



(1) tie

- and -

(2) INFRACO

- and -

(3) PARSONS BRINCKERHOFF LIMITED

**NOVATION OF SYSTEM DESIGN
SERVICES AGREEMENT**

in respect of

EDINBURGH TRAM NETWORK

AGREEMENT

AMONG

- (1) **TIE LIMITED** (Company number SC230949) whose registered office is at City Chambers, High Street, Edinburgh, Midlothian, EH1 1YJ ("**tie**");
- (2) **BILFINGER BERGER UK LIMITED**, a company incorporated in England and Wales under number 02418086 and having its registered office at 150 Aldersgate Street, London, EC1A 4EJ, which expression shall include its successors, permitted assignees and transferees and **SIEMENS PLC**, a company incorporated in England and Wales under number 00727817 and having its registered office at Faraday House, Sir William Siemens House, Frimley, Camberley, Surrey, GU16 8QD, which expression shall include its successors, permitted assignees and transferees, acting jointly and severally (together the "**Infraco**");
- (3) **PARSONS BRINCKERHOFF LIMITED** (company number 2554514) whose registered office is at Amber Court, William Armstrong Drive, Newcastle Business Park, Newcastle Upon Tyne, NE4 7YQ ("**SDS Provider**").

BACKGROUND

- A By an agreement in writing dated 19 September 2005 ("**SDS Agreement**") **tie** appointed the SDS Provider to provide system design services in connection with the Edinburgh Tram Network.
- B **tie** and Infraco have entered into a contract of even date ("**Infraco Contract**") under which Infraco has been appointed to complete the design and carry out the construction, installation, commissioning and maintenance planning in respect of the Edinburgh Tram Network.
- C **tie** and Infraco have agreed, with the consent of the SDS Provider, that the Infraco shall take over the rights and liabilities of the "Client" under the SDS Agreement by novating the SDS Agreement from **tie** to Infraco upon and subject to the terms of this Agreement.

1. DEFINITIONS AND INTERPRETATION

- 1.1 The definitions given in the recitals to this Agreement apply to this Agreement.
- 1.2 Clause headings in this Agreement are for the convenience of the parties only and do not affect its interpretation.

1.3 Unless otherwise defined hereunder, where the SDS Agreement defines a meaning to any capitalised word or expression used in this Agreement, the same meaning shall be given to it in this Agreement.

1.4 In this Agreement the following words and expressions shall have the meanings hereby ascribed to them

"Design Delivery Programme" has the meaning given in Appendix 1 to this Agreement;

"Disclosure Statement" means Appendix, Part 5 (together with all the documents attached to or referred to in it);

"EAL" means Edinburgh Airport Limited a subsidiary of BAA plc and the operator of Edinburgh Airport;

"Employer's Requirements" has the meaning given in the Infraco Contract;

"Incentivisation Payment" means the sum of £1,000,000;

"Infraco Contract" has the meaning given in Appendix 1 to this Agreement;

"Infraco Proposals" has the meaning given in the Infraco Contract;

"Issued for Construction Drawings" has the meaning given in Appendix 1 to this Agreement;

"SRU" means the Scottish Rugby Union;

"Third Party Agreements" means the Parliamentary Undertakings, Third Party Agreements and other undertakings or commitments entered into at the date of this Agreement by CEC or **tie** in relation to the Edinburgh Tram Network and listed in Appendix Part 6 (in so far as the same have been supplied to the SDS Provider);

"tie Change Order" has the meaning given in the Infraco Contract and shall include a confirmation of a Mandatory tie Change and a Notified Departure (as defined in the Infraco Contract);

"Tram Legislation" means the Edinburgh Tram (Line One) Act 2006 and the Edinburgh Tram (Line Two) Act 2006, which received Royal Assent on 8 May 2006 and 27 April 2006 respectively and which confer on CEC all requisite authorities and statutory powers to procure the construction, operation and maintenance of the Edinburgh Tram Network;

2. RELEASE BY THE SDS PROVIDER OF TIE

- 2.1 The SDS Provider releases and discharges **tie** from any and all duties, obligations and liabilities owed to the SDS Provider under the SDS Agreement and accepts the liability of the Infraco under the SDS Agreement in lieu of **tie**.
- 2.2 The Parties acknowledge that the SDS Provider and **tie** shall enter into a separate agreement in respect of certain design services connected to the implementation of utilities diversionary works for the Edinburgh Tram Network and that scope of work is not novated under this Agreement.

3. RELEASE BY TIE OF THE SDS PROVIDER

- 3.1 **tie** releases and discharges the SDS Provider from the further performance of the SDS Provider's duties and obligations under the SDS Agreement.

4. ACCEPTANCE OF LIABILITY BY THE SDS PROVIDER TO THE INFRACO

- 4.1 The SDS Provider undertakes to continue to perform all the duties and to discharge all the obligations of the SDS Provider under the SDS Agreement and to be bound by its terms and conditions in every way as if the Infraco was and always had been a party to the SDS Agreement in place of **tie**.
- 4.2 The SDS Provider warrants and undertakes to the Infraco that:
- 4.2.1 in respect of the duties and obligations which it has already performed under the SDS Agreement, it has performed those duties and obligations in accordance with the standards of skill and care set out in the SDS Agreement; and
- 4.2.2 subject to Clause 12.1:
- (a) the SDS Provider is not aware having made due and diligent enquiry, of any breaches by **tie** of the SDS Agreement and there is no dispute or claim subsisting nor are there any circumstances existing which might give rise to any dispute or claim relative to the SDS Agreement;
- (b) the information set out at Appendix Part 4 (*Design and Deliverable Status*) is true, complete and accurate in all respects and is not misleading;

- (c) the Deliverables completed by the SDS Provider to the date of this Agreement and listed in Appendix Part 4:
 - (A) are in all respects in compliance with the SDS Agreement and, without prejudice to the foregoing generality:
 - (i) the Tram Legislation;
 - (ii) all applicable Law and Consents;
 - (iii) the Parliamentary Undertakings;
 - (iv) the Environmental Statements, and all other applicable environmental regulations and requirements;
 - (v) will permit compliance with the Code of Construction Practice; and
 - (vi) the Third Party Agreements (and in the case of SRU the draft Third Party Agreement);
 - (B) is so as to enable the Edinburgh Tram Network on completion of construction, testing and commissioning to be sited (and thereafter be operated and maintained) within the limits of deviation under the Tram Legislation save as expressly indicated in the Disclosure Statement,
- (d) the design as fully developed pursuant to the SDS Agreement following the date of this Agreement shall continue to meet the requirements of Clause 4.2.2(c)(A) and (B) and on the basis of the standard of reasonable skill and care exercised pursuant to clause 3.2 of the SDS Agreement that
 - (i) the designs and Deliverables completed prior to the date of this Agreement comply with the Employer's Requirements
 - (ii) the designs and Deliverables as will be completed after the date of this Agreement will comply with the Employer's Requirements,

provided that in circumstances where compliance with the Employer's Requirements is dependant upon further design development to be undertaken by the Client (and which is out with the Services provided by SDS), the SDS Provider's obligation pursuant to this Clauses 4.2.2(d) shall be limited to having produced or producing designs and Deliverables that are capable of allowing Infraco to develop a design which is compliant with the Employer's Requirements.

- (e) save in respect of any Consents which are the responsibility of **tie** in terms of Clause 19 of the Infraco Contract, the Consents listed at Appendix Part 2 (*Consents Programme*) are all the Design Stage Consents which are required to enable the Edinburgh Tram Network to be procured, constructed, installed, tested and commissioned, and thereafter operated and maintained in accordance with the Infraco Contract;
- (f) it has received no Client Notice of Change or any other instruction from **tie** to vary any term of the SDS Agreement (whether pursuant to Clause 15 and 29.2 of the SDS Agreement or otherwise) and, subject to Clause 9.1 below, it has agreed no variation, alteration of the SDS Agreement; and
- (g) no Change in Law has come into effect or is anticipated to come into effect which would have a material adverse impact on the Deliverables completed or to be completed pursuant to the SDS Agreement

The SDS Provider warrants and undertakes to the Infraco that it shall be liable for any loss or damage suffered or incurred by the Infraco arising out of any negligent act, default or breach by the SDS Provider in the performance of its obligations under the SDS Agreement prior to the date of this Agreement. The SDS Provider shall be liable for such loss or damage notwithstanding that such loss or damage would not have been suffered or incurred by **tie** (or suffered or incurred to the same extent by **tie**) or is different to or arises on a different basis to any loss or damage which would have been suffered or incurred by **tie**.

- 4.3 The SDS Provider undertakes and warrants to the Infraco that its design is consistent with and delivers the Edinburgh Tram Network runtime set out in the Employers' Requirements , which runtime supersedes that set out in the SDS Agreement.

- 4.4 The liability of the SDS Provider to the Infraco pursuant to the SDS Agreement shall not be affected by the Infraco's assumption of liability for design to **tie** pursuant to the Infraco Contract.
- 4.5 The SDS Provider acknowledges that the Infraco has and shall continue to rely upon all Services carried out by the SDS Provider.
- 4.6 **tie** warrants that it has received a report from the SDS Provider (annexed at Part B of Appendix Part 7) setting out the misalignments between the Deliverables completed prior to the date of this Agreement and the Employer's Requirements and that it has issued initial instructions (in the form of the letter annexed at Part A of Appendix Part 7) to the SDS Provider in relation to addressing all such misalignments. Upon completion of the work entailed to resolve the misalignments, the SDS Provider confirms to **tie** and the Infraco that such Deliverables shall be consistent with the Employer's Requirements.
- 4.7 As soon as reasonably practicable, the Parties shall commence and expeditiously conduct a series of meetings to determine the development of the Infraco Proposals and any consequential amendment to the Deliverables (the "**Development Workshops**"). The matters to be determined at the Development Workshops shall be those set out in the report annexed at Part C of Appendix Part 7 (the "**Misalignment Report**"), together with any items identified as "items to be finalised in the SDS/BBS alignment workshops" in Appendix 4 to be dealt with in the following order of priority and objective unless otherwise agreed:
- 1 Roads and associated drainage and vertical alignment with the objective of minimising the extent of full depth reconstruction for roads thus minimising cost and construction programme duration
 2. Structures value engineering, including track fixings to structures with the objective of enabling BBS to realise the Value Engineering savings for the structures identified in Schedules 4 and 30 of the Infraco Contract (Pricing and Infraco Proposals respectively)
 3. OLE Design with the objective of identifying and agreeing the actions, responsibilities and programme to enable Infraco to implement their proposals for OLE as identified in the Infraco Proposals
 4. Trackform with the objective of completing an integrated design to enable BBS to implement their proposals for trackform

5. Sub-station buildings with the objective of resolving the misalignment between Infraco Proposals and SDS Design with the minimum of changes to accommodate the Infraco Proposals for substations.

The following to be reviewed at the end of the Development Workshop to identify any issues arising from the above items:

1. Earthworks
2. Landscaping
3. OLE Foundations
4. Alignment
5. Site Clearance
6. Tramstops
7. all other items in the Misalignment Report together with any items identified as "items to be finalised in the SDS/BBS alignment workshops" in Appendix 4.

At the Development Workshop, the Parties shall also develop a strategy for co-operation between the SDS Provider and the Infraco to manage design development and the necessary interface between the Infraco's design and the design developed by the SDS Provider.

- 4.8 The product of the Development Workshops shall be a report signed by each of the Parties to detail the conclusions in respect of each matter and the payments to be made to the SDS provider in respect of the work to be carried out by the SDS Provider as a result of the conclusions set out in the report. Any consequential **tie** Change Orders or instructions shall be appended to such report as and when the same are issued. **tie** shall pay the SDS Provider for the work required for the Development Workshop on an hourly rate basis in accordance with the hourly rates set out in Appendix Part 8 and the SDS Provider agrees that the Infraco shall not be liable to make such payments to the SDS Provider. For the avoidance of doubt, the Infraco and **tie** agree that any amendment to the Deliverables completed prior to the date of this Agreement as set out in this report will be a Mandatory **tie** Change under the Infraco Contract, and a Client Change under the SDS Agreement.

5. VESTING OF REMEDIES AGAINST SDS PROVIDER

- 5.1 All rights of action and remedies against the SDS Provider under and pursuant to the SDS Agreement vested in **tie** (as Client) shall from the date of this Agreement vest in the Infraco.
- 5.2 Subject to Clause 12.1, **tie** warrants to the Infraco that there is no dispute or claim subsisting (save to the extent that the same are fairly disclosed in the Disclosure Statement), nor are there any circumstances existing which might give rise to any dispute or claim by the SDS Provider against **tie** relative to the SDS Agreement.
- 5.3 **tie** shall indemnify the Infraco against all loss, injury and damage that the Infraco may incur as a consequence of any dispute or claim by the SDS Provider or circumstance referred to in Clause 5.2 above identified in the Disclosure Statement which relates to the SDS Provider and **tie's** dealings under the SDS Agreement prior to the date of this Agreement.

6. ACCEPTANCE OF LIABILITY BY THE INFRACO

- 6.1 The Infraco undertakes to perform all the duties and to discharge all the obligations of **tie** under the SDS Agreement and to be bound by its terms and conditions in every way as if the Infraco was and always had been a party to the SDS Agreement in place of **tie** and as if all acts and omissions of **tie** under or pursuant to the SDS Agreement prior to the date of this Agreement were the acts and omissions of the Infraco.
- 6.2 The Infraco undertakes to pay the SDS Provider the amounts set out in Appendix Part 4 in respect of the outstanding work identified in Appendix Part 4 in accordance with the terms of the SDS Agreement.

7. VESTING OF REMEDIES AGAINST TIE

- 7.1 All rights of action and remedies under or pursuant to the SDS Agreement vested in the SDS Provider shall, save in respect of those sums identified in Clauses 8.1 and 8.8 from the date of this Agreement lie against the Infraco and not **tie**.
- 7.2 Without prejudice to Clause 4.2.2(a), the SDS Provider waives all right to claim against Infraco in respect of any breach of the SDS Agreement by **tie** prior to the date of this Agreement.

8. ACKNOWLEDGEMENT OF PAYMENT AND INCENTIVE

- 8.1 The SDS Provider acknowledges that all fees and expenses properly due to the SDS Provider under the SDS Agreement up to the date of this Agreement have been paid by **tie** other than

any payments which become due under Clause 29.3 of the SDS Agreement or due as a consequence of the further instruction to be issued by **tie** pursuant to Clauses 4.6 or 4.8 to be paid by **tie**.

- 8.2 **tie** and SDS acknowledge that **tie** has paid SDS in respect of its existing claims for prolongation and SDS confirms to **tie** and the Infraco that it has accepted such payments, when made in full and final settlement of any and all claims of whatever nature existing and/or available to it prior to the date of execution of this Agreement.
- 8.3 **tie** warrants to Infraco that all fees and expenses properly due to the SDS Provider under the SDS Agreement up to the date of this Agreement have been paid by **tie**.
- 8.4 The parties agree that Infraco will have no liability in relation to the payments referred to in Clause 8.1 or 8.8.
- 8.5 **tie** has released the retention bond (in accordance with clause 12.7.4 of the SDS Agreement)
- 8.6 Subject to Clause 4.2.1, the SDS Provider warrants to the Infraco that Appendix Part 4 contains an accurate status and identification confirmation of all Deliverables produced by the SDS Provider up to the date of this Agreement.
- 8.7 The parties agree that Appendix Part 4 contains (i) an accurate description of the balance of the Deliverables to be completed; and (ii) the agreed price for completion of the Deliverables.
- 8.8 **tie** shall pay to the SDS Provider the Incentivisation Payment 14 days after the provision of the last required Issued for Construction Drawing save that the Incentivisation Payment shall be reduced by the sum of £8,928.57 in respect of each occasion that the SDS Provider does not achieve the provision of Issued for Construction Drawings by the dates identified in the Design Delivery Programme save where **tie** and the SDS Provider otherwise agree. No further or other reduction can be made to the Incentivisation Payment whether by abatement set off or counterclaim.
- 8.9 For the purposes of Clause 8.8 any extension of time granted to the SDS Provider pursuant to Clause 7.5.2 of the SDS Agreement in respect of any Issued for Construction Drawings shall be ignored save where the cause of the entitlement to an extension of time is a circumstance or occurrence entitling the Infraco to an extension of time and that such circumstance or occurrence is a **tie** Change (as defined in the Infraco Contract).

9. AMENDMENT OF SDS AGREEMENT

9.1 **tie**, the SDS Provider and the Infraco agree that the terms of the SDS Agreement shall be and are varied in the manner set out in Appendix Part 1 to this Agreement.

9.2 Subject to Clause 9.1, **tie** warrants to Infraco that it has not issued any Client Notice of Change or any other instruction to the SDS Provider to vary any term of the SDS Agreement (whether pursuant to clause 15 of the SDS Agreement, clause 29.2 of the SDS Agreement or otherwise) and it has agreed no variation, alteration of the SDS Agreement.

10. AFFIRMATION OF SDS AGREEMENT

The terms and conditions of this Agreement represent the entire agreement between the parties relating to the novation of the SDS Agreement and, except as specifically amended by Appendix Part 1 of this Agreement, all the terms and conditions of the SDS Agreement remain in full force and effect.

11. RIGHTS OF THIRD PARTIES

A person who is not party to this Agreement shall have no right to enforce any term of this Agreement. This Clause does not affect any right or remedy of any person which exists or is otherwise available.

12. WARRANTIES

12.1 The warranties set out in Clause 4.2.2(a) to-(g) and Clause 5.2, are subject only to any matter which is fully and fairly disclosed to the Infraco in the Disclosure Statement (with sufficient details to enable the Infraco to identify the nature and scope of the matter disclosed and to make an informed assessment of the matter concerned and its significance to the Infraco and/or the design, construction, installation, testing, commissioning, operation and or maintenance of the Edinburgh Tram Network).

12.2 Save as provided in Clause 12.1 no information of which Infraco has knowledge (actual, constructive or imputed) shall prejudice any claim being made by Infraco under any of the warranties set out in Clauses 4.2, 4.3, 5.2, 8.3, 8.6 and 9.2 (the "**Warranties**") nor shall it affect the amount recoverable under any such claim and neither the rights and remedies of Infraco nor the SDS Provider's or **tie**'s (as the case may be) liability in respect of the Warranties shall be affected by any investigation made by or on behalf of Infraco.

any event, matter or circumstance which comes to its knowledge which is, or may constitute, a breach of, or which is, or may be, inconsistent with, any of the Warranties given by that Party in this Agreement or the disclosures given by that Party in the Disclosure Statement.

13. LAW AND JURISDICTION

This Agreement shall be governed by and construed in accordance with Scots law and the Scottish Courts shall have jurisdiction with regard to all matters arising under it. This Agreement shall be a "Related Contract" for the purpose of clause 28 of the SDS Agreement and Clause 97 (Dispute Resolution Procedure) of the Infraco Contract.

IN WITNESS WHEREOF these presents on this and the preceding ~~7~~¹⁰ pages together with the Appendix in ~~8~~⁹ Parts which is annexed hereto are executed as follows: ~~SR~~

EXECUTED for and on behalf of **TIE LIMITED** at Edinburgh on ~~13~~¹⁴ May 2008 by:

Authorised Signatory


Full Name

WILLIAM CALLAGHER

Witness Signature



Full Name

STEVEN BELL

Address

13 NEW ROAD
LEDMASSON.

EXECUTED for and on behalf of **SIEMENS PLC** at Edinburgh on ~~13~~¹⁴ May 2008 by:

Authorised Signatory



Full Name

C. ROTH

Authorised Signatory



Full Name

M. FLYNN

EXECUTED for and on behalf of
BILFINGER BERGER UK LIMITED at
Edinburgh on 14 May 2008 by:

Director



Full Name

Richard John Walker

Director

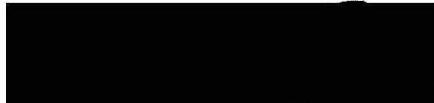


Full Name

BARRY STAVE DALTON

EXECUTED for and on behalf of **PARSONS
BRINCKERHOFF LIMITED** at Edinburgh
on 14 May 2008 by:

Director



Full Name

STEPHEN CHRISTOPHER REMOND

Witness Signature



Full Name

CHRISTOPHER IAN TITKIN

Address

25 WILTON ROAD

LONDON SW1

**This is the Appendix referred to in the foregoing Novation Agreement among tie, Infraco and
Parsons Brinkerhoff Limited**

APPENDIX PART 1

SCHEDULE OF AMENDMENTS TO THE SDS AGREEMENT

Clause 1 – Definitions and Interpretation

1.1 Amend existing definitions:

Background Information

Insert ", the Client" after "CEC"

Change in Law

Add "(d) any new requirement for any statutory Consent other than a statutory Consent the need for which had been published on 7 August 2007."

Client Change

Add 'and any amendment to the Consents Programme and/or the Design Delivery Programme (other than one necessitated by a breach of this Agreement by the SDS Provider) and any change made to the Employer's Requirements or Infraco Proposals made after the date of the Novation Agreement

Edinburgh Tram Network

Delete "tie" and replace with "the Client"

Insolvency Event

(k) delete references to "tie" and replace with "the Client" in each place

Delete **Master Project Programme** and replace with Programme

Planned Service Commencement Date means the date specified for service commencement in the Infraco Contract

Programme

Delete the entire definition and replace with "means the Consents Programme and/or the Design Delivery Programme, as the context may require"

Programme Phasing Structure

Delete "**tie**" and replace with "the Client"

1.1 Insert the following new definitions:

Client Designs means designs and information which are being provided by the Client;

Compensation Event has the meaning given in the Infraco Contract;

Consents Programme means the document in Appendix Part 2 to the Novation Agreement as amended or updated from time to time in accordance with this Agreement

Construction Programme means the programme included in Schedule Part 15 of the Infraco Contract and as may be updated in accordance with the terms of the Infraco Contract such programme to contain the Consents Programme, Design Delivery Programme and the construction activities programme.

Design Delivery Programme means the document in Appendix Part 2 to the Novation Agreement as amended or updated from time to time in accordance with this Agreement

Design Management Plan means the document which forms part of Part 14 of the Schedule to the Infraco Contract and has that name;

Design Stage Consents means the Consents (including Consents in respect of Client Designs) listed in Table A below and any further Consents which may be required for the construction, installation, commissioning, completion and opening of the Edinburgh Tram Network as is consistent with, required by or contained within the Services.

Table A

	Consent	Approval Body
Railways and Aviation	HMRI	HMRI
	Network Rail	Network Rail
	Airport/Aviation Consents, including EAL Permissions and EAL Works Data, to the extent that the same are Deliverables under the SDS Agreement.	Edinburgh Airport Limited/BAA/CAA/NATS
Planning	Listed Building Consent	CEC Planning Authority
	Prior Approval	CEC Planning Authority
	Planning Permission	CEC Planning Authority
	Conservation Area Consent	CEC Planning Authority
	Scheduled Monument Consent	Scottish Executive & Historic Scotland
	Advertisement Consent	CEC Planning Authority
Traffic Management	Road Technical Approvals relating to structures, lighting, traffic signals, road markings, safety and geometry and drainage.	CEC Roads Authority
Environment Ecological	Badger Licence	Scottish Natural Heritage
	Otter holt/disturbance licence	Scottish Natural Heritage
	Bat Licence	Scottish Natural Heritage

	Appropriate Assessment	Competent Authority
Drainage CAR	CAR General Binding Rules	SEPA
	CAR Registration	SEPA
	CAR Licence	SEPA
	Water/Wastewater Connection	Scottish Water
Construction	Technical Approval	CEC Bridges/CEC Roads
	Building Warrant	CEC Building Standards
Radio	OFCOM licence	OFCOM
Design Consultation	Third Party Design Consultation	Third parties
Undertakings	Parliamentary Undertakings	Parliament and third parties
Agreements	Third Parties approval and consents	Third parties

Infraco Proposals has the meaning given in the Infraco Contract;

Infraco Works has the meaning given in the Infraco Contract

Issued for Construction Drawings means those Deliverables necessary for Infraco to commence construction of the relevant part of the Infraco Works and as shown on the Design Delivery Programme which have been fully approved by all Approval Bodies and in accordance with the Review Procedure;

Novation Agreement means the agreement for novation of the SDS Agreement entered into between tie, the Infraco, and the SDS Provider, dated on or about the date of the Infraco Contract

Quality Management System means the quality management system entitled Bilfinger Berger - Siemens (BBS) Consortium, Edinburgh Tram Network Infraco, PROJECT MANAGEMENT PLAN INCLUDING QUALITY PLAN utilised by the Infraco and dated 12 February 2008, as amended from time to time in accordance with the Infraco Contract;

Relief Event has the meaning given in the Infraco Contract

Clause 2 – Term of this Agreement

Delete Clause 2 and substitute therefore:

This Agreement shall come into effect on the last date of execution of this Agreement. The rights and obligations imposed on the SDS Provider to perform the services set out in Schedule 1 (Scope of Service) shall continue (unless expressly provided otherwise in Schedule 1 to this Agreement) until the date on which the SDS Provider is notified by the Client that the Patent Defects Rectification Period (as defined in the Infraco Contract) has expired. For the avoidance of doubt, the liability of the SDS Provider in respect of any breach of this Agreement or negligence in the performance of the Services shall continue in full force and effect notwithstanding any notification by the Client pursuant to this Clause 2.1.

Clause 3 - Duty of Care, Standards and the Services to be Provided

3.3.4 Insert "Employer's Requirements" after "Technical Specifications".

3.3.14 Insert ", the Client, Bilfinger Berger, Siemens" after "the Scottish Executive"

3.10 Delete references to "**tie**" and "**tie Parties**" and replace with references to "the Client" and "Client Parties" respectively.

3.18 Replace "planning supervisor" with "CDM coordinator".

Insert the following new Clauses:

3.28 The SDS Provider is aware and has knowledge of all the terms and conditions of the Infraco Contract and the SDS Provider shall not cause the Infraco to be in breach of the provisions of the Infraco Contract to be observed and performed and complied with by the Infraco in so far as they relate and apply to the Services, and is further aware and has taken and shall continue to take full account of the obligations to be undertaken and the liabilities which may be incurred by the Infraco therein in relation to the Services.

- 3.29 The SDS Provider acknowledges that any breach by it of this Agreement may result in the Infraco committing breaches of and becoming liable for damages under the Infraco Contract and other contracts made by it in connection with the Infraco Contract and may occasion further loss or expense to the Infraco in connection with the Infraco Contract and such other contracts and all such damage, loss and expense is hereby agreed to be within the contemplation of the Parties as being the probable results of any such breach by the SDS Provider. Subject to Clause 27.6 and 27.7, the SDS Provider shall indemnify the Infraco against all such damage, loss and expense.
- 3.30 The SDS Provider shall observe, perform and comply with all the provisions of the Infraco Contract (in so far as the same has been supplied to the SDS Provider) on the Infraco's part to be observed, performed and complied with insofar as they relate and apply to the performance of the Services and the SDS Provider shall be liable to the Infraco for:
- 3.30.1 any breach, non-observance or non-performance for which the SDS Provider is responsible of any of the provisions of the Infraco Contract in so far as they relate and apply to the performance of Services; and
 - 3.30.2 any act or omission for which the SDS Provider is responsible which involves the Infraco in any liability to ~~tie~~ and/or the Tram Supplier under the provisions of the Infraco Contract in so far as they relate and apply to the performance of Services; and
 - 3.30.3 any claim, damage, loss or expense due to or resulting from any negligence or breach of duty for which the SDS Provider is responsible.
- 3.31 Provided that the Client has received the necessary design and other information from the SDS Provider in accordance with the Design Delivery Programme to allow it to develop the Client Designs, the Client shall, as soon as reasonably practicable, provide to the SDS Provider such Client Designs and, save where the SDS Provider has an obligation pursuant to this Agreement to obtain such information or instructions from another party, such other information and instructions as are necessary to enable the SDS Provider to comply with the Consents Programme and/or the Design Delivery Programme.

Clause 4 - Development, Review, Finalisation and Delivery of the Deliverables

- 4.4 Delete reference to tie in third line and replace with "the Client".

Delete Clause 4.5 and insert the following new Clause 4.5

4.5 The SDS Provider shall submit to the Client's Representative five copies of each Deliverable no later than the date shown in the Design Delivery Programme.

4.6 Delete "submittal programme" and replace with "Design Delivery Programme".

4.8 Delete all after 'Approval Bodies' and add: "the SDS Provider shall amend the Deliverable. Such amendment shall be at the SDS Provider's cost except where such amendment is required in order for the Deliverable to meet the requirements of any Approval Bodies, where such requirements are:

4.8.1 inconsistent with or in addition to the Infraco Proposals or the Employer's Requirements;

4.8.2 not reasonable given the nature of the Approval Body; or

4.8.3 not reasonably foreseeable within the context of the Infraco's Proposals or the Employer's Requirements,

in which case such amendment shall be a Client Change. All such amendments shall be made in accordance with Schedule 9 (*Review Procedure*) and shall ensure that the Deliverable shall satisfy the requirements of this Agreement and any Approval Bodies.

4.11/4.12 Insert "Employer's Requirements" in line 3 after "Technical Specifications"

Insert the following new Clause 4.14:

4.14 In addition to the other requirements of this Clause 4, the SDS Provider shall support the Client as reasonably required in relation to the maintenance and provision of any records, drawings, registers, manuals and/or reports as may be required under the Infraco Contract.

Clause 5 – Consents

Delete Clause 5.1 and substitute therefor:

5.1 The SDS Provider shall (at its own cost and expense):

5.1.1 submit applications which are valid and complete for (and/or for renewal or extension as appropriate of) all Design Stage Consents in accordance with the timetable set out in the Consents Programme and thereafter (subject to Clause 7.5) obtain and maintain in effect all Design Stage Consents;

- 5.1.2 implement each Design Stage Consent within the period of its validity and in accordance with its terms; and
- 5.1.3 observe and comply with the terms of each Consent (not being a Design Stage Consent) obtained from time to time in connection with the construction, installation, commissioning, completion and opening of the Edinburgh Tram Network.

Clause 5.2 - Delete "Consents" and replace with "Design Stage Consents".

Delete 5.4 and substitute therefor:

- 5.4 The SDS Provider shall update the Consents Programme not less than 3 Business Days prior to each Reporting Period End Date, showing progress and identifying any new Consents (whether or not Design Stage Consents) to be obtained. Subject to Clauses 7.5 and 15 no other changes to the Consents Programme shall be permitted without the consent in writing of the Client. The Client shall be entitled to request information in relation to the progress of the application for any such Consent and the Consent itself and the SDS Provider shall provide the same at no cost to the Client.

Insert new Clauses:

- 5.5 Without prejudice to Clause 5.1.1, the SDS Provider shall inform the Client as soon as practicable after becoming aware that a Design Stage Consent (or its extension and/or renewal) will not be obtained by the programmed date set out in the Consents Programme.
- 5.6 Where an application for a Design Stage Consent (or its extension and/or renewal) is denied, the SDS Provider shall notify the Client of the reasons given by the Approval Body for declining to issue or renew the Design Stage Consent and shall provide all appropriate supporting documentation to the Client.
- 5.7 Subject to Clause 5.8 below, failure to obtain a Design Stage Consent from the relevant Approval Body in respect of a design which the SDS Provider is responsible for preparing by the date on which it is shown as required in the Design Delivery or Consents Programme shall not be a breach of this Agreement and shall be a Compensation Event.
- 5.8 Clause 5.7 shall apply following the inability of the SDS Provider to obtain (or maintain) a Design Stage Consent for which it is responsible and in accordance with the Consents Programme contained in the SDS Novation Agreement, provided that:

- 5.8.1 the SDS Provider
- (i) has complied with clauses 5.5 and 5.6;
 - (ii) has used reasonable endeavours to afford the Infracore a period of 3 Business Days from notification under Clauses 5.5 or 5.6 to meet with the relevant Approval Body with a view to resolving the situation and supports them by its attendance at such meeting; The SDS Provider acknowledges that **it** is entitled to attend the meeting
 - (iii) has acted timeously in order to mitigate the impact of the failure to obtain or renew the Consent;
- 5.8.2 the SDS Provider has ensured timely provision of adequate required information to the relevant Approval Body in accordance with the Consents Programme, the Design Delivery Programme, the agreed requirements of the Approval Body and the Design Management Plan.
- 5.8.3 the inability to obtain or renew the Consent is not the result of the SDS Provider reprioritising the Consents Programme and/or the Design Delivery Programme (save where such reprogramming or prioritisation is the direct result of a Client Change, an extension of time pursuant to Clause 7.5, a Relief Event or a Compensation Event) such that the relevant Approval Body has insufficient time or information in which to respond to an altered timescale;
- 5.8.4 there has been a failure of the relevant Approval Body to respond in accordance with the agreed requirements of the Approval Body and timescales set out in the Design Management Plan or Design Delivery Programme or, if none has been stipulated, any reasonable timescale, provided that this failure has not been caused by inadequate or late submissions by the SDS Provider with regard to other Consents;
- 5.8.5 the failure to obtain or renew the Consent is not a consequence of a failure of the SDS Provider to perform its obligations under the SDS Agreement in terms of the quality or content of the relevant Deliverables and as required pursuant to the Design Management Plan, the Design Delivery Programme or the Consents Programme and, where relevant, Clause 10 (*Design Development and Finalisation*); or
- 5.8.6 the failure to obtain or renew a Consent is as a consequence of the quality or content of Client Design.

- 5.9 For the avoidance of doubt, clause 5.7 shall apply where, and to the extent, that a Consent in respect of a submission for Prior Approval is sought and the relevant Approvals Body
- 5.9.1 requires changes to design which could not reasonably have been anticipated from the previous formal or informal consultations or communications with the Approvals Body; or
- 5.9.2 does not deliver the Consent within the period stated in the Consents Programme or such Consents Programme updated in accordance with these terms.
- 5.10 Clause 5.8.3 shall not apply to a Prior Approval Consent where the Approval Body, acting reasonably, has agreed in writing to a proposal from the SDS Provider to changes in the sequencing, packaging and timescales set out in the Design Management Plan or the Consents Programme, provided that the SDS Provider has provided reasonable advance notice to **tie** and to the Approvals Body including full details of the proposed changes.

Clause 6 – Quality Assurance

- 6.1 Delete "a quality management system, and comply with such system" and replace with "and comply with the Quality Management System".
- 6.2 Delete "SDS Provider's quality management system" and replace with "Quality Management System".

Clause 7.1 – Master Project Programme, Programme Phasing Structure and Programme

- 7.1 Amend to delete reference to "Master Project Programme" and substitute "Programme".

Clause 7.5 - Extensions of Time:

Delete Clause 7.5 and substitute therefor:

- 7.5.1 If the SDS Provider shall be delayed in the execution of the Services:
- 7.5.1.1 by any circumstances or occurrence (other than a breach of this Agreement by the SDS Provider) entitling the Infraco to an extension of time for completion or stage completion of the Infraco Contract including, without limitation, any Relief Event or Compensation Event; or
- 7.5.1.2 by the issuing of a Client Change Order in respect of the Services to which Clause 7.5.1.1 does not apply; or

7.5.1.3 by reason of any other breach by the Client of this Agreement (save to the extent caused or contributed to by breach of this Agreement by the SDS Provider) to the extent not caused or contributed to by breach of the Infraco Contract by **tie** or any Relief Event or Compensation Event; or

7.5.1.4 by reason of any circumstances to which Clause 5.8.6 applies, irrespective of whether it entitles the Infraco to an extension of time or Compensation Event under the Infraco Contract,

then in any such event the SDS Provider shall forthwith notify the Client of:-

- (a) the cause of the delay;
- (b) the SDS Provider's estimate of the likely effect of such delay upon the Consents Programme and/or the Design Delivery Programme;
- (c) the estimated additional cost that shall be incurred; and
- (d) any acceleration measures which the SDS Provider could take to mitigate the effects of such delay and an estimate of the costs thereof

and, in the case of any event listed in Clauses 7.5.1.1 and/or 7.5.1.2, shall include such information as Infraco would be required to provide pursuant to Clause 65.2 of the Infraco Contract in respect of such event and/or circumstance.

7.5.2 Subject to compliance with Clause 7.5.1, the SDS Provider shall, subject to any instruction to accelerate the Services pursuant to Clause 7.5.3, be entitled to such adjustment to the Consents Programme and/or the Design Delivery Programme as may in all circumstances be fair and reasonable in respect of any event or circumstance under Clause 7.5.1, provided always that the SDS Provider's entitlement to an extension of time for any event listed in Clauses 7.5.1.1 and 7.5.1.2 above shall in no circumstances exceed (in respect of such event) the extension of time (if any) to which the Client is entitled for the identical event under the Infraco Contract. An extension of time shall not be granted where the cause of the Services having been delayed, affected or suspended is due to any act, omission, default or breach of the Agreement by the SDS Provider or its employees, agents or servants or any SDS Provider Party.

7.5.3 The Client shall issue a Client Change Order to authorise any agreed acceleration of the Consents Programme and/or the Design Delivery Programme and/or increased costs as a result of delays notified under Clause 7.5.1.

- 7.5.4 If the Services are delayed in circumstances other than those entitling the SDS Provider to an extension of time as set out in Clause 7.5.1 or as a result of a Force Majeure Event, the SDS Provider shall inform the Client at the earliest opportunity and shall give an estimate of the likely effect upon the Consents Programme and/or the Design Delivery Programme. The SDS Provider at his own expense shall take such acceleration measures as are necessary to achieve the requirements of the Consents Programme and/or the Design Delivery Programme.
- 7.5.5 The SDS Provider shall not be entitled to and shall be deemed to have irrevocably waived any entitlement to any extension of time unless the SDS Provider has:
- 7.5.5.1 within 10 Business Days of becoming aware of the circumstances or occurrences which have caused or are likely to cause delay to the SDS Provider in the performance of the Services notified the Client in writing; and
 - 7.5.5.2 within 10 Business Days after such notification submitted by further written notice to the Client detailed particulars of any extension of time to which it may consider itself entitled in order that such submission may be investigated at the time; and
 - 7.5.5.3 wherever applicable, complied with the requirements of any Clause under this Agreement requiring timely notice to be given.
- 7.5.6 Any notice under 7.5.5.1 or 7.5.5.2 above shall give full particulars to the extent then possible of the cause of the delay and of its probable duration and where appropriate (and that without prejudice to Clause 7.5A) reasonable estimate of any direct and indirect costs likely to result therefrom together with any other relevant details.

7.5A Additional Costs

- 7.5A.1 In the event that a Compensation Event causes the SDS Provider to incur costs beyond such costs which were reasonably anticipated to be incurred by the SDS Provider but for the occurrence of the Compensation Event (which for these purposes shall include any breach of this Agreement by the Client to the extent caused or contributed to by breach of the Infraco Contract by **tie**) then without prejudice to Clause 7.5 the SDS Provider shall be entitled to claim costs under this Agreement.
- 7.5A.2 To claim costs, the SDS Provider must, as soon as practicable, and in any event within 10 Business Days after it first became aware that the Compensation Event had caused or is likely to cause the SDS Provider to incur additional costs:

- (a) give to the Client a notice of its claim for costs and full details of the nature of the Compensation Event, the date of occurrence and its likely duration;
- (b) include in any notice given under Clause 7.5A.2(a) full details of any costs claimed including:
 - (i) details of the costs or losses which are not Indirect Losses;
 - (ii) mitigation measures adopted and why unsuccessful; and
 - (iii) any acceleration or other measures which the Infracore could take to mitigate the effects of any delay or non-performance and, where applicable, an estimate of the costs thereof;

provided that where a Compensation Event has a continuing effect, such that it is not practicable for SDS Provider to submit full details in accordance with this Clause 7.5A.2 then the SDS Provider shall instead submit to the Client:

- (A) a statement to that effect with reasons, together with interim written particulars (including details of the likely consequences of the Compensation Event on the SDS Provider's ability to comply with its obligations under this Agreement and an estimate of the likelihood and likely extent of the delay or non-performance and the costs incurred); and
 - (B) thereafter, further interim written particulars until the actual costs incurred (if any) are ascertainable, whereupon the SDS Provider shall as soon as reasonably practicable, submit to the Client the items referred to in Clause 7.5A.2(b);
- (c) demonstrate to the reasonable satisfaction of the Client that:
- (i) the SDS Provider and the SDS Provider Parties could not reasonably have avoided such occurrence or consequences by steps which they might reasonably be expected to have taken;
 - (ii) the Compensation Event is the direct cause of the additional costs; and
 - (iii) the SDS Provider is using reasonable endeavours to perform its obligations under this Agreement.

- 7.5A.3 In the event that the SDS Provider has complied with its obligations under Clause 7.5A.2, then the SDS Provider shall be paid the amount of any direct and demonstrable additional cost as may be reasonable in the circumstances of the Compensation Event, provided always that the SDS Provider's entitlement to such costs shall in no circumstances exceed (in respect of such event) a fair and reasonable proportion of the costs (if any) to which the Client is entitled for the identical event under the Infraco Contract. An entitlement to additional costs shall not be granted where the cause of the Compensation Event is due to any act, omission, default or breach of the Agreement by the SDS Provider or its employees, agents or servants or any SDS Provider Party.
- 7.5A.4 The SDS Provider shall notify the Client if at any time it receives or becomes aware of any further information relating to the Compensation Event, giving details of that information to the extent that such information is new or renders information previously submitted materially inaccurate or misleading.
- 7.5A.5 If the Parties cannot agree the extent of the extension of time or relief required or the additional costs claimed or the Client disagrees that a Compensation Event has occurred (or as to its consequences) or that the SDS Provider is entitled to any additional costs, either Party may refer the matter for determination in accordance with the Dispute Resolution Procedure.
- 7.5A.6 The Client shall, in assessing any delay or extension of time or costs for the purpose of Clause 7.5 and/or this Clause 7.5A:
- (a) not take into account any event or cause of delay or costs which is caused by any negligence, omission, default, breach of contract or breach of statutory duty of the SDS Provider or any SDS Provider Parties;
 - (b) take into account an event or cause of delay or costs only if and to the extent that the SDS Provider establishes to the satisfaction of the Client that the SDS Provider has used its reasonable endeavours to adjust the order and sequence in which the SDS Provider proposes to carry out the Services in such a manner as to minimise the effects of the delay in, or if possible to avoid altogether any delay in, the progress of the Services and mitigate the costs.
- 7.5A.7 The SDS Provider shall not be entitled to and shall be deemed to have irrevocably waived any entitlement to any extension of time and/or additional costs in respect of any failure by the SDS Provider to:

- (a) manage the required interface with CEC in so far as this forms part of the Services;
or
- (b) manage any required interface with any Approval Body and/or third party where consent or approval is required at any stage of the Services; or
- (c) identify any instructions which are required from the Client and/or **tie** in order to progress the Services in accordance with the Consents Programme and/or the Design Delivery Programme,

provided that following the occurrence of a Compensation Event nothing in this Clause 7.5A.7 shall prevent any required interfaces with CEC, any Approval Body and/or third party, or instructions which are required from the Client and/or **tie** from being taken into account when considering extensions of time in accordance with Clause 7.5 and/or additional costs in accordance with Clause 7.5A.

7.5A.8 Notwithstanding the occurrence of a Compensation Event, the SDS Provider shall continue to carry out the Services unless otherwise agreed in connection with Clause 7.5 and/or this Clause 7.5A.

Clause 9 – Sub-letting and the Appointment of SDS Provider Parties

Delete Clause 9.5.

Clause 11 – Methods of Payment

In Clause 11.6

In line five, replace "eighty per cent (80%)" with "ninety per cent (90%)"

In line nine, after the word "final.", delete the remaining wording and replace with:

"The SDS Provider may make application for payment in respect of the remaining ten per cent (10%) of the total value of the Detailed Design Phase Milestone payment:

- 11.6.1 in the case of Detailed Design Phase Deliverables which are required to be submitted to CEC for Technical Approval or Prior Approval pursuant to the Design Management Plan, on the date of their submission provided that such submission is made on or before the date of submission required by the Design Delivery Programme; or.

11.6.2 in the case of all other Deliverables (including, without limitation, any Detailed Design Phase Deliverables not submitted on or before the date of submission required by the Design Delivery Programme), following the issue of the Milestone Completion Certificate by the Client in respect of the relevant Detailed Design Phase for the relevant sub-sector or sector (as appropriate)."

Clause 15 - Changes

Insert the following new Clauses 15.18 and 15.19

15.18 Except in relation to a breach of this Agreement by the Client or unless otherwise agreed by the Client in writing, the SDS Provider's entitlement to additional payment or an extension of time for a Permitted Variation shall in no circumstances exceed (in respect of such Permitted Variation) the extension of time (if any) and/or additional payment (if any) to which the Infraco is entitled under the Infraco Contract for the identical Permitted Variation. The SDS Provider's entitlement to such extension of time or additional payment under this Agreement shall in no circumstances exceed that proportion of the Infraco's entitlement to an extension of time or additional payment under the Infraco Contract to which the Infraco becomes entitled in respect of the entitlement claimed by the SDS Provider. An extension of time and/or additional payment shall not be granted where the cause of the Permitted Variation is due to any act, omission, default or breach of the Agreement by the SDS Provider, its employees, agents or servants or any SDS Provider Party.

15.19 Clause 15.18 shall not apply in connection with additional payment due to the SDS Provider for Services relating to Deliverables in respect of 'Identified Value Engineering' or 'Further Value Engineering' (both as defined in Schedule Part 4 of the Infraco Contract) .

Clause 19 - Termination for SDS Provider Default

Delete Clause 19.1.3 and substitute therefore "Clause not used".

Clause 20 - Termination, Abandonment or Suspension of the Services by the Client

Delete Clause 20.1 and substitute therefor:

20.1 In the event that the Infraco Contract is terminated, this Agreement shall terminate. Such termination shall be deemed to have occurred under Clause 20 unless the Infraco Contract is terminated as a result of any circumstances specified in Clause 19 whereupon the provisions of Clause 25.3 shall not apply in such event.

Clause 22 - Termination for Corrupt Gifts and Payments

Delete Clause 22 (Termination for Corrupt Gifts and Payments in its entirety) substitute therefor:

- 22.1 The SDS Provider or anyone employed by it or acting on its behalf (including any SDS Provider Party) shall not commit any Prohibited Act.
- 22.2 If the SDS Provider or anyone employed by it or acting on its behalf (including any SDS Provider Party) commits any Prohibited Act, then the Client may terminate this Agreement with immediate effect by giving notice to the SDS Provider.

Clause 27 – Indemnity by SDS Provider, Liability and Sole Remedy

Insert new Clauses:

- 27.7 If the SDS Provider fails to achieve the provision of Issued for Construction Drawings identified in the Design Delivery Programme by the date set out in the Design Delivery Programme for the release of the Issued for Construction Drawings (or within such longer period as is agreed by the Client), the SDS Provider will pay the Client liquidated damages at the rate of £8,928.57 in respect of each failure.
- 27.8 The SDS Provider will not be liable to pay liquidated damages:
- 27.8.1 to the extent that the failure to achieve the release date for Issued for Construction Drawings is the failure of **tie** or the CEC to approve the SDS submission of the design Deliverables within the requisite periods set by the Design Management Plan and/or Design Delivery Programme (as appropriate); or
- 27.8.2 if and to the extent that the total aggregate liquidated damages under Clause 27.7 in respect of submissions under this Agreement exceeds £1,000,000.
- 27.9 In the event that it is agreed by the Parties or determined pursuant to Clause 28 (*Dispute Resolution Procedure*) that the Deliverable (including the relevant Issued for Construction Drawings) was not submitted in accordance with the Agreement in terms of packaging, process, or the content or quality was inadequate or insufficient, the limits set out in Clause 27.7 and 27.8 shall not apply and the SDS Provider shall be liable to the full extent under this Agreement.
- 27.10 The liquidated damages set out in Clause 27.7 are a genuine pre-estimate of losses incurred by the Client resulting from failure by the SDS Provider to achieve the relevant release date

and the Parties shall not seek to challenge the application or recovery of such amounts on the basis of this underlying calculation.

- 27.11 Notwithstanding the generality of Clause 27.1, the SDS Provider shall indemnify the Client from all loss, costs, claims, damages, expenses and liabilities incurred by the Client pursuant to Clause 7.5 of the Infraco Contract caused by a breach of this Agreement by the SDS Provider in relation to the exercise of powers under the Tram Legislation (in so far as the same are to be carried out by Infraco pursuant to the Infraco Contract) excluding the construction and maintenance activities associated with the Infraco Works.
- 27.12 Each of the obligations of the SDS Provider under this Agreement shall be interpreted as a separate and independent obligation so that Infraco shall have a separate claim and right of action in respect of every breach of each obligation (including without limitation each failure to comply with Clauses 4.5 and/or 5.1.1).
- 27.13 The SDS Provider shall not be entitled to any common law rights including (but not limited to) rights to damages or any other rights under contract, delict or otherwise (other than specific implement, interim specific implement, interdict, interim interdict or any action for payment) in relation to any breach of this Agreement by the Client to the extent caused or contributed to by breach by the Client of the Infraco Contract or any other Compensation Event. The SDS Provider's sole right to an extension of time and/or relief from the performance of its obligations and/or to claim costs in connection with a Compensation Event shall be as set out in Clause 7.5 and 7.5A, respectively.
- 27.14 The SDS Provider shall not be responsible for the quality or content of Client Design. The SDS Provider shall undertake a general review of Client Design on receipt of the same from the Client, and shall report to the Client with details of any element which is patently inconsistent with the requirements of an Approval Body as applied to design submitted previously.

Clause 28 – Dispute Resolution Procedure

Delete Clause 28 and replace with:

- 28.1 The Parties agree that this Clause 28 (*Dispute Resolution Procedure*) shall have effect for the resolution of any Dispute.
- 28.2 Any Dispute shall, in the first instance, be referred to the Internal Resolution Procedure in accordance with Clause 28.10.

- 28.3 Neither Party shall commence any court proceedings until the procedures in Clauses 28.10 to 28.57A6 have been completed, under exception that Clause 28 (*Dispute Resolution Procedure*) shall not apply so as to prevent either Party seeking an interim order, or interim relief, in the Scottish courts.
- 28.4 In the event that any court proceedings whatsoever are initiated by either Party against the other, the Parties agree that the Court of Session, Scotland, shall have exclusive jurisdiction.
- 28.5 Neither Party shall be entitled to suspend the performance of its undisputed obligations under this Agreement merely by reason of the reference of any Dispute to the Dispute Resolution Procedure contained in this Clause 28 (*Dispute Resolution Procedure*).
- 28.6 Subject to the Client's **tie**'s discretionary rights set out in Clause 28.55 to Clause 28.57.3 to require that a Dispute and a Related Dispute (as defined in Clause 28.55) be dealt with together at an appropriate stage of the Dispute Resolution Procedure, the provisions of this Clause 28 (*Dispute Resolution Procedure*) are mandatory and binding upon the Parties. For the avoidance of doubt nothing in this Schedule 9 shall be intended to disapply section 80(2) and 79(2) of the Edinburgh Tram (Line One) Act 2006 and the Edinburgh Tram (Line Two) Act 2006 (together the "**Tram Acts**") respectively.
- 28.7 Not used
- 28.8 Where either Party refers a Dispute to the Dispute Resolution Procedure, such Party shall not have waived nor be deemed to have waived any right to pursue or progress such Dispute in the event that such Party fails to observe any time limit or timescale provided for in this Clause 28.
- 28.9 Not used

Internal Resolution Procedure

- 28.10 The following procedure is the Internal Resolution Procedure referred to in Clause 28.2:
- 28.10.1 In the event of any Dispute arising, the SDS Provider's Representative and the Client's Representative shall seek to resolve the Dispute at a meeting to be convened within three Business Days of written notification by either Party to the other that it wishes to

initiate the Internal Resolution Procedure in respect of that Dispute ("Notification"). Such Notification shall be given in accordance with the provisions of Clause 36 (*Notices*) of this Agreement.

- 28.10.2 If following the meeting referred to in Clause 28.10.1 the Dispute is not resolved or in the event that a meeting has not been convened within 3 Business Days pursuant to Clause 28.10.1, each Party shall, before the expiry of the period of seven Business Days from Notification, serve, in accordance with the provisions of Clause 36 (*Notices*) of this Agreement, a written position paper ("Position Paper") upon the other Party. Each Party's Position Paper shall state in reasonable detail that Party's position and required objectives in relation to the Dispute; any required redress, and, where possible, any comments on the other Party's position.
- 28.10.3 Upon such service of a Position Paper by the Party initiating or pursuing the Dispute, the Chief Executive (or equivalent) of the SDS Provider and the Chief Executive (or equivalent) of the Client (or their respective deputies in the event of their unavailability) shall seek to resolve the Dispute by meeting in good faith to discuss and negotiate upon the Dispute without recourse to legal or other proceedings.
- 28.10.4 In the event that resolution of the Dispute is achieved by the Chief Executive (or equivalent) of the SDS Provider and the Chief Executive (or equivalent) of the Client, the resolution shall be reduced to writing and, once it is signed by the duly authorised representatives of both Parties, shall be binding on the Parties.
- 28.10.5 Unless concluded by a written legally binding agreement, all discussions and negotiations connected with the Dispute shall be conducted in confidence and without prejudice to the rights of the Parties in any future legal or other proceedings. Nor may such matters be produced or relied upon in evidence in any such proceedings.
- 28.11 In the event that any Dispute is not resolved by the Internal Resolution Procedure within a period of twenty Business Days from Notification (or longer if so agreed by the Parties) then the following provisions of this Clause 28.11 shall apply:
- 28.11.1 the Chief Executive (or equivalent) of the SDS Provider and the Chief Executive (or equivalent) of the Client (or their respective deputies in the event of their unavailability) shall, within a further period of five Business Days, seek to agree that the Dispute shall be resolved by any one of the following procedures:
- 28.11.1.1 mediation in accordance with Clauses 28.12 to 28.14; or

- 28.11.1.2 adjudication in accordance with Clauses 28.15 and 28.54; or
- 28.11.1.3 litigation before the Court of Session, Scotland, in which event the Summons in any such litigation shall be signeted and served within ten Business Days of the date of expiry of the period of 60 Business Days following the conclusion of the internal resolution procedure under Clause 28.10;

28.11.2 in the event that the Chief Executive (or equivalent) of the SDS Provider and the Chief Executive (or equivalent) of the Client (or their respective deputies in the event of their unavailability) are unable to agree that the Dispute be resolved by one of the procedures described in Clauses 28.11.1.1 to 28.11.1.3, the Party initiating or pursuing the Dispute shall refer the Dispute to mediation (and thereafter adjudication if necessary) in accordance with Clauses 28.12 and 28.14.

Mediation

28.12 The Parties shall attempt in good faith to resolve the Dispute by a procedure of mediation in accordance with the Centre for Effective Dispute Resolution mediation rules or Model Mediation Procedure in force at the commencement of the mediation, (or in the event that the Centre for Effective Dispute Resolution has ceased to exist as at the time of the commencement of the mediation, mediation rules or a model mediation procedure offered by any other body offering commercial mediation services which shall be selected by the Client). In the event that any provision of such mediation rules or model mediation procedure conflicts with any provision of this Clause 28 (*Dispute Resolution Procedure*), the provisions of this Clause 28 (*Dispute Resolution Procedure*) shall take precedence. In the event that any timescales contained in such mediation rules or model mediation procedure conflicts with the timescales referred to in this Clause 28 (*Dispute Resolution Procedure*), the timescales contained in such mediation rules or model mediation procedure shall be amended accordingly such that the timescales referred to in this Clause 28 (*Dispute Resolution Procedure*) shall be adhered to.

28.13 In the event that resolution of the Dispute is achieved in consequence of such mediation procedure, such agreed resolution shall be recorded in writing and, once it is signed by the duly authorised representatives of both Parties, shall be binding on the Parties. Unless concluded by a written legally binding agreement, all discussions and negotiations (including written submissions made and documents produced in relation thereto) connected with the mediation procedure referred to in Clause 28.12 shall be

conducted in confidence and without prejudice to the rights of the Parties in any future legal or other proceedings. Nor may such matters be produced or relied upon in evidence in any such proceedings.

- 28.14 If any Dispute to which this Clause 28 (*Dispute Resolution Procedure*) relates is not resolved by the mediation procedure referred to in Clauses 28.12 and 28.13 within a period of 30 Business Days from the referral of the Dispute to mediation (or longer if so agreed by the Parties), the mediation procedure shall be terminated and unless the Party initiating or pursuing the Dispute withdraws the Dispute, the Dispute shall within 60 days of the termination of the mediation procedure be referred to adjudication in accordance with Clauses 28.15 to 28.54.

Adjudication

- 28.15 In the event that either Party refers a Dispute to adjudication in terms of Clause 28.11.1 or 28.14, or exercises a statutory right available to it (if any) under the Housing Grants, Construction and Regeneration Act 1996 to raise adjudication proceedings in relation to "construction operations" (within the meaning ascribed to that term by the Housing Grants, Construction and Regeneration Act 1996) which are not Authorised Works as defined in the Tram Acts, such adjudication shall be conducted in accordance with Clauses 28.15 to 28.54, wherein any reference to "days" is a reference to calendar days.

Notice of intention to seek adjudication

- 28.16 Either Party may give written notice (the "**Notice of Adjudication**") of its intention to refer the Dispute to adjudication and the Party giving such notice shall be the "**Referring Party**".
- 28.17 The Notice of Adjudication shall be given to the other Party and the Party receiving the Notice of Adjudication shall be the "**Responding Party**".
- 28.18 The Notice of Adjudication shall set out briefly:
- 28.18.1 the nature and a brief description of the Dispute and of the parties involved;
- 28.18.2 details of where and when the Dispute has arisen;
- 28.18.3 the nature of the redress which is sought; and

- 28.18.4 the names and addresses of the Parties (including the addresses which the Parties have specified for the giving of notices).
- 28.19 The adjudicator selected to consider the Dispute shall be selected from one of the panels ("**Panels**") appointed by the Parties in accordance with the following:
- 28.19.1 there shall be three Panels, one in respect of legal matters, ("**Legal Panel**") one in respect of construction and operational matters ("**Construction/Operational Panel**"), and one in respect of financial matters ("**Financial Panel**");
- 28.19.2 each Panel shall be comprised of at least four members, who are listed in Schedule 10 (*Panels for the Dispute Resolution Procedure*) to this Agreement;
- 28.19.3 if any member of a Panel resigns or dies or becomes incapax or ill to the extent of being unable to reasonably discharge his duties as a member of the Panel, a replacement shall be appointed by the Parties as soon as practicable. Any such replacement shall be wholly independent of the Client, any Client Party, the SDS Provider, any SDS Provider Party, **tie**, any **tie** Party, City of Edinburgh Council or any Relevant Authority, any Approvals Body, the Tram Supplier or any equipment supplier or any party associated with the Edinburgh Tram Network, and any successor to or subsidiary or parent of any of the aforementioned parties. If the Parties are unable to agree on the identity of such replacement(s), the President or Vice President for the time being of The Chartered Institute of Arbitrators (Scottish Branch) or the Institution of Civil Engineers or the Law Society of Scotland shall appoint such replacement(s) within thirty days of any application for such appointment by either Party.
- 28.20 The Referring Party shall at the same time as giving the Notice of Adjudication to the Responding Party, send to each of the members of the relevant Panel a copy of the Notice of Adjudication and a request that each member of the relevant Panel advises both Parties within three days of the date of the Notice of Adjudication as to whether or not he is able and willing to act. The Referring Party shall at their sole discretion be entitled to select which of the Panels is the relevant Panel in light of the subject matter of the Dispute. The Parties shall attempt to agree within two further days as to which one of the members of the relevant Panel who responded indicating that they are able and willing to act shall be requested to act as adjudicator. In the event that such agreement is reached, the Referring Party shall, within a further period of one day, request the member of the relevant Panel upon whom agreement has been reached to act as adjudicator. In the event that such agreement is not reached, the Responding

Party shall, within a further period of two days, select one of the members of the relevant Panel who responded indicating that they are able and willing to act and the Referring Party shall request that member to act as adjudicator.

- 28.21 If no member of the relevant Panel indicates that he is able and willing to act within three days of receiving a request to act as adjudicator, the Referring Party shall request the President or the Vice President for the time being of The Chartered Institute of Arbitrators (Scottish Branch) or the Institution of Civil Engineers or the Law Society of Scotland to select a person to act as adjudicator.
- 28.22 Any person appointed, requested or selected to act as adjudicator in accordance with Clause 28.20, 28.21 and 28.24 paragraphs shall be a natural person acting in his personal capacity. A person appointed, requested or selected to act as an adjudicator shall be wholly independent of the Client, any Client Party, the SDS Provider, any SDS Provider Party, tie, any tie Party, City of Edinburgh Council or any Relevant Authority, any Approvals Body, the Tram Supplier or any equipment supplier or any party associated with the Edinburgh Tram Network, and any successor to or subsidiary or parent of any of the aforementioned parties.
- 28.23 The requests referred to in Clause 28.20 shall be accompanied by a copy of the Notice of Adjudication.
- 28.24 The Chartered Institute of Arbitrators (Scottish Branch) or the Institution of Civil Engineers or the Law Society of Scotland must communicate the selection of an adjudicator to the Referring Party within three days of receiving a request to do so.
- 28.25 If the Chartered Institute of Arbitrators (Scottish Branch) or the Institution of Civil Engineers or the Law Society of Scotland fails to comply with Clause 28.24, the Referring Party may:
- 28.25.1 agree with the other Party to the Dispute to request a specified person to act as adjudicator; or
- 28.25.2 request any other adjudicator nominating body to select a person to act as adjudicator. An "adjudicator nominating body" shall mean a body (not being a natural person and not being a Party to the Dispute) which holds itself out publicly as a body which will select an adjudicator when requested to do so by a Referring Party.

- 28.26 The person requested to act as adjudicator in accordance with the provisions of Clause 28.20 or 28.21 shall indicate whether or not he is willing to act within two days of receiving the request.
- 28.27 Where an adjudicator has been selected and appointed in accordance with Clause 28.20, 28.21 or 28.24, paragraph the Referring Party shall not later than seven days from the date of the Notice of Adjudication refer the Dispute in writing (the "**Referral Notice**") to the adjudicator.
- 28.28 The Referral Notice shall be accompanied by copies of, or relevant extracts from the Agreement and such other documents as the Referring Party intends to rely upon.
- 28.29 The Referring Party shall, at the same time as he sends to the adjudicator the documents referred to in Clauses 28.27 and 28.28, send copies of those documents to the Responding Party.
- 28.30 The adjudicator may, with the consent of the parties to those Disputes, adjudicate at the same time on more than one Dispute under the Agreement.
- 28.31 The Parties may agree to extend the period within which the adjudicator may reach a decision in relation to all or any of these Disputes.
- 28.32 An adjudicator may resign at any time on giving notice in writing to the Parties.
- 28.33 An adjudicator must resign where the Dispute is the same or substantially the same as one which has previously been referred to adjudication, and a decision has been taken in that adjudication.
- 28.34 Where an adjudicator ceases to act under Clauses 28.32 or 28.33 or dies or becomes incapax or ill to the extent of being unable to reasonably discharge his duties:
- 28.34.1 the Referring Party may serve a fresh notice in accordance with Clauses 28.16 to 28.19 and shall in accordance with Clauses 28.20 to 28.29 request an adjudicator to act; and
- 28.34.2 if requested by the new adjudicator, the Parties shall supply him with copies of all documents which they had made available to the previous adjudicator.
- 28.35 The Parties to a Dispute may at any time agree to revoke the appointment of the adjudicator and in such circumstances the fees and expenses of that adjudicator shall,

subject to Clause 28.36, be determined and payable in accordance with Clauses 28.52 to 28.53.

28.36 Where the revocation of the appointment of the adjudicator is due to the default or misconduct of the adjudicator, the Parties shall not be liable to pay the adjudicator's fees and expenses.

Powers of the Adjudicator

28.37 The adjudicator shall:

28.37.1 act impartially in carrying out his duties and shall do so in accordance with any relevant terms of the Agreement and shall reach his decision in accordance with Scots law; and

28.37.2 avoid incurring unnecessary expense.

28.38 The adjudicator may take the initiative in ascertaining the facts and the law necessary to determine the Dispute, and shall decide on the procedure to be followed in the adjudication. In particular, he may:

28.38.1 request either Party to supply him with such documents as he may reasonably require including, if he so directs, any written statement from either Party supporting or supplementing the Referral and any other documents given under Clauses 28.27 to 28.28;

28.38.2 conduct the adjudication in the English language and decide whether a translation of any document is to be provided and, if so, by whom, by when, and at whose cost;

28.38.3 meet and question either Party and their representatives;

28.38.4 subject to obtaining any necessary consent from a third party or the Parties, make such site visits and inspections as he considers appropriate, whether accompanied by the Parties or not;

28.38.5 subject to obtaining any necessary consent from a third party or the Parties, procure the carrying out of any tests or experiments, and make directions as to the conditions for and responsibility for the cost of the same;

- 28.38.6 obtain and consider such representations and submissions as he requires, and, provided he has notified the Parties of his intention, appoint experts, assessors or legal advisers;
- 28.38.7 give directions as to the timetable for the adjudication, any deadlines, or limits as to the length of written documents or oral representations to be complied with; and
- 28.38.8 issue other directions relating to the conduct of the adjudication.
- 28.39 The Parties shall comply with any request or direction of the adjudicator in relation to the adjudication.
- 28.40 If, without showing sufficient cause, a Party fails to comply with any request, direction or timetable of the adjudicator made in accordance with his powers, fails to produce any document or written statement requested by the adjudicator, or in any other way fails to comply with a requirement under these provisions relating to the adjudication, the adjudicator may:
- 28.40.1 continue the adjudication in the absence of that Party or of the document or written statement requested;
- 28.40.2 draw such inferences from that failure to comply as may, in the adjudicator's opinion, be justified in the circumstances;
- 28.40.3 make a decision on the basis of the information before him, attaching such weight as he thinks fit to any evidence submitted to him outside any period he may have requested or directed;
- 28.40.4 disqualify any part or parts of that Party's submissions affected by the failure to comply; and
- 28.40.5 grant the other Party proper opportunity to consider and respond to any evidence or representation made late.
- 28.41 Subject to any agreement between the Parties to the contrary, either Party may be assisted by, or represented by, such advisers or representatives (whether legally qualified or not) as he considers appropriate.
- 28.42 The adjudicator shall consider any relevant information submitted to him by either Party and shall make available to them any information to be taken into account in reaching his decision.

28.43 The adjudicator and the Parties shall not disclose to any other person any information or document provided in connection with the adjudication which the Party supplying it has indicated is to be treated as confidential, except to the extent that disclosure is required by law or is necessary for the purposes of, or in connection with, the adjudication, or the information is already in the public domain.

Adjudicator's Decision

28.44 Unless otherwise agreed in accordance with paragraph Clause 28.56.1 pr 28.57.1 the adjudicator shall reach his decision not later than:

28.44.1 twenty eight days after the date of the Referral Notice mentioned in Clause 28.25;

28.44.2 forty two days after the date of the Referral if the Referring Party so consents; or

28.44.3 such period exceeding twenty eight days after the Referral Notice as the Parties may, after the giving of that notice, agree.

28.45 Where the adjudicator fails, for any reason, to reach his decision in accordance with Clause 28.44;

28.45.1 either of the Parties to the Dispute may serve a fresh notice in accordance with Clause 28.16 to 28.19 and shall request an adjudicator to act in accordance with Clauses 28.20 to 28.29; and

28.45.2 if requested by the new adjudicator the Parties shall supply him with copies of all documents which they had made available to the previous adjudicator.

28.46 As soon as possible after he has reached a decision, the adjudicator shall deliver a copy of that decision to each of the Parties.

28.47 The adjudicator shall decide the matters in Dispute and may make a decision on different aspects of the Dispute at different times.

28.48 The adjudicator may take into account any other matters which the Parties agree should be within the scope of the adjudication or which are matters under the Agreement which he considers are necessarily connected with the Dispute and, in particular, he may:

- 28.48.1 open up, review and revise any decision taken or any notice certifying payment given by any person referred to in the Agreement, unless the Agreement states that the decision or notice certifying payment is final and conclusive;
- 28.48.2 decide that any of the Parties to the Dispute is liable to make a payment under the Agreement (whether in sterling or some other currency) and, subject to the terms of the Agreement, when that payment is due and the final date for payment.
- 28.49 The adjudicator shall provide written reasons for his decision.

Effect of the Decision

- 28.50 In his decision, the adjudicator may, if he thinks fit, order either or both of the Parties to comply forthwith with his decision or any part of it. In the absence of any directions by the adjudicator relating to the time for performance of his decision, the Parties shall be required to comply with any decision of the adjudicator immediately on delivery of the decision to the Parties in accordance with Clause 28.46.
- 28.51 The decision of the adjudicator shall be binding on the Parties, and they shall comply with it, until the Dispute is finally determined by legal proceedings or by agreement between the Parties.
- 28.52 The adjudicator shall be entitled to the payment of such reasonable amount as he may determine by way of fees and expenses incurred by him and the Parties shall be jointly and severally liable to pay that amount to the adjudicator.
- 28.53 Without prejudice to the right of the adjudicator to effect recovery from either Party in accordance with Clause 28.52, the adjudicator may by direction determine the apportionment between the parties of liability for his fees and expenses.
- 28.54 The adjudicator shall not be liable for anything done or omitted in the discharge or purported discharge of his functions as adjudicator unless the act or omission is in bad faith, and any employee or agent of the adjudicator shall be similarly protected from liability.

Related Disputes

- 28.55 In the event that a Dispute arising under, out of or in connection with this Agreement which in the opinion of the Client relates to a dispute or difference arising out of or in connection with any agreement associated with the Edinburgh Tram Network between

the Client and a third party (a "**Related Contract**") all such disputes or differences being referred to as a "**Related Dispute**", then providing that the Related Contract contains dispute resolution provisions in terms substantially the same as set out in this Clause 28 (*Dispute Resolution Procedure*) (save for necessary changes), the Client may required and direct that the Dispute and the Related Dispute be dealt with together at an appropriate stage of the Dispute Resolution Procedure.

Referral of a Dispute under this Agreement to a Related Adjudicator

28.56 In the event that a Related Dispute has already been referred to the decision of an adjudicator ("**Related Adjudicator**") in accordance with the provisions of the Related Contract, and the Client or the SDS Provider (as the case may be) is of the opinion, acting reasonably, that a Dispute is to be (but has not yet been) referred to adjudication under this Clause 28 (*Dispute Resolution Procedure*), the Client may refer the Dispute or may by notice in writing to the SDS Provider require that the Dispute be referred (as the case may be) to the Related Adjudicator. The Client and the SDS Provider agree that, without fettering or restricting the adjudicator's power and authority in any way, it is their intention that such adjudicator shall, insofar as is relevant, practicable and appropriate, come to the same conclusion as to the facts and apply the same reasoning and analysis in reaching a decision on the Dispute as the adjudicator's conclusions, reasoning and analysis applied by him as Related Adjudicator in the Related Dispute, and:

28.56.1 the adjudicator shall, if practicable, hear the Dispute at the same time as the Related Dispute and shall request such extension of time for producing his decision or award as he may require in order to reach a decision in respect of each of the Dispute and the Related Dispute at the same time. The Parties shall agree to such request for an extension of time, except in the event that the Dispute or the Related Dispute relates to "construction operations", which are not Authorised Works, within the meaning ascribed to that term by the Housing Grants, Construction and Regeneration Act 1996 (if applicable) (unless otherwise agreed by the Parties, all parties to the Related Dispute and the adjudicator);

28.56.2 except in the event that the Dispute or the Related Dispute relates to "construction operations", which are not Authorised Works, within the meaning ascribed to that term by the Housing Grants, Construction and Regeneration Act 1996 (if applicable) (unless otherwise agreed by the Parties, all parties to the Related Dispute and the adjudicator), the adjudicator shall have power (if so requested by the Client) to make

his decisions or awards in the Dispute and the Related Dispute in such a manner as if the rules applicable in the Court of Session, Scotland as to the joining of one or more defenders or third parties or conjoining actions were applicable to the Parties to the Dispute and the Related Dispute, and to the adjudicator; and

28.56.3 the Client shall procure that, as soon as practicable, the other party or parties to the Related Dispute shall give the SDS Provider copies of the Related Contract, the Referral Notice in the Related Dispute and any other documentation provided to the adjudicator by any party to the Related Dispute.

The Client's request to consolidate a Related Dispute with a Dispute

28.56A1 Where a Related Dispute has been referred to adjudication the Client may by written notice request the adjudicator (copied to the SDS Provider and to the other party to the Related Dispute) to consolidate the Related Dispute with the Dispute with a view to allowing all questions arising out of the Dispute and the Related Dispute to be disposed of in the adjudication. Where the Client requests the adjudicator to consolidate the Dispute and Related Dispute then the Client shall (or may procure that the other party to the Related Dispute shall) as soon as practicable, and in any case within fourteen (14) of the referral of the Dispute to the adjudicator, give to the adjudicator conducting the adjudication under this Agreement and also to the other parties to the Dispute and the Related Dispute the following particulars:

28.56A1.1 a copy of the relevant Related Contract;

28.56A.1.2 a preliminary statement from the Client and/or, as the case may be, the other party to the Related Dispute setting out:

28.56A.1.2.1 the basis and the grounds for consolidation of the Related Dispute and the Dispute;

28.56A.1.2.2 the cases of the parties to the Related Dispute;

28.56A.1.2.3 any relief sought by the parties to the Related Dispute; and

28.56A.1.2.4 a list of any documents served in relation to the Related Dispute.

Any such particulars sent by the Client or the other party to the Related Dispute (as the case may be) to the adjudicator shall be sent at the same time to the SDS Provider and the other party to the Related Dispute (as the case may be)

28.56A.2 On receiving the particulars set out in Clause 28.56A.1 provided that such particulars have been received within fourteen (14) days of the referral of the Dispute to the adjudicator, the adjudicator shall if he considers that the Dispute and the Related Dispute are substantially the same or connected one to the other, immediately request that the parties to the Dispute and the other party to the Related Dispute attend a meeting with the adjudicator with a view to determining whether or not the Dispute and the Related Dispute should be consolidated. If the Adjudicator and all the relevant parties agree, they may hold a telephone conference call instead of a meeting, and in such event references in Clauses 28.56A.3 to 28.56A.5 to a meeting or to attending a meeting, shall mean a telephone conference call and taking part in such a telephone conference call.

28.56A3 The Client shall use its reasonable endeavours to procure that an authorised representative or nominee of the other party to the Related Dispute shall attend the meeting with the adjudicator referred to in Clause 28.56A.2. The Client and the SDS Provider each agree to send an authorised representative or nominee to any meeting of this kind under this Agreement or under a Related Contract, which they may be requested to attend.

28.56A4 At the meeting referred to in Clause 28.56A.2, the Party which has not requested the adjudicator to consolidate the Dispute with the Related Dispute shall, as a preliminary matter, either:

28.56A4.1 confirm to the adjudicator that it accept the proposed consolidation of the Related Dispute with the Dispute; or

28.56A4.2 inform the adjudicator that it does not accept the proposed consolidation of the Related Dispute with the Dispute.

Decision to Consolidate

28.56A5 Where Clause 28.56A4.1 applies, or if the SDS Provider's authorised representative or nominee does not attend the meeting referred to in Clause 28.56A2 above (having received due notice thereof) the adjudicator shall if he considers that the Dispute and the Related Dispute are substantially the same or connected one to the other immediately issue a decision consolidating the Dispute and the Related Dispute and shall have the authority and the power referred to in Clause 28.56A7 below.

28.56A.6 Where Clause 28.56A4.2 above applies, or if the SDS Provider's authorised representative or nominee attends the meeting referred to in Clause 28.56A2 above but does not confirm to the adjudicator whether or not it accepts or does not accept the proposed consolidation of the Related Dispute with the Dispute, the adjudicator shall issue within one (1) Business Day of the meeting referred to in Clause 28.56A2 above his written decision as to whether or not the Dispute and the Related Dispute are substantially the same or connected. If the adjudicator considers that the Dispute and the Related Dispute are not substantially the same or not connected one to the other, or has failed or is unable to reach a decision within 1 Business Day of the meeting referred to in Clause 28.56A2, the Dispute and the Related Dispute shall not be consolidated. If the adjudicator considers that the Dispute and the Related Dispute are substantially the same or connected one to the other the adjudicator shall immediately issue a decision consolidating the Dispute and the Related Dispute and the adjudicator shall have the authority and the power referred to in Clause 28.56A7 below.

28.56A7 The adjudicator shall have the authority and power to consolidate the Dispute and the Related Dispute and to direct that all procedural and/or evidential matters arising in both the Dispute and the Related Dispute are dealt with in whatever manner the adjudicator considers shall lead to the fair and expeditious resolution of both the Dispute and the Related Dispute and the parties (including the other party to the Related Dispute) shall thereafter abide by and implement such consolidation and any such direction and any decision of the adjudicator. For the foregoing purposes:

28.56A7.1 unless the context otherwise requires, the provisions of the adjudication rules in this Clause 28 shall apply as between the Client and the other party to the Related Dispute, as they apply between the Client and the SDS Provider in relation to the Dispute; and

28.56A7.2 the adjudicator shall have the same authority and powers as if the Related Dispute constituted a dispute or difference between the Client and the SDS Provider.

28.56A8 In the event that the Related Dispute is consolidated with the Dispute, the adjudicator shall reach a decision on the Dispute and the Related Dispute at the same time and in any event within twenty eight (28) days of the earlier of the referral of the Dispute or the referral of the Related Dispute, or such longer period as is agreed by the parties to the Dispute and the Related Dispute after the date that the Related Dispute has been consolidated with the Dispute. The adjudicator shall be entitled to extend the said

period of twenty eight (28) days by up to fourteen (14) days with the consent of the party by whom the Dispute and (where applicable) the Related Dispute were referred.

Referral of a Related Dispute to the Adjudicator

- 28.57 In the event that a Dispute has already been referred to the decision of an adjudicator, and the Client is of the opinion that a Related Dispute is to be (but has not yet been) referred to adjudication, the Client may refer the Related Dispute to the adjudicator appointed in relation to the Dispute under this Clause 28 (*Dispute Resolution Procedure*). The Client and the SDS Provider agree that, without fettering or restricting the adjudicator's power and authority in any way, it is their intention that the adjudicator shall, insofar as is relevant, practicable and appropriate, come to the same conclusion as to the facts and apply the same reasoning and analysis in reaching a decision on the Related Dispute as the adjudicator's conclusions, reasoning and analysis applied by him as adjudicator in relation to the Dispute under this Agreement. The adjudicator shall:
- 28.57.1 if practicable, hear the Related Dispute at the same time as the Dispute and shall request such extension of time for producing his decision or award as he may require in order to reach a decision in respect of each of the Dispute and the Related Dispute at the same time. The Parties shall agree to such request for an extension of time, except in the event that the Dispute or the Related Dispute relates to "construction operations" which are not Authorised Works within the meaning ascribed to that term by the Housing Grants, Construction and Regeneration Act 1996 (if applicable) (unless otherwise agreed by the Parties, all parties to the Related Dispute and the Adjudicator).
- 28.57.2 except in the event that the Dispute or the Related Dispute relates to "construction operations" which are not Authorised Works within the meaning ascribed to that term by the Housing Grants, Construction and Regeneration Act 1996 (if applicable) (unless otherwise agreed by the Parties, all parties to the Related Dispute and the Adjudicator), the adjudicator shall have power (if so requested by the Client) to make his decisions or awards in the Dispute and the Related Dispute in such a manner as if the rules applicable in the Court of Session, Scotland as to the joining of one or more defenders or third parties or conjoining actions were applicable to the Parties to the Dispute and the Related Dispute, and to the adjudicator; and

28.57.3 as soon as practicable, the Client shall give to the SDS Provider copies of the Related Contract, the Referral Notice in the Related Dispute and any other documentation provided to the adjudicator by any party to the Related Dispute.

Consolidation of a Dispute under this Agreement with a Related Dispute

28.57A1 In the event that, subject to Clause 28.57A3, an adjudicator under a Related Contract ("**Related Adjudicator**"), who is permitted pursuant to the Related Contract to do so, decides that a Dispute under this Agreement be consolidated with a Related Dispute with which the Related Adjudicator is dealing under the Related Contract, then:

28.57A1.1 notwithstanding anything in the adjudication rules in this Schedule 9, with effect from the time of such decision, the adjudicator shall cease to have authority or jurisdiction to determine the Dispute which shall instead be determined by the Related Adjudicator and the appointment of the adjudicator under this Agreement shall cease;

28.57A.1.2 such decision shall be binding on the Client and the SDS Provider and both of them shall acknowledge the appointment of the Related Adjudicator as the adjudicator of the Dispute;

28.57A.1.3 the Client and the SDS Provider shall be jointly liable with the other party to the relevant Related Contract for the Related Adjudicator's reasonable fees and expenses including those reasonable fees and expenses of any specialist consultant or adviser (excluding legal) appointed by the Related Adjudicator in accordance with the adjudication procedure in the Related Agreement, in respect of the period after the date on which the Dispute is consolidated with the Related Dispute pursuant to a decision of the Related Adjudicator;

28.57A1.4 without prejudice to the right of the Related Adjudicator to effect recovery from either party in accordance with Clause 28.57A1.3, the Client and the SDS Provider agree that the Related Adjudicator may by direction determine the apportionment between the parties of liability for his fees and expenses referred to in Clause 28.57A.1.3; and

28.57A.1.5 notwithstanding anything to the contrary a Dispute under this Agreement shall only be consolidated with a Related Dispute, if the

Related Adjudicator receives particulars of the Dispute within fourteen (14) days of the referral of the Related Dispute to the Related Adjudicator under the Related Contract.

- 28.57A2 Where the Related Adjudicator receives a request under the Related Contract, that a Dispute under this Agreement be consolidated with a Related Dispute with which he is dealing under the Related Agreement, the Client and the SDS Provider acknowledge that the Related Adjudicator may immediately request that they, together with the other party to the Related Dispute, attend a meeting with the Related Adjudicator with a view to determining whether or not the Dispute and the Related Dispute should be consolidated. If the Related Adjudicator and all the relevant parties agree, they may hold a telephone conference call instead of a meeting, and in such an event references in Clauses 28.57A3 to 28.57A5 to a meeting or to attending a meeting shall mean a telephone conference call and taking part in such a telephone conference call.
- 28.57A3 The Client and the SDS Provider each agree to send an authorised representative or nominee to any meeting of this kind under this Agreement or under a Related Agreement, which they may be requested to attend.
- 28.57A4 At the meeting referred to in Clause 28.57A2, the Party which has not requested the Related Adjudicator to consolidate the Related Dispute with the Dispute shall, as a preliminary matter, either:
- 28.57A4.1 confirm to the Related Adjudicator that it accepts the proposed consolidation of the Dispute with the Related Dispute; or
 - 28.57A4.2 inform the Related Adjudicator that it does not accept the proposed consolidation of the Dispute with the Related Dispute.
- 28.57A5 Where Clause 28.57A4.1 applies, or if the SDS Provider's authorised representative or nominee fails to attend the meeting referred to in Clause 28.57A.2 above (having received due notice thereof), the Related Adjudicator shall if he considers that the Dispute and the Related Dispute are substantially the same or connected one to the other, immediately issue a decision consolidating the Dispute and the Related Dispute and shall have the authority and the power to consolidate the Dispute and the Related Dispute and to direct that all procedural and/or evidential matters arising in both the Dispute and the Related Dispute are consolidated in whatever manner the Related Adjudicator considers shall lead to the fair and expeditious resolution of both the Dispute and the Related Dispute and the parties (including the party to the Related

Dispute) shall thereafter abide by and implement such consolidation and any such direction.

28.57A6 Where Clause 28.57A4.2 applies or if the SDS Provider's authorised representative or nominee attends the meeting referred to in Clause 28.57A.2 but does not confirm to the Related Adjudicator whether or not that the SDS Provider accepts or does not accept the proposed consolidation of the Dispute with the Related Dispute, the Related Adjudicator shall within one (1) Business Day of the meeting referred to in Clause 28.57A.2 issue his written decision as to whether or not the Dispute and the Related Dispute are substantially the same or connected. If the Related Adjudicator considers that the Dispute and the Related Dispute are not substantially the same or not connected one to the other, or has failed or is unable to reach a decision within 1 Business Day of the meeting referred in Clause 28.57A.2, the Dispute and the Related Dispute shall not be consolidated. If the Related Adjudicator considers that the Related Dispute and the Dispute are substantially the same or connected one to the other, the Related Adjudicator shall immediately issue a decision consolidating the Dispute and the Related Dispute and shall have the authority and the power to consolidate the Dispute and the Related Dispute and to direct that all procedural and/or evidential matters arising in both the Dispute and the Related Dispute are consolidated in whatever manner the Related Adjudicator considers shall lead to the fair and expeditious resolution of both the Dispute and the Related Dispute and the parties (including the party to the Related Dispute) shall thereafter abide by and implement such consolidation and any such direction.

Clause 29 – Novation, Collateral Warranty in favour of tie, Funder's Direct Agreement and Agreement between the Joint Revenue Committee and the SDS Provider

Insert new Clause:

29.10 Within 14 days of the execution of the Novation Agreement, the SDS Provider shall use best endeavours to deliver to **tie** a collateral warranty agreement duly executed by Halcrow and the SDS Provider in favour of **tie** substantially in the form set out in Appendix Part 3 to the Novation Agreement.

Clause 30 - Assignment, Changes In Legal Status And Changes In Control

Delete Clause 30.2 and substitute therefor:

30.2 The Client shall be entitled to assign, novate or otherwise transfer the whole or any part of this Agreement:

30.2.1 to an assignee permitted in accordance with the terms of the Infraco Contract;
or

30.2.2 with the prior written consent of the SDS Provider (such consent not to be unreasonably withheld or delayed).

Clause 32.2.1 – Delete "with full title guarantee"

Schedule 1 – Scope of Services

Amend to include the services set out in Appendix Part 4.

Delete paragraph 3.2.1

Amend paragraph 3.2.2 to include 'prior to the date of the Novation Agreement' after shall.

Amend paragraph 2.1.1 to include after 'all design' in the first line, the words 'other than Client Design',

Schedule 3 – Pricing Schedule – Provisional Additional Work

Delete references to **tie** and **tie Representative** and replace with "Client" and "Client's Representative", respectively.

Schedule 9 – Review Procedure

In paragraphs 1.3 and 1.4 replace "20 Business Days" with "10 Business Days".

In paragraph 3.1.15 replace "prevent Service Commencement" with "would prevent a Certificate of Service Commencement (as defined in the Infraco Contract)".

In paragraph 4.3 insert "and to **tie**" after "Client's Representative".

Insert new sub-clauses:

5.2.7 SEPA;

5.2.8 Historic Scotland;

5.2.9 SNH;

5.2.10 EAL; and

5.2.11 Transport Scotland.

APPENDIX PART 2

CONSENTS PROGRAMME AND DESIGN DELIVERY PROGRAMME

PART A - PROGRAMME ASSUMPTIONS AND CONSTRAINTS

Edinburgh Tram Network

Edinburgh Project Detailed Design Plan - Assumptions & Constraints Report

Doc. Ref: ULE90130-SW-REP-00302 V3



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14 May 2008

CEC01370880_0054

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1 INTRODUCTION

Version 31 of the SDS design Programme was issued to tie on 25 April 2008. This version of the design programme incorporates the requested amendments and modifications resulting from numerous programme meetings specifically aimed to achieve early release of design to meet the Infracore Construction Programme start dates.

These amendments often require modification of the design processes used by SDS in the development of the design, obtaining of Approvals and Consents and the quality control/review procedures. Some of the measures used to achieve early release of the design are in the control of SDS and others rely upon third parties to achieve the IFC dates.

This is a schedule of the modifications to the PB design process and approvals and consents periods. As shown on V31.

2 SCHEME WIDE

2.1 Approvals

- 2.1.1 The SDS Detailed Design Programme assumes a CEC Prior Approval period of 40 days for all submissions unless stated.
- 2.1.2 The SDS Detailed Design Programme assumes a CEC Technical Approval period of 40 days for all submissions unless stated.
- 2.1.3 The SDS Detailed Design Programme assumes all approvals bodies will not exceed the number of days shown. Should the length of time be extended SDS will not meet the stated IFC dates.
- 2.1.4 It has been assumed that tie's review period will occur in parallel with approvals once the design is complete. tie reviews will not affect the critical path. This approach has been agreed by tie in order to speed IFC delivery.
- 2.1.5 Informal Consultation ensures CEC comments are captured prior to formal submission for Prior & Technical Approval. The SDS Detailed Design Programme therefore assumes that SDS should receive minimal or no comments after formal approval period provided that the comments received during the informal consultation period are incorporated into the SDS design.
- 2.1.6 Approvals and Consents resulting from Third Party Agreements, and other consents (with exception of Network Rail, ScotRail, SEPA and BAA) have been programmed into the Approvals and Consents Tracker linked to the Detailed Design Programme.

2.2 Design Assurance

- 2.2.1 The SDS Detailed Design Programme assumes Design Assurance Statements are produced on a subsection basis post acceptance of all approvals for the subsection. Formal handover of design between disciplines is an iterative process throughout the development of the Detailed Design. The formal IDC process between the relevant disciplines at the completion of the design will complete the process.

2.3 Surveys

- 2.3.1 Surveys are planned in order to fill gaps and shortcomings in existing information and will be scheduled in accordance with the critical areas and production of detailed design. These include topographical surveys, ground investigations, photographic & archaeological surveys. Some surveys are dependant on Third Parties, Network Rail, for example, will require land access and method statement approval.

2.4 Power

- 2.4.1 Support to Stray Current Working Party 5 through 10 are currently on hold. tie have commenced stray current negotiations directly with InfraCo including the convening of a separate SCWP, excluding SDS. A letter has been forwarded to tie clarifying the situation. It is assumed that SDS will do no further work in this area.

2.5 As-Built Drawings

- 2.5.1 The SDS Provider will provide as-built drawings within 4 weeks of receipt of all necessary information from the Infraco.

3 SECTION 1A

3.1 Tower Place Bridge

- 3.1.1 Tower Place Bridge is programmed to commence detailed design at risk of the preliminary design not being approved by TAA. This was at ties request (28 March 2008) and adds 5 weeks of risk of abortive work and time delay.
- 3.1.2 IFC is dependant on procuring water-born surveys.
- 3.1.3 Tower Place Bridge batch now has to go through full planning approval as it is outside the LOD, therefore the approval duration is 60 days, as shown in V31.
- 3.1.4 IDC has been unlinked from the subsection IDC as requested by tie. The risk of change coming from the IDC process is therefore with tie.

3.2 Victoria Dock Entrance Bridge

- 3.2.1 IDC has been unlinked from the subsection IDC as requested by tie. The risk of change coming from the IDC process is therefore with tie.

3.3 Lindsay Road Retaining Wall

- 3.3.1 Lindsay Road is programmed to commence detailed design at risk of the preliminary design not being approved by TAA. This adds 50 working days of risk of abortive work and time delay.
- 3.3.2 The SDS Detailed Design Programme assumes CEC will approve the technical submission in 4 weeks, as requested by tie, rather than the standard 8 weeks.
- 3.3.3 Lindsay Road batch has to go through full planning approval as it is now outside the LOD, therefore the duration has been increased to 60 days, as shown in V31.

- 3.3.4 IDC has been unlinked from the subsection IDC as requested by tie. The risk of change coming from the IDC process is therefore with tie.

3.4 Newhaven Retaining Wall & Roadway Junction

- 3.4.1 Newhaven Retaining Wall & Roadway Junction batch has to go through full planning approval as it is now outside the LOD, therefore the approval duration has been increased to 60 days, as shown in V31.

3.5 Batch 1/02a (Bypass):

- 3.5.1 Batch 1/02a submission is subject to confirmation of requirements from CEC (design & approval).

4 SECTION 1B

4.1 Roads

- 4.1.1 V31 of the SDS Detailed Design Programme shows a delay in receiving roads technical approval/comments. The SDS programme has assumed comments/approval will be received by 30 May 08.

5 SECTION 1C

5.1 York Place Tramstop & OLE:

- 5.1.1 The York Place Tramstop & OLE batch has to go through full planning approval as it is now outside the LOD, therefore the duration has been increased to 60 days for a full Planning Application as indicated in V31.

5.2 Roads:

- 5.2.1 1C Roads has been split into 3 sections under change estimate 336: IC1 London Road to Section 1B start, IC2 London Road to York Place (Picardy Place), IC3 York Place to Section 1D start. The V31 of the SDS design programme has been split to reflect this.

6 SECTION 2A

6.1 Russell Rd Bridge

- 6.1.1 Updating to comments (& creation of IFC drawings) has been reduced to 5 days from 10 days subject to commercial agreement on LDs as requested by tie (28 March 2008). Should comments be received requiring amendments to Prior Approval/TAA submission then turnaround may not be possible in 5 days.
- 6.1.2 The SDS Detailed Design Programme assumes CEC will approve the technical addendum submission in 2 weeks rather than the standard 8 weeks (this has been instructed by tie).
- 6.1.3 SDS has been instructed by tie to issue IFC drawings post TAA agreement although Prior approval and subsection IDC completion is outstanding at this time. This is undertaken at ties risk.
- 6.1.4 tie has instructed SDS to prepare Issue for Construction (IFC) drawings for Russell Road Bridge to be ready for signature by 23 May 2008 provided that Prior Approval is granted by CEC by that date and provided that the Prior Approval is not granted with conditions that would require changes to those IFC drawings.

6.2 Haymarket Station Viaduct

- 6.2.1 Updating to comments (& creation of IFC drawings) reduced to 5 days from 10 days subject to commercial agreement on LDs as requested by tie (28 March 2008). Should comments be received requiring amendments to Prior Approval submission then turnaround may not be possible in 5 days.
- 6.2.2 Prior Approval is to be submitted at ties risk as final RSA comments have not been fully accommodated at time of Prior Approval submission.
- 6.2.3 The SDS Detailed Design Programme assumes CEC will take batch 2/01 off hold the day after Prior Approval submission (30th April 08).

7 SECTION 3A

7.1 Coltbridge Viaduct

- 7.1.1 Coltbridge Viaduct now has to go through full Planning Approval, therefore the approval duration has been increased to 60 days, as shown in V31.

8 SECTION 5A**8.1 Murrayfield Stop Retaining Wall**

- 8.1.1 SDS is taking 6 working days risk by progressing design CAT checking in parallel with design.
- 8.1.2 The SDS Detailed Design Programme assumes CEC will approve the technical submission in 4 weeks, as requested by tie, rather than the standard 8 weeks, due to BBS procurement purposes.

8.2 Batch 5/06:

- 8.2.1 Updating to comments (& creation of IFC drawings) reduced to 5 days from 10 days subject to commercial agreement on LDs as requested by tie (23 April 2008). Should comments be received requiring amendments to Prior Approval submission then turnaround may not be possible in 5 days.

8.3 Murrayfield Stadium Retaining Wall

- 8.3.1 As requested by tie (28 March 2008), SDS have split Murrayfield Stadium Retaining Wall from the combined CATIII & Network Rail Approval (with Baird Drive, Balgreen Road Retaining Wall & Murrayfield Training Pitches) in order to accelerate design by 4 weeks. Tie are to ensure Network Rail are comfortable with this approach and will review the design in the specified timescales. There is a risk to SDS that at short notice CATIII check may be not be complete.

8.4 Batch 5/07

- 8.4.1 Batch 5 / 07 was previously on hold due to ongoing discussions between tie/SRU relating to the Third Party Agreement. SDS acknowledge receipt of the instruction to issue the Prior Approval on the basis of the current SDS design. SDS understand that this does not satisfy the aspirations of both tie and SRU for a redesign of Roseburn Street Viaduct and that under most circumstances that this would result in SRU rejecting the Prior Approval proposals.
- 8.4.2 SDS will issue the Prior Approval on the 23 May 08 on the basis that tie will negotiate the approval with SRU and issue further instructions at a later date regarding the VE exercise (Roseburn Street Viaduct). At this time SDS will advise tie of any associated change resulting from the VE proposals.

- 8.4.3 Updating to comments (& creation of IFC drawings) reduced to 5 days from 10 days subject to commercial agreement on LDs as requested by tie (23 April 2008). Should comments be received requiring amendments to Prior Approval submission then turnaround may not be possible in 5 days.
- 8.5 Baird Drive**
- 8.5.1 Prior to V27 of the SDS Detailed Design Programme, SDS were designing at risk on the detailed design & CATII check, before the PD is approved by tie and TAA. Due to this V29 assumes SDS are working at risk for 15 working days (subject to timely approval). SDS have also undertaken to issue for Prior Approval at risk before the PD TAA is approved and detailed design is complete. This has been done to improve timescales and obtain approvals early. There is a risk to SDS of design change and resubmission for Prior Approval. SDS have also reduced CAT check timescales from 30 days to 10 days to improve the IFC delivery date.
- 8.6 Balgreen Rd Retaining Wall**
- 8.6.1 Post V27 of the SDS Detailed Design Programme, SDS agreed to relink the programme to bring IFC back to 15 Aug 08, saving Approx 3 weeks. SDS have reduced the NR comment period to 2 weeks from 4 (as they will not comment until TAA is received). SDS prior to V27 issue of the SDS Detailed Design Programme are designing at ties risk on the detailed design & CATII check before the PD is approved by tie and TAA. V27 shows SDS taking at least 15 working days of risk(subject to timely approval). SDS have also undertaken to issue for Prior Approval at risk before the PD is approved and detailed design is complete, to improve timescales and obtain approvals early. There is a risk to SDS of design change and resubmission for Prior Approval, this is done at ties risk.
- 8.7 Balgreen Road Tram Bridge**
- 8.7.1 Prior to V27 issue SDS were designing at risk on the detailed design & CATII check, before the PD is approved by tie and TAA. Due to this V29+ assumes SDS are working at risk for 35 working days (subject to timely approval). SDS have also undertaken to issue for Prior Approval at risk before the PD TAA is approved and detailed design is complete. This has been done to improve timescales and obtain approvals early. Risk to SDS of design change and resubmission for Prior Approval.
- 8.8 Balgreen Road NR Access Bridge**
- 8.8.1 IDC has been unlinked from the subsection IDC as requested by tie. The risk of change coming from the IDC process is therefore with tie.
- 8.8.2 Delivery of the Access bridge is dependant on Network Rail approvals. We have looked at options for the proposed bridge and discussed them with NR. NR agrees the option that re-uses the existing abutments is acceptable in theory but SDS are to submit the back up information to support this before they give their final approval.

Supporting information comprise:

1. Form A
2. Proposed headroom
3. Detailed analysis of the abutments suitability for the retention and reuse of existing substructures within the proposed scheme following the requirements detailed within Railtrack Group Standard GC/RC/5510

The analysis of the abutment requires additional investigation. SDS are programming for trial pitting and probing behind the abutments to prove the thickness and condition of the abutment walls. Initial enquiries with NR indicate possessions will be required even though we are a distance from the running lines.

In the meantime, SDS are pursuing alternative means of obtaining this information, using radar from the front of the abutments from the roadside. Should this be successful SDS will carry out further studies to cover the full height of the abutments and supplement this information with hand dug trial pits behind the abutments.

Key risks out of SDS's control are:

Delays in appointing contractors

Delay in gaining access for the investigation / surveys

The trial holes show the abutments to be worse than expected.

Network Rail do not approve our submission and the design has to be amended.

There is also a risk raised by the preferred contractor in that the client may wish us to guarantee the design life of the existing abutment to 120 years. This would be unusual as network rail themselves do many deck replacements on existing abutments. Hence the importance of obtaining the additional information.

9 SECTION 5B**9.1 Roads**

- 9.1.1 The SDS Detailed Design Programme assumes CEC will approve the technical submission in 4 weeks, as requested by tie, rather than the standard 8 weeks.
- 9.1.2 The time between completing IDC and issuing for Technical Approval has been reduced from 10 days to 5 days, subject to commercial agreement on LDs, as requested by tie (23 April 2008). This turnaround may not be possible in 5 days.

9.2 South Gyle Access Bridge

- 9.2.1 Updating to comments (& creation of IFC drawings) has been reduced to 5 days from 10 days subject to commercial agreement on LDs as requested by tie (28 March 2008). Should comments be received requiring amendments to Prior Approval submission then turnaround may not be possible in 5 days.
- 9.2.2 The SDS Detailed Design Programme assumes CEC will approve the technical submission in 6 weeks rather than the standard 8 weeks as requested by tie.
- 9.2.3 On 23 April 08 tie instructed SDS to prepare Issue for Construction (IFC) drawings for South Gyle Access Bridge to be ready for signature by 23 May 2008 provided that Prior Approval is granted by CEC by that date and provided that the Prior Approval is not granted with conditions that would require changes to those IFC drawings (as they are being draughted at risk).

9.3 Bankhead Drive Retaining Wall

- 9.3.1 Updating to comments (& creation of IFC drawings) has been reduced to 5 days from 10 days subject to commercial agreement on LDs at ties request 28 March 2008.

9.4 Carrick Knowe

- 9.4.1 V27 of the SDS Detailed Design Programme IFC dates were brought forward from V26 (IFC 22 July) to assist with construction start dates as requested by tie. IDC performed in isolation from rest of the subsection. There is a risk of change due to the impact of changes to design of the rest of the sub-section

10 SECTION 5C**10.1 Roads 5C**

- 10.1.1 The SDS Detailed Design Programme assumes CEC will approve the technical submission in 4 weeks, as requested by tie, rather than the standard 8 weeks.
- 10.1.2 Updating to comments (& creation of IFC drawings) has been reduced to 5 days from 10 days subject to commercial agreement on LDs as requested by tie (23 April 2008). Should comments be received requiring amendments to Prior Approval submission then turnaround may not be possible in 5 days.

10.2 Drainage

- 10.2.1 The SDS Detailed Design Programme assumes CEC will approve the technical submission in 4 weeks, as requested by tie, rather than the standard 8 weeks.

10.3 Gyle stop Retaining Walls

- 10.3.1 The SDS Detailed Design Programme assumes CEC will approve the technical submission in 6 weeks rather than the standard 8 weeks as requested by tie.

10.4 A8 Underpass

- 10.4.1 The SDS Detailed Design Programme assumes CEC will approve the technical submission in 3 weeks rather than the standard 8 weeks at ties request.
- 10.4.2 The programme has been accelerated at risk from V27 as requested by tie. Design time reduced by 1 week. CATII check at risk as accelerated at risk by 3 weeks. 1 day only allowed for IDC, a reduction from 10 days. The IDC performed standalone, rather than as part of the subsection.
- 10.4.3 In order to ensure confidence and understanding of the design quickly, a presentation to TAA has been scheduled into the programme once the design is complete.

10.5 Gogarburn Tram Stop

- 10.5.1 Tie has instructed SDS to break the Gogarburn tramstop out of batch 5/22 to allow the earliest possible production of IFC drawings for the line of route otherwise contained in that batch.

11 SECTION 6

11.1 General

11.1.1 The SDS Detailed Design Programme assumes that the Gogarburn depot site is selected over preference of the Leith depot, and no further development of a design for a depot at Leith is required.

11.1.2 The detailed cladding design and secondary steel detailed design will be undertaken by the contractor depending on final selection of cladding materials.

11.2 Earthworks

11.2.1 Earthworks batch has been split out to allow construction of earthworks in advance of securing approval for the entire depot. CEC approval of this strategy required.

11.3 Drainage

11.3.1 The drainage design has been split out and accelerated as requested by tie. There is a risk of rework/abortive work if amendments are required once the IDC for the entire section has been completed.

11.4 Roads

11.4.1 The SDS Detailed Design Programme shows 13 August 08 for IFC as requested by tie. The programme has taken out 9 days between IDC completion and issue to TAA. The programme also assumes there will be no comments and roads team work at risk to compile IFC drawings while waiting for Technical approval. This may not be possible and is subject to commercial agreement on LDs.

11.5 Depot Access Bridge

11.5.1 The IDC has been unlinked from the subsection IDC as requested by tie. The risk of change coming from the IDC process is therefore with tie.

12 SECTION 7A

12.1 Gogarburn Bridge

12.1.1 The SDS Detailed Design Programme assumes CEC will approve the technical submission in 6 weeks rather than the standard 8 weeks as requested by tie.

12.1.2 The IDC has been unlinked from the subsection IDC as requested by tie. The risk of change coming from the IDC process is therefore with tie.

12.2 Gogar Culvert One

- 12.2.1 The SDS Detailed Design Programme assumes CEC will approve the technical submission in 4 weeks, as requested by tie, rather than the standard 8 weeks.
- 12.2.2 IDC has been unlinked from the subsection IDC as requested by tie. The risk of change coming from the IDC process is therefore with tie.

12.3 Gogar Culvert Two

- 12.3.1 The SDS Detailed Design Programme assumes CEC will approve the technical submission in 4 weeks, as requested by tie, rather than the standard 8 weeks.
- 12.3.2 IDC has been unlinked from the subsection IDC as requested by tie. The risk of change coming from the IDC process is therefore with tie.

12.4 Gogar Culvert Three

- 12.4.1 The SDS Detailed Design Programme assumes CEC will approve the technical submission in 4 weeks, as requested by tie, rather than the standard 8 weeks.
- 12.4.2 The IDC has been unlinked from the subsection IDC as requested by tie. The risk of change coming from the IDC process is therefore with tie.

12.5 Gogarburn Retaining Wall One

- 12.5.1 The SDS Detailed Design Programme assumes CEC will approve the technical submission in 4 weeks, as requested by tie, rather than the standard 8 weeks.
- 12.5.2 V29 onwards of the SDS Detailed Design Programme assumes SDS will be working at risk for 40 working days by continuing with detailed design before PD approvals have been received.
- 12.5.3 IDC has been unlinked from the subsection IDC as requested by tie. The risk of change coming from the IDC process is therefore with tie.

12.6 Gogarburn Retaining Wall Two

- 12.6.1 The SDS Detailed Design Programme assumes CEC will approve the technical submission in 4 weeks, as requested by tie, rather than the standard 8 weeks.

- 12.6.2 V29 onwards of the SDS Detailed Design Programme assumes SDS will be working at risk for 40 working days by continuing with detailed design before PD approvals.

- 12.6.3 IDC has been unlinked from the subsection IDC as requested by tie. The risk of change coming from the IDC process is therefore with tie.

PART B - CONSENTS PROGRAMME AND DESIGN DELIVERY PROGRAMME

APPENDIX PART 3

HALCROW COLLATERAL WARRANTY



(1) HALCROW GROUP LIMITED

- and -

(2) tie LIMITED

COLLATERAL WARRANTY

relating to the

**PROVISION OF DESIGN SERVICES FOR
THE EDINBURGH TRAM NETWORK**

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AGREEMENT

BETWEEN

- (1) **HALCROW GROUP LIMITED** (Company Number 03415971) whose registered office is at Vineyard House, 44 Brook Green, London, W6 7BY (the "**Consultant**") and
- (2) **tie LIMITED** (Company Number SC230949) whose registered office is at City Chambers, High Street, Edinburgh, Midlothian, EH1 1YJ ("**tie**") which term shall include its successors and permitted assignees).

BACKGROUND

- A. By an agreement in writing dated 19 September 2005 (the "**SDS Agreement**"), **tie** appointed Parsons Brinckerhoff Limited (the "**SDS Provider**") to provide system design services in connection with the Edinburgh Tram Network.
- B. The SDS Provider appointed the Consultant to provide design services and technical and civil engineering expertise and support (the "**Services**") as the SDS Provider's sub-consultant pursuant to an agreement dated [◆] 2005 (the "**Halcrow/PB Agreement**").
- C. It is a term of the SDS Agreement that the SDS Provider shall procure the provision of a Collateral Warranty in favour of **tie** from the Consultant.

IT IS AGREED as follows:

1. DEFINITIONS AND INTERPRETATION

- 1.1 In this Agreement the following words and expressions have the following meanings, unless the context requires otherwise:

"**Agreement**" means this document (as amended from time to time pursuant to clause 10);

"**Deliverables**" means the Sub-Consultant Deliverables under the Halcrow/PB Agreement, as determined in accordance with Clause 4.1 of the Halcrow/PB Agreement and Schedule 1 (*Scope of Services*) to the Halcrow/PB Agreement;

"**Intellectual Property Rights**" means any rights in or to any patent, design rights, utility model, trade mark, brand name, service mark, trade name, business name, logo, invention (whether registered or unregistered), domain name, semi-conductor

right, topography right, software design, and/or other materials, source code, copyright, moral right or rights in databases and any other rights in respect of any industrial or intellectual property, whether capable of being registered or not, including all rights to apply for any of the foregoing rights or an extension, revival or renewal of any of the foregoing rights and any similar or analogous rights to any of the above, whether arising or granted under the laws of Scotland or of any other jurisdiction.

"Party" means each and any of the parties to this Agreement and Parties shall be construed accordingly.

1.2 Unless the context requires otherwise:

1.2.1 words importing:

1.2.1.1 the singular include the plural and vice versa; and

1.2.1.2 one gender include all other genders.

1.2.2 a reference to:

1.2.2.1 persons includes firms, companies, corporations, partnerships, trusts, authorities and other incorporated and/or unincorporated bodies; and

1.2.2.2 a recital, clause or schedule is a reference to a recital, clause or schedule of or to this Agreement.

1.3 The list of contents and clause headings in this Agreement are included for convenience only and do not affect its interpretation.

1.4 Where a Party comprises two or more persons:

1.4.1 any obligations on the part of that Party contained or implied in this agreement are deemed to be joint and several obligations on the part of those persons; and

1.4.2 references to that Party shall include references to each and any of those persons.

- 1.5 Unless otherwise defined hereunder, where the Halcrow/PB Agreement defines a meaning to any capitalised word or expression used in this Agreement, the same meaning shall be given to it in this Agreement;
- 1.6 In the case of any unintended and patent conflict between the definition or interpretation of words or expressions in this Agreement and the Halcrow/PB Agreement, the Halcrow/PB Agreement shall prevail save where by express words or where it is apparent from the context that the contrary is intended in this Agreement.

2. STANDARD OF CARE

The Consultant warrants and undertakes to **tie** that:

- 2.1 it has carried out and shall continue to carry out its Services and other duties and obligations under the Halcrow/PB Agreement subject to and in accordance with the terms thereof; and
- 2.2 in addition to and without derogation from clause 2.1;
- 2.2.1 the Consultant warrants to **tie** that, in the performance of the Services and its other obligations under the Halcrow/PB Agreement it has exercised and shall exercise a reasonable level of professional skill, care and diligence to be expected of a properly qualified and competent system design services and technical and civil engineering services provider experienced in performing services similar to the Services in connection with projects of a similar size, scope and complexity to the Edinburgh Tram Network; and
- 2.2.2 it owes a duty of care to **tie** in carrying out its duties, obligations and scope of services under the Halcrow/PB Agreement in terms of 2.2.1 above.

3. COPYRIGHT LICENCE

- 3.1 The Consultant hereby grants to **tie** an irrevocable, perpetual, royalty-free and non-exclusive licence to use any and all of its own Intellectual Property Rights contained in the Deliverables as may be necessary for **tie** to use in relation to any projects associated with the Services. This licence shall carry the right to grant sub-licences, and be freely transferable to third parties. The Consultant shall be liable for any claims arising from the use by **tie** of such Intellectual Property Rights only to the extent that they are used by **tie** for the purposes for which they were intended.

- 3.2 Subject to **tie** paying the Consultant's reasonable photocopying charges, the Consultant shall provide to **tie** a copy of any of the Deliverables as soon as reasonably practicable after receipt by the Consultant of a written request from **tie** to do so.
- 3.3 The Consultant undertakes to **tie** that the use by **tie** of any of the Deliverables shall not infringe the rights of any third party in relation to the Deliverables.

4. REQUIRED INSURANCES

- 4.1 The Consultant undertakes that it has maintained and shall maintain during the performance of its obligations under the Halcrow/PB Agreement all insurance cover in accordance with the requirements of the Halcrow/PB Agreement;
- As and when reasonably required by **tie**, the Consultant shall produce for inspection documentary evidence that such insurance is being properly maintained.
- 4.2 The Consultant shall at times maintain insurance to comply with its obligations to carry insurance cover following completion of the Services.

5. ASSIGNATION

- 5.1 The Consultant shall not assign, novate or otherwise transfer the whole or any part of this Agreement without the prior written agreement of **tie**.
- 5.2 Subject to notice being served on the Consultant, **tie** shall be entitled to assign the whole of this Agreement (and any such assignee shall be entitled to assign once only) to any person taking **tie**'s interest in the Edinburgh Tram Network (but not a party to whom **tie** or any assignee may enter into one or more contracts whereupon that party takes responsibility for all or any of the Consultant's performance and/or services) without the consent of the Consultant. No further or other assignments shall be permitted.
- 5.3 The Consultant undertakes to **tie** not to contend in any legal or court proceedings under this Agreement that any person to whom **tie** assigns or has assigned its rights under this Agreement in accordance with the foregoing provisions of this clause is to be precluded from recovering any loss resulting from any breach of this Agreement (whenever happening) by reason that (i) such person is an assignee and not the original contracting party under this Agreement, or (ii) **tie** is named under this Agreement and any intermediate assignee of **tie** escaped loss resulting from such breach by reason of the disposal of its interest in the same.

6. LIABILITY OF THE CONSULTANT

- 6.1 The responsibility of the Consultant under this Agreement is not to be reduced or in any way released or limited by any enquiry or inspection by or on behalf of any person notwithstanding that such enquiry or inspection may give rise to a claim by **tie** against a third party.
- 6.2 Subject to the other provisions of this Agreement, the liability of the Consultant to **tie** is to be determined in all respects in accordance with the terms of the Halcrow/PB Agreement and, in the event of any claim by **tie** under this Agreement, the Consultant shall be entitled to rely upon any defence, right, limitation or exclusion under the Halcrow/PB Agreement as though **tie** were named as Client under it.
- 6.3 The liability of the Consultant under this Agreement shall be no greater in nature or extent than the liability of the Consultant under the Halcrow/PB Agreement. Further and notwithstanding any similar or other limitations which may be included in the Halcrow/PB Agreement (and therefore upon which the Consultant may rely by virtue of clause 6.2 and this clause 6.3), the total aggregate liability of the Consultant arising under or in connection with this Agreement, whether in contract, delict or howsoever arising shall be limited to £10,000,000 (TEN MILLION POUNDS except in respect of death and personal injury caused by its negligence, or in the case of fraud or fraudulent misrepresentation).
- 6.4 Further and without prejudice to the foregoing, the aggregate liability of the Consultant arising out of or in connection with this Agreement shall be further limited to that proportion of loss or damage (including interest and costs) suffered by **tie** which is attributable to the Consultant having regard to the contribution to such loss and damage by any other person, and each other person who has contributed to the loss and damage shall conclusively be deemed to have paid to **tie** a sum equivalent to the proportion of the loss and damage which is attributable to its contribution to the same. For the avoidance of doubt, in calculating the SDS Provider's contribution for the purposes of this clause, the SDS Provider's contractual assumption of responsibility for services performed by the Consultant shall not be taken into account.

NOTICES

- 6.5 Any notice required to be given under this Agreement is to be hand delivered or sent by prepaid registered or recorded delivery post to the Party concerned at its address

set out in this Agreement or to such other addresses as may be notified by such Party for the purposes of this clause.

- 6.6 Any notice given pursuant to this clause, if sent by registered or recorded delivery, is deemed to have been received 48 hours after being posted.

7. RIGHTS OF THIRD PARTIES

- 7.1 Save as in accordance with clause 5, a person who is not a Party to this Agreement shall have no right to enforce any term of this Agreement save through the operation of clause 5 (*Assignment*).

8. INVALID TERMS

- 8.1 If any term of this Agreement shall be held to any extent to be invalid, unlawful or unenforceable:

8.1.1 that term shall to that extent be deemed not to form part of this Agreement; and

8.1.2 the validity and enforceability of the remainder of this Agreement shall not be affected.

9. VARIATIONS AND WAIVERS TO BE IN WRITING

- 9.1 No variation, alteration or waiver of any of the provisions of this Agreement shall be effective unless it is in writing and signed by or on behalf of the Party against which the enforcement of such variation, alteration or waiver is sought.

10. WAIVER

- 10.1 Save where expressly stated, no failure or delay by either Party to exercise any right or remedy in connection with this Agreement shall operate as a waiver of it or of any other right or remedy nor shall any single or partial exercise preclude any further exercise of the same, or of some other right or remedy. A waiver of any breach of this Agreement shall not be deemed to be a waiver of any subsequent breach.

- 10.2 The Parties' rights and remedies under this Agreement are, except where provided otherwise in this Agreement, independent and cumulative.

11. JURISDICTION AND LAW

11.1 This Agreement is governed by and is to be construed according to Scots law and the Scottish courts shall have jurisdiction in relation to all matters arising under it.

11.2 The Parties agree that any dispute in relation to this Agreement shall be conducted in accordance with clause 28 (*Dispute Resolution Procedure*) of the Halcrow/PB Agreement and the provisions of the said clause 28 are deemed to be incorporated mutatis mutandis in respect of this Agreement provided that any reference to "Parties" shall be deemed to refer to **tie** and the Consultant, any reference to "Client" shall be deemed to refer to **tie**.

IN WITNESS WHEREOF these presents on this and the preceding 7 pages are executed as follows:

EXECUTED for and on behalf of **HALCROW PLC**

at

on _____ 2008 by:

Director/Authorised Signatory

Full Name

Witness Signature

Full Name

Address

EXECUTED for and on behalf of **tie**

at

on _____ 2008 by:

Authorised Signatory

Full Name

Witness Signature

Full Name

Address

APPENDIX PART 4

Design and Deliverable Status

PARSONS BRINCKERHOFF LIMITED

SDS CONTRACT

NOVATION AGREEMENT

Appendix Part 4

14 May 2008

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1 Introduction

This document defines the status of the SDS Agreement between **tie** and SDS at the point of Novation. The report details:-

- The status of deliverables completed to date and remaining to be completed for the currently defined scope of services.
- The requirement for future additional services to be provided by SDS for the management of the Approvals process for the Infraco designs.
- The requirement for future additional Construction Support Services to be provided by SDS to the Infraco.

2 Current Scope of Services

2.1 Overview

The scope of work covered by the SDS Agreement is defined as four Phases of work:-

1. Phase I Requirements Definition
2. Phase II Preliminary Design
3. Phase III Detailed Design
4. Phase IV Construction Support

3 Phase I Status

3.1 Scope of Work

Phase I is complete

4 Phase II Status

4.1 Scope of Work

Phase II is complete

5 Phase III Status

5.1 Scope of Work

5.1.1 Overview

The Deliverables to be produced by SDS for the Edinburgh Tram Network under Phase III of the SDS Agreement can be categorised as Detailed Design packages delivered to the client and submissions presented for Prior and Technical Approvals.

Phase III is not complete. The Phase III scope of work will be completed under the terms of the SDS Agreement.

The following sections provide an analysis of current status for each category of deliverable.

5.1.2 Detailed Design Packages - Status as at 13 May 2008

Total Number of Packages	Total Delivered	Total Remaining to be Delivered
329	296	33

5.1.3 Prior Approvals - Status as at 13 May 2008

Total Number of Prior Approvals	Total Approved	Total Remaining to be Approved
63	22	41

5.1.4 Technical Approvals – Status as at 13 May 2008

Total Number of Technical Approvals	Total Approved	Total Remaining to be Approved
128	30	98

5.2 Changes

The table of rates for provisional additional work to be used for the pricing of changes to scope is as follows:-

Reference	Role	Hourly Rate
GD	Graduate Designer	£55.00
SD	Senior Designer	£78.00
PD	Principal Designer	£95.00

CT	CAD Technician	£38.00
ST	Senior CAD Technician	£49.00
TS	Technical Support	£38.00

5.3 Team Location and Office Accommodation

Office space for the SDS Phase III Team is to be supplied free of charge by tie to SDS for the duration of the involvement of the team

6 Phase IV Status

6.1 Scope of Work

No work has yet been started under Phase IV. The Phase IV scope of work will be completed under the terms of the SDS Agreement.

Office space for the SDS Phase IV Team is to be supplied free of charge by tie to SDS for the duration of the involvement of the team in supporting Infraco.

7 Additional Scope – Siemens Management Services

7.1 General

As a result of the request from tie and Infraco SDS will provide an additional service beyond that required by the SDS Agreement during the construction phase of the project to support Infraco to secure Approvals and Consents for client design (as defined in the SDS agreement).

This will be where Infraco complete the systems design with final component selections and will be primarily,

- OLE systems design,
- Signalling and Comms,
- Passenger Information Displays
- Tram Stop Furniture
- Automatic Fare Collection equipment
- CCTV equipment
- Public Address equipment
- Track Finishes
- Substation building modifications
- System wide security systems
- Depot equipment.

The team will support Infraco with technical and prior approvals and will also support Infraco with their duty to discharge outstanding planning and prior approval conditions scheduled by the Approvals Authorities in the formal responses to the SDS prior approvals applications.

7.2 Responsibilities of the SDS Support team

SDS will provide personnel with experience of the prior and technical approval processes on the Edinburgh Tram Scheme and the procedures employed by City of Edinburgh Council in registering and approving planning, prior approvals and technical approvals. The SDS team will advise Infraco on these procedures and give guidance on obtaining the outstanding approvals and consents. This will include advice on the content and style of applications as required by CEC, the format of documents to be issued, the timescales for processing of applications and the support of these applications during the process of securing the approval.

During the production of the submissions SDS will advise Infraco on the local knowledge that SDS has gained during the formal and informal consultations SDS previously managed by SDS and the history of the development of the design and any likely requirements of the Approvals Bodies. SDS will also review the submissions produced by the Infraco design teams prior to submission by Infraco and advise on any areas likely to cause objection or rejection of the prior or technical approval.

SDS will support Infraco in their informal consultation process with the Approvals Bodies and with the formal process of making the applications with CEC.

7.3 Programme

The SDS Design Support Team will liaise with the Infraco, tie and SDS planners to inform the Infraco Project Planner of the progress of the Client design approvals and consents.

7.4 Design Checks

In reviewing the Client design SDS will advise Infraco of any errors highlighted in the review process that will impact on the approval of the design. SDS will also advise of any errors or quality control issues that are identified during the review but will not be responsible for quality checking of the Client design.

7.5 Reporting

A weekly report (or as otherwise agreed) will be produced to record the issues being addressed by the SDS Design Support Team. This will detail;

- Progress of the prior, technical and planning approvals;
- The number of prior, technical and planning approvals, the number issued for approval, the number approved and the number of informal consultations in progress.
- New Issues Arising,
- Details of the design issue, location, cause (deviation from SDS design/ design error/programme issue etc) status of resolution,
- Status of any Changes instructed to the design by Approvals Bodies to secure the approval and consent (where applicable)
- Status of resolution of ongoing issues

- Design Progress including target completion dates
- Additional support required from Client/tie etc for the resolution of outstanding issues

7.6 Resources

The SDS Design Support Team is as indicated on the resource chart attached, but is nominally three Principal Engineers, one Document Controller/administration person and one CAD technician. SDS proposes that there is a dedicated engineer for Section 1 of the route, one engineer for Sections 2, 5 and 7 and a further engineer dedicated to supporting SDS in their completion of the design at the depot.

The SDS Design Support Team will report to the Infraco Design Manager. The Infraco Design Manager will be the link with the Client design teams and will be responsible for instructing the Infraco designers in any amendments proposed to the Infraco design at the suggestion/recommendation of the SDS Design Support Team.

The SDS Design Support Team shall lead the negotiations to secure Approvals and Consents for the Infraco related design. The Infraco shall provide all necessary technical support for this process as is required by the SDS Design Support Team.

The SDS Design Support Team will not be responsible for securing the Approvals and Consents for Infraco related design and will perform a supporting and advisory role to Infraco in securing these consents.

7.7 Commercial

The SDS Design Support Team as required above will be a dedicated project team permanently based in Edinburgh. This will be charged and paid by Infraco on a time at contract rates basis (the rates set out in Appendix Part 8 of this Agreement). The team will be nominally as indicated on the organisation chart. This will be flexible in that the team will be increased and decreased to suit project programme demands and as required by Infraco. The team size will be reviewed on a monthly basis and amended as required/agreed.

Additional specialist resources will be made available when requested by Infraco upon request, subject to availability, and this will be charged on a time and expense basis with durations as agreed.

Timesheets will be presented for signature by a nominated Infraco representative for all staff forming part of the Site Support team on a weekly basis and copies made available.

Office space for the SDS Design Support Team is to be supplied free of charge by tie to SDS for the duration of the involvement of the team in supporting Infraco.

Site transport and any specialist equipment required to carry out the above additional services are to be supplied free of charge to SDS by tie.

8 Additional Scope – Construction Support Services

8.1 Design

8.1.1 General

As a result of the request from tie and the Infraco, SDS will provide an additional Design service beyond that required for Phase IV of the Scope of Work during the construction phase of the project of on-site design support. This is intended to provide design clarification to the construction team on site and address technical queries and issue design clarifications as they arise in so far as this is additional to the Services required for Phase IV of the Scope of Work. The aim is to provide on-the-spot design solutions where possible and fast turn around where additional clarification/advice is required in order to minimise disruption to the construction progress. Where required, the SDS design support team will seek clarification from the wider project Design Team and advise on design solutions/requirements. The team will also review the temporary works method statements and confirm that there is no adverse impact on the SDS permanent works design. The SDS team will review the Inspection and Test Plan with a view to identifying potential programme conflicts and practical problems for implementation.

8.1.2 Drawings

Where reasonably required by an Infraco (with tie's agreement acting reasonably) request for clarification the team will produce design sketches to assist the construction team and these will also be used to inform the as-built drawing production by incorporating the design clarifications where amendments have to be made to the detailed design of the scheme.

8.1.3 Approvals and Consents

Where design produced by the Construction Support Team requires amendment to the design that has been the subject of an Approval or Consent the Construction Design Support Team will advise the Infraco of the likely implications based upon experience prior to the change being made. This consent may be a technical approval from the Technical Approval Authority, a Prior Approval matter from CEC local planning authority or a third party consultee. The Construction Design Support Team will inform the SDS Approvals and Consents Construction Support team of the issues, supply the additional design clarification sketches to support the team in securing the Approval and consent.

8.1.4 Survey

In support of the construction team it may be necessary to undertake additional surveys on site. The Construction Design Support Team, will provide a written scope for the survey required. If it is necessary to procure this survey from sources external to the project the Construction Support team will manage the procurement of the service providing written quotations to enable the surveys to be undertaken in a timely manner.

8.1.5 Confirmation of Verbal Instructions

The Construction Design Support Team will manage the Confirmation of Verbal Instructions (CVI) process that will be introduced to control the on site design support process. Verbal instructions given to or received from the tie or the Infraco construction team on site will be reinforced by the issue of a Confirmation of Verbal Instructions (CVI) for record purposes. The team will also manage a register of these CVIs and record the status of outstanding issues.

8.1.6 Additional Design

The Construction Support Team will manage the Request For Information procedure implemented to track the progress of technical queries. The process will be used to manage the technical questions being asked of the Construction Support Team and the associated responses. In cases where the Construction Design Support Team cannot answer the design query themselves they will seek additional support from the relevant technical design function. This may be the SDS designers or the the Infraco design teams. A Request For Information (RFI) form will be generated clarify the design points. The Construction Design Support Team will liaise with the designers to resolve the design issue and mitigate where possible construction programme delays by prioritising design issues with the design teams. Where additional design is required from the SDS team the Construction Design Support Team will inform the Infraco of the design change and will assist to prepare the relevant change instruction.

8.1.7 Health and Safety

The Construction Support Team will assist the Infraco Contractor with the provision of design information for incorporation into the Health and Safety file in accordance with CDM recommendations.

8.1.8 Programme

The Construction Design Support Team will liaise with the Infraco, tie and SDS planners to inform the project programme of the implication of on site generated design change. This will include additional detailed design time, approval and consent related amendments and impacts on the critical path activities. The Construction Design Support Team will work with the Infraco, tie and the rest of the SDS Construction support team to mitigate construction programme delay through prioritisation of the design amendment responses.

8.1.9 Design Checks

Where design is produced by the Construction Design Support Team as a result of a tie instruction or the Infraco request for clarification that requires checking by the discipline teams e.g. structures, OLE, track etc this process will be managed by the Construction Design Support Team. An assessment of the level of design check required will be made by the Construction Design Support Team and notified in the weekly status report and on the CVI form for the issue.

In pursuance of the general obligations of Infraco and SDS the Construction Support Team will also provide assistance to Infraco by checking that subcontractors, suppliers and the Infraco designs themselves have no adverse impacts on the Permanent Design works and ensure that a suitable level of Infraco Inspection and Testing is incorporated.

8.1.10 As Built Drawings

Where additional design is produced in support of the construction team by the Construction Support Design Team, the SDS design drawings will be updated to reflect the changes in preparation for the production of the As-Built Design Drawings.

8.1.11 Reporting

A weekly report will be produced to record the issues being addressed by the Construction Design Support Team. This will detail;

Critical Issues Summary

- Details of the issue, Location, cause (deviation from SDS design/ design error/programme issue etc) status of resolution, reason for delay in resolution and impact of the delay

New Issues Arising,

- Details of the design issue, Location, cause (deviation from SDS design/ design error/programme issue etc) status of resolution,
- Status of the Change instructions (where applicable)
- New RFI s
- Photographic records

Status of resolution of Ongoing issues

- Design Progress including target completion dates
- Approval and Consent progress
- Additional support required from the Infraco/tie etc for the resolution of outstanding issues

RFI Commentary

- Outstanding RFI responses and owners prioritised on the basis of programme delay/importance

- New RFIs
- Updated RFI register

Resources

The Design support team is as indicated on the resource chart attached, but is nominally three Principal Engineers, one CAD technician and administrative support and Project Management.

8.2 Inspection

8.2.1 General

The role of the Inspection Team is to provide an overview of the construction as the work progresses. The aim is to enable SDS to comment upon the construction and the compliance with the SDS design. Inspections will be done by a combination of frequent sampling of the construction works as they progress and for some elements of the works e.g. bridges and more rigorous inspection regime. The inspection teams will be expected to provide a report on the construction works undertaken and work with the Infraco Construction Supervision team to advise of issues that, if not addressed, will result in a non-compliant construction to the SDS design and project specifications. The aim of the team will be to minimise abortive works and provide documentary support to the Infraco Construction Quality Plans and Procedures.

The field inspectors will advise on issues where there are overlapping codes, specification standards, and individual interpretations from architects, engineers and the construction team, and will work in conjunction with the Infraco, tie and the Construction Support Design Team to resolve the construction related issues as they arise in a timely manner to avoid delays as the construction progresses.

The Inspectors will not be responsible for the quality of Construction and will not be expected to approve the construction or elements of the works. The inspectors will, however, be responsible for a review of the documentation produced by the Infraco as part of their quality procedures during construction and comment on the works undertaken against these procedures.

The Inspectors will be expected to report instances where the methods of construction are not as described by the Contractor's method statements, the design drawings, Code of Construction Practise, the design specifications, the Quality Plan etc.

8.2.2 Duties and Responsibilities

The Inspectors will form an integral part of the Infraco construction team. The team will review the construction works as they progress and advise on the compliance with the SDS design as required by the Infraco Construction Quality Plan. The reviews undertaken will include

8.2.3 Ground Investigation

Review of the Infraco GI results for the testing is undertaken and assistance to ensure that the correct are applying the appropriate treatment/mitigation measures required for the trackbed.

- On an ad hoc basis witness the testing and inspection methods to ensure consistency and adherence to the method statement/procedure.

8.2.4 Earthworks

- Checks that the profiles constructed are as indicated on the design drawings
- Checks that the types of reinforced earth materials and installation are in accordance with the SDS design and materials specification.
- Where poor ground is discovered ensure that the correct treatment is used to mitigate to obtain the desired formation quality

8.2.5 Drainage

- Checks that drainage is installed in accordance with designs and specifications for the project.
- Confirm that materials used are in accordance with those specified

8.2.6 Bridges

The inspectors will have a key role in assessing the adherence to the design for the construction of the bridges including;

- pile sizes and locations,
- Testing of concrete being poured on site, methods of testing and adherence to the design requirements,
- Compaction of the concrete and suitable methods,
- Cover to reinforcement prior to concreting,
- In the case of remedial/repair welding processes and procedures, correct paint specifications for anti rust protection, quality of galvanising,
- Inspections will be undertaken to validate that the bridges are constructed using materials that conform to the drawings and specification provided by SDS for the construction.
- Correct reinforcement at correct spacing
- Quality of the finishes achieved on site.

8.2.7 Quality

The Inspection team will not be responsible for ensuring the quality of the construction of the infrastructure and this will remain the responsibility of the contractor and the Infraco, but will assist with clarification of the design to enable the Infraco to comply with the Construction Quality Plan.

8.2.8 Resources

The team will be as shown on the organisation chart but will in principal consist of three inspectors, one dedicated to bridges, one roads and another architectural issues. The inspectors will be supported by an assistant and a CAD operator and Project Management support.

8.3 Commercial - Fees for Construction Support Services

The Construction Support Team as required above will be a dedicated project team permanently based in Edinburgh. This will be charged on a time at contract rates basis, (the rates set out in Appendix Part 8 of this Agreement). The team will be nominally as indicated on the organisation chart. This will be flexible in that the team will be increased and decreased to suit project programme demands and as required by the Infraco and tie. The team size will be reviewed on a monthly basis and amended as required/agreed.

Additional specialist resources will be made available when requested by the Infraco and tie upon request, subject to availability, and this will be charged on a time and expense basis with durations as agreed.

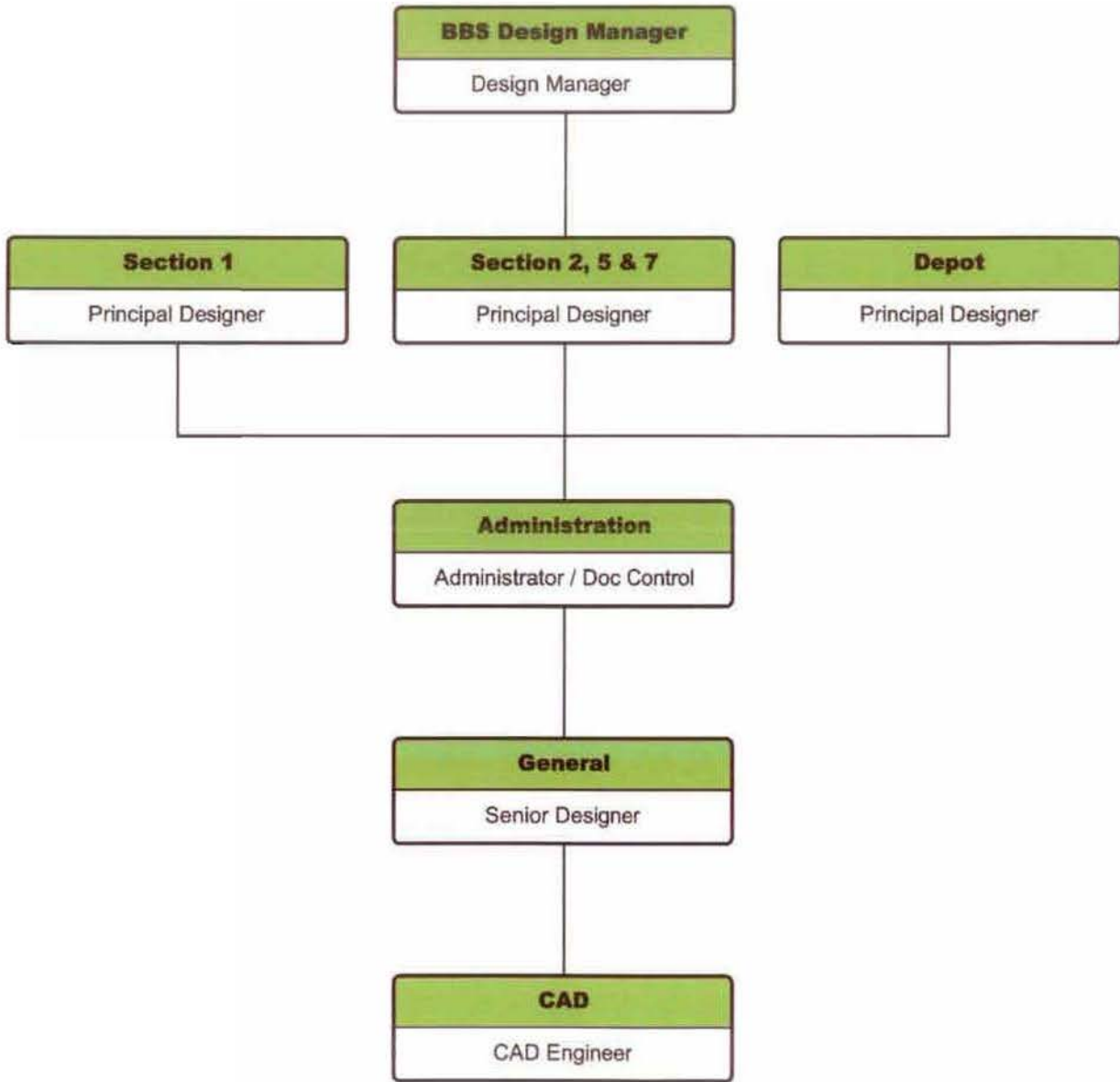
Timesheets will be presented for signature by a nominated Infraco representative for all staff forming part of the Site Support team on a weekly basis and copies made available.

Office space for the SDS Design Support Team is to be supplied free of charge by tie to SDS for the duration of the involvement of the team in supporting Infraco.

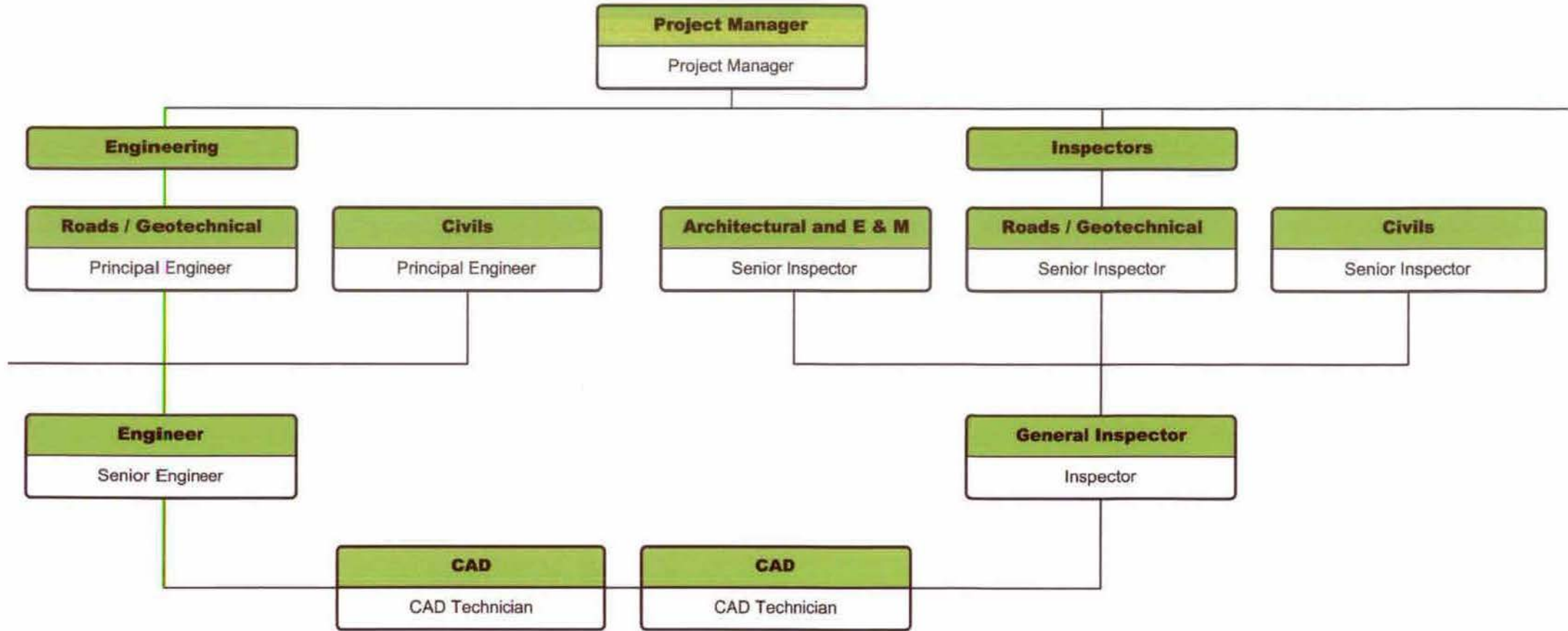
Site transport and any specialist equipment required to carry out the above additional services are to be supplied free of charge to SDS by tie.

9 Cost to Complete

Total Contract Sum	£ 31,906,128.00	
Certified and Paid to Date	£ 25,922,313.00	
Balance to Complete	£ 4,983,815.00	
Detailed Design Deliverables	£ 2,204,792.00	
Construction Support	£ 1,104,023.00	
Extended Construction Support	£ 1,000,000.00	Provisional Sum
Design Support Team	£ 675,000.00	Provisional Sum



Construction Support Services



Capability Split

Discipline	Item	Description	BBS	SDS	Comments/ exceptions
Approvals		Identify the powers sought by the bills and how these affect the range of approvals and consents normally required		Yes	
Approvals		Identify the requirements generated through Parliamentary Undertakings and Third Party Agreements		Yes	
Approvals		Identify the requirements of the Tram Design Manual		Yes	
Approvals		Effective communication to the designers of the design constraints imposed by the above		Yes	
Approvals		Facilitate liaison between designers and approving bodies to assist in ensuring that the evolving design is most likely to meet approval and consent requirements		Yes	
Approvals		Examine the evolving design to ensure that approvals and consents arising from the works proposed are identified		Yes	
Approvals		Communicate, with the support of the designers, the design works to the appropriate authorities for the purpose of obtaining consents using the pre-agreed channels identified in the consents protocol		Yes	
Approvals		Provide a mechanism or forum to ensure that potential conflicts between approval and consent requirements and design features are investigated and mitigated		Yes	
Approvals		Manage the consents protocol to ensure the optimum delivery of consents		Yes	
Approvals	Drainage	Outfall consents		Yes	
Approvals	Depot Design	Planning Process and Approvals		Yes	
Civils	Bridges	Murrayfield Viaduct		Yes	
Civils	Bridges	Existing Water of Leith Bridge		Yes	
Civils	Bridges	Existing Balgreen Road Bridge		Yes	
Civils	Bridges	Balgreen Road Bridge		Yes	
Civils	Bridges	Soutyh Gyle Access Road Bridge		Yes	
Civils	Bridges	A8 Underpass		Yes	

Civils	Bridges	Depot Access Road Bridge		Yes	
Civils	Bridges	Gogar Burn Bridge		Yes	
Civils	Retaining Walls	Baird Drive Retaining Wall		Yes	
Civils	Retaining Walls	Balgreen Road Retaining Wall No. 1		Yes	
Civils	Retaining Walls	Balgreen Road Retaining Wall No.2		Yes	
Civils	Retaining Walls	Bankhead Drive Retaining Wall (South Gyle Access)		Yes	
Civils	Retaining Walls	Gyle Retaining Wall		Yes	
Civils	Retaining Walls	Glasgow Road Retaining Wall		Yes	
Civils	Bridges	Approval in Principle (AIP)		Yes	
Civils	Bridges	Detailed design and approvals		Yes	
Civils	Bridges	Structure gauge drawings		Yes	
Civils	Bridges	Transition slabs	Yes		With BBS as part of the trackform
Civils	Retaining Walls	Approval in Principle (AIP)		Yes	
Civils	Retaining Walls	Ravelston Dykes Access Ramp		Yes	

Civils	Bridges/Ret. Walls	All contamination assessment / advice / interpretation.		Yes	As per the SDS Agreement, The SDS Provider shall be responsible for undertaking and reporting on (inclusive of interpretative analysis) surveys necessary to inform the SDS design of the Edinburgh Tram Network. The resultant analysis and reports from those surveys are to be used to develop the Functional Requirements Specifications and the Technical Specifications and to set base lines against which the impact of the Edinburgh Tram Network can be measured when built. There is no Clause within the SDS Contract stating that SDS will freely and contractually provide "All contamination assessment / advice / interpretation."The relevant Change Instruction to SDS in accordance with the SDS Contract would be required to provide this additional consultant service.
Civils	Power	Power distribution equipment foundation design		Yes	To be finalised in SDS/BBS alignment workshops
Civils	OLE	OLE support foundation design		Yes	To be finalised in SDS/BBS alignment workshops
Civils	Accommodation Works	Layout and Details		Yes	
Civils	Bridges/Ret. Walls	Review Client's Data for Design Scope		Yes	

Civils	Bridges/Ret. Walls	Review of previous factual Interpretive Report where available		Yes	
Civils	Bridges/Ret. Walls	Final Geotechnical Interpretive Report	-	Yes	-
Civils	Bridges/Ret. Walls	Individual Structures Interpretive Reports	-	Yes	-
Civils	Bridges/Ret. Walls	Review and resolve contaminated sites		Yes	If necessary
Civils	Bridges/Ret. Walls	Brief for any additional SI required for permanent works design		Yes	BBS to advise following due diligence
Civils	Bridge	EARL structure at New Ingliston			
Civils	Derailment Containment	Derailment containment as part of structures inc guided busway		Yes	
Civils	Derailment Containment	Derailment containment as part of the track form	Yes		Where required
Civils	Existing Sewers, Drainage or other Utilities under Highways / Tramway	Investigation and condition survey		Yes	
Civils	Existing Sewers, Drainage or other Utilities under Highways / Tramway	Design of any remedial or strengthening measures		Yes	

Civils	Existing Sewers, Drainage or other Utilities under Highways / Tramway	Design of any protection measures, bridging slabs or structures		Yes	
Civils	Existing Sewers, Drainage or other Utilities under Highways / Tramway	Design of New Side or Top Entries to existing sewers, drainage and the like		Yes	
Civils	Bridges	Haymarket Station Viaduct		Yes	
Civils	Bridges	Leith Walk Railway Bridge		Yes	
Civils	Bridges	Tower Place Bridge		Yes	
Civils	Bridges	Victoria Dock Entrance Bridge		Yes	
Civils	Bridges	Roseburn Terrace Bridge		Yes	
Civils	Bridges	Coltbridge Viaduct		Yes	
Civils	Bridges	St George's School Access Bridge		Yes	
Civils	Bridges	St George's School Access Footbridge		Yes	
Civils	Bridges	Ravelston Dykes Bridge		Yes	
Civils	Bridges	Craigleith Drive Bridge		Yes	
Civils	Bridges	Holiday Inn Access Bridge		Yes	
Civils	Bridges	Queensferry Road Bridge		Yes	
Civils	Bridges	Groathill Road South Bridge		Yes	
Civils	Bridges	Telford Road Bridge		Yes	
Civils	Bridges	Drylaw Drive Bridge		Yes	
Civils	Bridges	Crewe Road Gardens Bridge		Yes	
Civils	Bridges	Russell Road Bridge		Yes	
Civils	Bridges	Carrick Knowe Underbridge		Yes	
Civils	Bridges	Existing Saughton Road Bridge		Yes	

Civils	Bridges	Existing Broomhouse Road Bridge		Yes	
Civils	Bridges	Edinburgh Park Station Bridge		Yes	
Civils	Retaining Walls	Roseburn corridor – locations to be confirmed following review of Baseplans and LHMP		Yes	
Civils	Retaining Walls	Ferry Road Retaining Wall		Yes	
Civils	Retaining Walls	Lindsay Road Retaining Wall		Yes	
Civils	Retaining Walls	Russell Road Retaining Wall No. 1		Yes	
Civils	Retaining Walls	Russell Road Retaining Wall No. 2		Yes	
Civils	Retaining Walls	Haymarket Depot Retaining Wall No. 1		Yes	
Civils	Retaining Walls	Haymarket Depot Retaining Wall No. 2		Yes	
Civils	Retaining Walls	Haymarket Depot Retaining Wall No. 3		Yes	
Civils	Retaining Walls	Gogar Burn Retaining Wall No. 1		Yes	
Civils	Retaining Walls	Gogar Burn Retaining Wall No. 2		Yes	
Civils	Bridges	Gogar Culvert One		Yes	
Civils	Bridges	Gogar Culvert Two		Yes	
Civils	Bridges	Approval in Principle (AIP)		Yes	
Civils	Bridges	Design and approvals		Yes	
Civils	Bridges	Piling Design Loads		Yes	
Civils	Bridges	Structure gauge drawings		Yes	
Civils	Bridges	Transition slabs+C440	Yes		With BBS as part of trackform
Civils	Box Culverts	Approval in Principle (AIP)		Yes	
Civils	Ret. Walls	Approval in Principle (AIP)		Yes	
Civils	New Parapets to Existing Bridges	Approval in Principle (AIP)		Yes	
Civils	Bridges/Ret. Walls	Detailed design and approvals		Yes	
Civils	Bridges/Ret. Walls	Review Client's Data for Design Scope		Yes	
Civils	Bridges/Ret. Walls	Review of previous factual Interpretive Report where available		Yes	

Civils	Bridges/Ret. Walls	Final Geotechnical Interpretive Report	-	Yes	-
Civils	Bridges/Ret. Walls	Review and resolve contaminated sites		Yes	
Civils	Bridges/Ret. Walls	Ground modelling / ground water modelling requirements.		Yes	
Civils	Bridges/Ret. Walls	All contamination assessment / advice / interpretation.	-	Yes	-
Civils	Existing Structures such as Bridges or Buildings	Investigation and condition survey		Yes	
Civils	Existing Structures such as Bridges or Buildings	Design of any remedial or strengthening measures		Yes	
Civils	Existing Structures such as Bridges or Buildings	Design of any protection measures for permanent works		Yes	
Civils	Existing Structures such as Bridges or Buildings	Design of any protection measures during construction	Yes		
Civils	Existing Subways, Culverts, Cellars under Highways / Tramway	Investigation and condition survey	Yes		Pre construction condition surveys for construction methodology to be BBS scope. SDS has done sufficient surveys to inform the permanent design but not the pre construction survey related to the construction methodology.

Civils	Existing Subways, Culverts, Cellars under Highways / Tramway	Design of any remedial or strengthening measures		Yes	
Civils	Existing Subways, Culverts, Cellars under Highways / Tramway	Design of any protection measures, bridging slabs or structures		Yes	
Civils	Bridges/Ret. Walls	Procure any additional SI required and associated Factual Reports	Yes		
Civils	Bridges/Ret. Walls	Detailed design and approvals		Yes	
Civils	Bridges/Ret. Walls	Review Client's Data for Design Scope		Yes	
Civils	Bridges/Ret. Walls	Review of previous factual Interpretive Report where available		Yes	
Civils	Bridges/Ret. Walls	Final Geotechnical Interpretive Report	-	Yes	-
Civils	Bridges/Ret. Walls	Brief for any additional SI required		Yes	To be finalised in SDS/BBS alignment workshops
Depot		Depot building layout design, architectural design, landscaping and access roads, car parking, external storage, site security and resolution of environmental matters		Yes	
Depot		Depot yard layout and amenities, lighting and fencing		Yes	

Depot		Depot access control facility (including communications system to control room)		Yes	SDS to take design to performance spec and design power & comms ducting; BBS sub-contractor will do final design of gate itself
Depot		Civil engineering foundations design the depot building C514		Yes	
Depot		Location & design of traction power substation building		Yes	
Depot		Design of traction power substation equipment	Yes		
Depot		Design of site wide drainage and drainage attenuation requirements		Yes	
Depot		Design and location of communication and security systems facilities - systems	Yes		
Depot		Design and location of communication and security systems facilities - building services		Yes	
Depot		Design of LV power supply - building services		Yes	
Depot		Design of UPS provision (split building / systems)	Yes		
Depot		Cable routing and ducting (external) - layout and design		Yes	
Depot		Workshop plant layouts		Yes	Based on input from information from suppliers & maintainers
Depot		Workshop equipment foundations, power, water, air supplies		Yes	Based on input from information from suppliers & maintainers
Depot		Specification of workshop and yard maintenance equipment	Yes		Definitely not SDS - depends on CAF/BBS split agreement
Depot		Design co-ordination of Structures and Civil Engineering, building services, Roads and Utilities and Architectural disciplines		Yes	
Depot *		Design co-ordination of Track, OLE, Supervisory Control and Communications, traction Power Distribution, LV transformer	Yes		

Depot		Co-ordination of depot maintenance plant with tram design specification		Yes	
Depot		General Arrangement		Yes	
Depot		Detailed depot workshop Equipment Design including fixings and loadings	Yes		(for Infraco Scope of work)
Depot		Civil, Building and Architectural design and approvals		Yes	
Depot		Suppliers' & Manufacturers' Drawings	Yes		SDS to check
Depot		Space planning including offices, rest area, canteen, locker rooms		Yes	
Depot		Substation civil design (Foundations)		Yes	
Depot		Outline Building M & E Services Design and Performance Specification for Small Power and Lighting, HVAC, Telephones, LAN, Plumbing, Fire Protection, Earthing and Lightning Protection, etc		Yes	
Depot		Outline Design of Yard M & E Services and Performance Specification for LV power distribution, water supply, compressed air, Fire Protection, Earthing, etc		Yes	
Depot		Detailed Design of Yard M & E Services Design such as LV power distribution, water supply, compressed air, Fire Protection, Earthing, etc		Yes	
Depot		Utilities Design to / from Boundary limits		Yes	
Depot		Workshop tools and maintenance/cleaning equipment. Includes equipment in yard area.	Yes		(for Infraco Scope of work)
Depot		Mechanical interlocking for equipment/OLE interfaces	Yes		Requires input from many parties inc SDS, TEL, CAF
Depot		Depot building amenities, waste and drainage facilities		Yes	
Depot		Fire engineering requirements		Yes	
Depot	Operation Control Centre	Detailed Room Layout Design		Yes	
Depot	Operation Control Centre	Workstation design	Yes		

Environmental	Archaeology	Archaeology Investigations		Yes	
Environmental	Archaeology	Identify sites and produce watching brief		Yes	
Environmental	Survey	Void Location Survey		Yes	Any additional void location required by BBS trackform choice to be instructed by BBS
Environmental	Exhumations	Brief and scope		Yes	
Environmental	Monuments	Brief and scope		Yes	
Environmental	Ecology	Brief and scope		Yes	
Environmental	Tree Felling	Brief and scope		Yes	
Environmental	Contaminated land	Brief and scope		Yes	
Environmental	Exhumations	Methodology for removal/mitigation	Yes		
Environmental	Monuments	Methodology for removal/mitigation	Yes		
Environmental	Ecology	Methodology for removal/mitigation	Yes		
Environmental	Tree Felling	Methodology for removal/mitigation	Yes		
Environmental	Contaminated land	Methodology for removal/mitigation	Yes		
Environmental	Noise	Study / Report		Yes	
Environmental	Noise	Post construction measurement		Yes	
Environmental	Noise	Detailed design for noise mitigation measures		Yes	
Environmental	Vibration	Study / Report		Yes	
Environmental	Vibration	Detailed design of track form to mitigate vibration	Yes		
Environmental	Hydrology Survey	Hydrology Survey		Yes	
Environmental	Survey	Survey		Yes	
Environmental		Preparing and updating from time to time the project Environmental Management Plan		Yes	
Environmental		Provision of environmental advice to the designers		Yes	
Environmental		Input into the design requirements tracker		Yes	
Environmental		Input into the approvals and consents tracker		Yes	

Environmental		Specifying the nature and extent of necessary Archaeological, Ecological and other Environmental Surveys		Yes	
Environmental		Preparing the applications necessary for Environmental Licenses		Yes	
Environmental		Attendance at design review meetings as appropriate		Yes	
Environmental		Environmental input and advice to the overall drainage design and the layouts to boundary limits		Yes	
Environmental		Drainage/interceptor design, including pumping and balancing ponds		Yes	
Environmental		Overall drainage design and layouts to boundary limits		Yes	
Environmental		Drainage / interceptor design. Includes pumping and balance ponds etc.		Yes	
Geotechnical		Preparation of methodology of rolling programme for inspection & test of ground conditions	Yes		
Geotechnical		Design of a phased ground investigation to delineate and characterise the prevailing geotechnical hazards		Yes	
Geotechnical		Supervision of GI fieldworks and the preparation of laboratory testing schedules		Yes	For scope of design that SDS have produced or have agreed to complete at the point of novation. Changes to the design that result in SDS rework are additional services.
Geotechnical		Preparation of an interpretative report presenting out conclusions and recommendations associated with mitigating the identified geotechnical hazards		Yes	
Geotechnical		Register of embankments and cuttings		Yes	
Geotechnical		Plan layouts of embankments and cuttings on the tram route		Yes	
Geotechnical		Preparation of cross sections of embankments and cuttings demonstrating land clearances		Yes	
Geotechnical		Perparation of cross sections of embankments and cuttings detailing typical construction (excluding foundation details)		Yes	