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 a provisional allowance for programming and planning. Preliminaries for Defined Provisional Sums has not been priced by Infraco and the appropriate Preliminaries required to carry out the Defined Provisional Sums will be valued in accordance with the spreadsheet contained in Appendix F herein.
- 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	provisional duration	£
1	Pumped surface water outfall at A8 underpass (by depot)	01 June 08	6 months	£100,000
2	Scottish Power connections to the Depot and Ingliston Park & Ride	not applicable	Depot 2 weeks(Feb 09) IPR 2 weeks (Nov 09)	£750,000
3	 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	Haymarket War Memorial 4 weeks (Mid Nov 08 – Mid Dec 08)	£53,700
4	Additional cost of Network Rail compliant ballast	20 Business Day after BBS provide spec.	26 months (Oct 08 – Nov 10)	£300,000
5	Extra over for revised alignment to Picardy Place, York Place and London Road junctions (see also next item)	01 January 09	23 months (March 09 – Jan 11)	£3,340,32 4
6	Extra over for major utility diversions Picardy Place, York Place and London Road junctions	01 January 09	23 months (March 09 – Jan 11)	£3,000,00 0
7	Extra over for shell grip at junctions Carried forward	01 August 08	29 months (Aug 08 – Jan 11)	£319,343 £7,863,367

Item	Description of Provision Sum	trigger date	duration	£
	Brought forward	10.00		£7,863,367
8	Allowance for Scottish Power connections to new street lights and new traffic signals	not applicable	29 months (Aug 08 – Jan 11)	£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	3 months (Aug 08 – Jan 11)	£55,662
10	Urban Traffic Controls [UTC] associated with the delivery of the alignment	01 August 08	29 months (Aug 08 – Jan 11)	£2,500,000
11	Scottish Power connections to Phase 1a sub-stations (8nr x £50,000)	not applicable	21 months(Nov 08 – July 10)	£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	25 months (Jan 09 – Jan 11)	£150,000
13	Forth Ports requirements at Ocean Terminal amendments	01 October 08	3 months (Aug 09 – Oct 09)	£350,000
	Total			£11,434,316

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 by-pass 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	
	Total		£8,011,012	

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:

Item	Description of Identified VE Saving	£	Notes	Key Qualifications
1	Delete depot pumping station / storm tanks by utilizing existing gravity system	-£193,526	tie may need to add in cost of a small pump	Subject to tie issuing an instruction to implement the VE opportunity. tie carries specification/acceptance risk and cost of additional pump
2	Build part of Depot now with provision to expand in the future / reduce size of car park facilities	-£230,000	Initial supply of 100 car parking places agreed	Subject to tie issuing an instruction to implement the VE opportunity.
3	Delete split vehicle accommodation system at Depot - requirement dependant on tram vehicle selection	-£27,500	Accommodation bodies are in Tram Suppliers offer	Subject to tie issuing an instruction to implement the VE opportunity.
4	Rationalise scope requirement Track Maintenance Equipment at Depot and consider renting	-£27,500		Subject to tie issuing an instruction to implement the VE opportunity.
5	Deletion of one pavement (inner) to Depot	-£36,000	Shown on latest site plan drawings	Subject to tie issuing an instruction to implement the VE opportunity.
6	Delete requirement for concrete apron to security fence at Depot	-£6,080		Subject to tie issuing an instruction to implement the VE opportunity.
	Carried forward	-£520,606		

Item	Description of Identified VE Saving	£	Notes	Key Qualifications
	Brought forward	-£520,606		
7	Consolidated VE items including those which result from changes to initial design driven by proximity to BAA runway and EARL decision as follows: • 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	Includes reductions in structural loadings (gantry crane reduced in capacity and size impacting on building frame and envelope), reductions in staff accommodation provision (reduced operational workforce reducing messing facilities, changing rooms,lock.	Design to cost but compliant with current technical/design info
8	Delete standby generator and substitute with hardstanding and power connection for portable generator	-£150,000		Subject to tie issuing an instruction to implement the VE opportunity.
9	Material recovery and reprocessing (Infraco); 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.
	Carried forward	-£3,370,606		

Item	Description of Identified VE Saving		Notes	Key Qualifications
	Brought forward	-£3,370,606		
10	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.
11	Reduce drainage run from guideway	-£100,000		Level of saving is subject to adjustment of quantity of this item based on the final design.
12	Edinburgh Park Viaduct various savings including use of cross heads to eliminate temp works,steel or concrete beams	-£1,470,000	This assumes continuation with 7 span structure	Subject to approval of NEL / CEC and subject to designing to cost
13	Carricknowe Bridge parapet – downgrade from P6 / P5 to N2 (reduce cost of parapet plus knock on effect on deck design / cost)	-£85,000		Subject to approval of design by Network Rail
	Carried forward	-£5,125,606		

Item	Description of Identified VE Saving	£	Notes	Key Qualifications
	Brought forward	-£5,125,606		
14	A8 Underpass – various initiatives	-£850,000	Changing to a contiguous piled wall/leaner designs	Subject to being able to design to cost
15	Roseburn Street Viaduct – various initiatives	-£1,375,000		Subject to approval of stakeholders – Network Rail and SRU and
16	Water of Leith initiatives	-£150,000		Subject to being Designed to Cost
17	Eight maintenance walkway structures – delete or reduce	-£250,000		Subject to being Designed to Cost
18	Class 7 material conversion	-£300,000		Level of saving is subject to adjustment of quantity of fill required by the final design.
19	Optimize the work site lengths wherever practical to ensure efficient construction outputs	-£300,000		Subject to programme development with CEC
20	Accept more disruption over shorter period to maximize efficiency of construction operations	-£100,000		Subject to programme development with CEC
21	Option to lease UPS provision from supplier rather than purchase	-£300,000		Subject to agreement of Operator
-	Carried forward	-£8,750,606		

Item	Description of Identified VE Saving	£	Notes	Key Qualifications
	Brought forward	-£8,750,606		
22	PM integration including shared resources and co- location	-£500,000		Subject to BBS / tie agreeing savings in resources and facilities items from BBS and tie costs.
23	Noise attenuation (outside of Roseburn Corridor) 3,650m of fencing	-£50,000		Subject to property owners' claims.
24	Reduce ballasted track thickness from 300mm to 200mm	-£200,000		
25	Urban Traffic Controls (UTC) associated with wider area impacts	-464,400		subject to tie issuing an instruction to implement the related Unidentified Provisional Sum at Item 6 in Table 2
	Total	-£9,965,006		

APPENDIX D

FURTHER VALUE ENGINEERING [VE]

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

Item	Description of Identified VE Saving		Key Qualifications
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
	Total	-£2,670,000	

APPENDIX E

UTILITIES DIVERSIONS TO BE CARRIED OUT BY INFRACO

Please refer to Schedule Part 41 (Ground Conditions and Utilities Information)

APPENDIX F

SCHEDULE OF RATES

APPENDIX G

PROCESS FOR AGREEMENT OF VALUE OF TIE CHANGES

1.0 Generally

- 1.1 The valuation of any tie Changes shall be made in accordance with Clause 80.6
- 1.2 Where Clause 80.6.3 or 80.6.4 applies and to the extent that they apply to a **tie** Change then the valuation shall be on the basis of Actual Cost or estimated Actual Cost.
- 1.3 In respect of a valuation of any work under 1.2 the **tie** Representative shall apply head office overheads and profit percentages to the appropriate elements of Actual Cost as follows:

(a)	Civil Engineering works	10%
(b)	Systems and Track works	17%

In all cases where a **tie** Change is being valued in accordance with Clause 80.6, Site related overhead (Preliminaries) shall be valued and added as follows:

7.4% to be added to Actual Cost to cover the Consortium Preliminaries and associated elements as set out in Spreadsheet 1 in Appendix F.

If appropriate to the particular **tie** Change, any other Preliminaries elements, valued in accordance with the Spreadsheet 2 set out in Appendix F.

- 1.4 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.
- 1.5 Where 1.2 above is the basis of the valuation of **tie** 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.

APPENDIX H

BASE DATE DESIGN INFORMATION

All of the Drawings available to Infraco up to and including 25th November 2007.

APPENDIX I

NETWORK RAIL IMMUNISATION

- 1. Words defined in Clause 16 or Part 1 of the Schedule shall have the same meaning in this Appendix I to Part 4 of the Schedule. Additionally, for the purposes of this Appendix I;
 - 1.1 "Immunisation Programme" shall mean the series of linked tasks, defined in the form of a Gantt chart in the Infraco's schedule of works, to be completed within a predetermined time that when executed to completion will result in NR Immunisation;
 - 1.2 "Infraco's Immunisation Strategy" shall mean the defined set of processes documented in the Infraco's NR EMC Strategy Plan; and
 - 1.3 "NR Immunisation" shall mean, in so far as indicated in Infraco's Immunisation Strategy as intended to be carried out on the Network, works to mitigate the potential effects to the Railway of electromagnetic interference due to effects of coupled energy or stray current from the operation of the Edinburgh Tram Network traction system.
- 2. The Infraco has agreed to undertake the NR Immunisation, including management of associated works, programme and approvals together with obligations in relation to the same set out in Clause 16 (*Interface with Network Rail*), subject to Network Rail approving the Infraco Immunisation Strategy in writing before 31 July 2008. In the event that Network Rail have been unable to determine whether or not to approve the Infraco Immunisation Strategy by 31 July 2008 due to material delay on the part of the Infraco in the provision of relevant information reasonably required by Network Rail through tie, the deadline for approval specified in this paragraph shall be extended to such later date as the Parties, acting reasonably shall agree.
- 3. In the event that Network Rail approve the NR Immunisation prior to the deadline referred to in paragraph 2 above:
 - 3.1 Infraco shall procure the delivery of the NR Immunisation;
 - 3.2 subject to any liability in relation to NR Immunisation and associated Possessions being addressed under Clauses 16.72 or 16.73, tie shall pay to Infraco 100% of the cost of NR Immunisation subject to a cap for the total cost of such works of£3 million;
 - 3.3. Infraco and **tie** shall jointly to carry out value engineering investigations in respect of NR Immunisation;
 - 3.4 in the event that the actual cost of procuring the NR Immunisation is less than £3 million then **tie** shall (in the case of Infraco, in addition to sums paid or due to be paid under paragraph 3.2) pay one third of the difference between the actual cost and £3 million to both Network Rail and Infraco and be entitled to retain the remaining third of that difference;
 - 3.5 in so far as the cost of NR Immunisation exceeds £3 million, Infraco shall be responsible for 100% of the proportion of that cost in excess of £3 million but not exceeding £3.375 million;
 - 3.6 subject to any liability in relation to NR Immunisation and associated Possessions being addressed under Clauses 16.72 or 16.73, in so far as the cost of NR Immunisation exceeds £3.375 million but does not exceed £4.125 million, tie shall pay Infraco 50% of the

NH/NH/310299/15/UKM/19240659.1

proportion of that cost in excess of £3.375 million in addition to all sums due to Infraco pursuant to paragraph 3.2;

- 3.7 subject to any liability in relation to NR Immunisation and associated Possessions (as defined in Clause 16) being addressed under Clauses 16.72 or 16.73, tie shall pay Infraco 100% of the cost of NR Immunisation in so far as the cost of such works exceeds £4.125 million.
- 4. The Infraco Immunisation Strategy is based on the Infraco or its sub-contractors carrying out all the works and supplying all equipment for the NR Immunisation.
- 5. Network Rail Costs as defined for the purposes of the Asset Protection Agreement shall be excluded in the calculation of the cost of the NR Immunisation for paragraph 3. All such Network Rail Costs shall be borne by tie.
- 6. Delays to NR Immunisation attributable to Network Rail shall be Compensation Events to the extent that such delays are not directly due to Infraco failure to comply with its obligations under this Agreement.
- 7. The Infraco's liability to **tie** in respect of or arising out of NR Immunisation shall be subject to the limitations as provided for in Clauses 16.72 and 16.73.
- 8. In the event that Network Rail do not accept the Infraco Immunisation Strategy by the deadline specified in paragraph 2 above, tie shall instruct the Infraco on how to proceed in respect of NR Immunisation and such instructions shall be Compensation Events and a tie Change (for any resulting additional or changed work required by tie) under the Infraco Contract.
- 9. In the event of paragraph 8 applying, the tie Change shall (subject to evaluation) omit an allowance of £2.2 million for NR Immunisation and add back any additional work to be undertaken to by the Infraco to support tie in delivering an alternative immunisation solution to mitigate the potential effects to the Railway of electromagnetic interference due to effects of coupled energy or stray current from the operation of the Edinburgh Tram Network traction system ("Alternative Solution").
- 10. In the event that the Infraco does not undertake the NR Immunisation or Alternative Solution works in full, all electromagnetic interference or corrosion due to effects of coupled energy or stray current from the operation of the Edinburgh Tram Network related obligations, in the Infraco Contract (including without prejudice to the foregoing Clause 16 and any relevant Third Party Agreements in Part 13 Section A of the Schedule) shall be the subject of a tie Change.
- 11. For the avoidance of doubt, tie shall pay to the Infraco, to the extent not taken into account in the tie Change arising pursuant to paragraph 8, any costs and expenses incurred as a consequence of the delay between the deadline specified in paragraph 2 and the actual date (and not the deemed date) that tie issue a tie Change Order. Such costs and expenses shall be evaluated pursuant to Clause 65 (*Compensation Events*) on the basis that such delay is itself a Compensation Event.
- 12. tie accepts that the Infraco may commence the work to deliver the NR Immunisation under the Mobilisation and Advance Works Agreement.
- 13. All sums due to Infraco pursuant to this Appendix I shall be paid in accordance with Clause 66 (*Payment of the Contract Price*) and not Clause 67 (*Payment in respect of Applications for Milestone Payments*).