

2008/5b

Schedule 4

PRICING

## **SCHEDULE FOUR PRICING**

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## 1.0 GENERALLY

- 1.1 The Infraco Construction Works Price is detailed in Appendix A to this Schedule 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 25<sup>th</sup> 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 ([Tram Technical Information Data Version 11]))

2.5 The "Contract Price" comprises capital expenditure and revenue expenditure as follows:

	£
Construction Works Price	233,507,664
SDS Price (as defined in the SDS Agreement and the Novation Agreement)	[Post Novation SDS cost to be finalised]
Tram Supply Price (as defined in the Tram Supply Agreement)	55,759,709
Infraco Maintenance Mobilisation	1,782,291
Tram Maintenance Mobilisation	2,274,883
Infraco Spare Parts	1,013,090
<b>Total of capital expenditure</b>	[Pending SDS price as above]

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, planning and pricing Preliminaries.
- 2.7 "Issued for Construction" 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

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 It is accepted by the Parties 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 Provisional Sums for those utilities diversions that are to be undertaken by Infraco.
- b) Work in connection with the St Andrew Square public realm project beyond the tram works. For the avoidance of doubt tramstops, trackform, track bed, OHLE, road surface refurbishing, associated systems and link works together with any other work shown on the Base Case Design Information are included.
- c) Ground conditions that require works that could not be reasonably foreseen by an experienced civil engineering contractor based on the ground conditions reports provided to BBS on 20<sup>th</sup> and 27<sup>th</sup> of November and 6<sup>th</sup> December 2007. Additionally the BBS price does not include for dealing with replacement of any materials below the earthworks outline or below ground obstructions/voids, soft material or any contaminated materials.
- d) Bernard Street public realm project as information provided to Infraco on 28<sup>th</sup> 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);

- 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
- 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 part [●] of 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 shall not be amended from the version set out in part [●] of Schedule Part 15 (Programme).
- 5 That in the event that tie and the SDS Provider have agreed mitigation measures in relation to any difference between Design Delivery Programme set out in part [●] of Schedule Part 15 (Programme) and the Design Delivery Programme attached as Appendix 2 to the SDS Novation Agreement all such mitigation measures shall be achieved in full.
- 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 sub-soils that may prevail within the earthworks outline.
- 12 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's 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 150mm 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 80,000m<sup>3</sup>, 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 part [•] of 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  
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 Tramstop.
- 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 a 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 on the carrying out of the Infraco Works.

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 Contract Price and/or Programme in respect of which tie will be deemed to have issued a tie Change on the date that such Notified Departure is notified by either Party to the other. 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 issue 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 filler 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 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 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 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) 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.

**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 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

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; and
- 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 Milestone Schedule 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);
- 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 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 [ ] 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 Clause 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 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 AND QUANTIFIED SCHEDULES OF RATES

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

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

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



- 8.3 The Quantified Schedules of Rates are also contained in Appendix F and they are included for reference only in determining the value of changes as outlined in Appendix G 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.
- 8.4 Rates for SDS are as noted in the SDS Agreement / SDS Novation Agreement which also set out the mechanism that shall apply in respect of any design associated with tie Changes.