Appendix 1 to the Witness Statement of Martin Foerder

1. ADJUDICATION PROCEEDINGS

1.1 As described elsewhere in my Witness Statement, there were 12 adjudications between Infraco and tie which proceeded all the way to a decision being issued on the merits of the dispute. There were many more disputes between the Parties, some of which did not reach formal adjudication. There was one adjudication underway at the time of mediation (Princes Street), which was put on hold and subsequently settled following the Parties entering into the Settlement Agreement.

1.2 In terms of the Settlement Agreement, all of the disputes between tie and Infraco were settled for all time. As I understand it, this means that the adjudication decisions are final and binding and cannot be revisited by either party.

1.3 On all major issues of principle, Infraco were found to be correct in their interpretation of the Infraco Contract in the course of the adjudications. .

1.4 In order to assist the Inquiry, I have included here a summary of all of the adjudication decisions and their importance to the issues described elsewhere in my Witness Statement.

2. EDINBURGH HILTON HOTEL CAR PARK WORKS

2.1 tie brought adjudication proceedings in respect of the commencement of the Hilton Car Park Works in September 2009. tie wanted Infraco to proceed with these works, and we believed that the works in question fell within the ambit of Schedule Part 4 and therefore required the agreement of an Estimate (under clause 80) before we were obliged to proceed with the works.

2.2 The real issue in question was whether the works to be carried out at the Hilton Car Park were Accommodation Works (as Infraco maintained) or whether the works were Third Party Obligations (as tie maintained).

2.3 Accommodation Works were defined as:

"**Accommodation Works**" means any works arising out of the compulsory purchase process (including the reinstatement of boundary walls, fences) or any other works **tie** are obliged to procure are carried out for third parties associated with the Edinburgh Tram Network."

2.4 Third Party Obligations were defined as:

"**Third Party Obligations**" means the obligations which Infraco is obliged to comply with under Clauses 18.17A and B and set out in Schedule Part 13 (*Third Party Agreements*) as that Schedule Part 13 may be amended from time to time as a result of a **tie** Change"

2.5 If these works were Third Party Obligations, then Infraco was obliged to make sure that it didn't do anything to cause tie to be in breach of Third Party Agreements etc. However, if in complying with third party obligations and requirements, Infraco incurred additional costs or had to do additional work, then that was to be dealt with as a Compensation Event (clause 65 which would potentially entitle Infraco to time and money).

2.6 Accommodation Works were an Undefined Provisional Sum and were contained within a table to Appendix B to Schedule Part 4. Essentially, these Provisional Sums were items where tie may or may not instruct the work, where Infraco had been asked

to provide a price up front. In respect of Undefined Provisional Sums, no allowance had been made for planning or programming of these works, and no inclusion had been made for Preliminaries. Therefore, if tie was to instruct these works, this would amount to a tie Change under Schedule Part 4, which would lead to the requirements to comply with Clause 80 and to get an agreement on the Estimate and a tie Change Order issued, before Infraco were obliged to carry out the works (again with reference to Clause 80.13 which I have dealt with elsewhere in this Witness Statement). If this was not correct and the additional work was to be dealt with as a Compensation Event (as per tie's argument), then Infraco could not hold off from carrying out these works pending agreement of the value of the Compensation Event.

2.7 Unfortunately I have not been shown all of the background papers to this adjudication and so this is my recollection of the issue (I have only seen the Referral Notice). In his decision dated 13 October 2009, the Adjudicator (Robert Howie QC) found in tie's favour and records a declaration that Infraco were obliged to proceed with the Car Park Works without further instruction. There were no reasons given for the Adjudicator's decision. I assume he must have made a decision that these works were Third Party Obligations and not Accommodation Works but this cannot be determined by his reasons.

2.8 In any case, this was a very minor matter particular to its own facts and of low value (circa £30,000 I believe) and did not provide guidance on general points of principle for use elsewhere in the Project.

3. CARRICK KNOWE AND GOGARBURN BRIDGE

3.1 These are two adjudication which ran simultaneously before John Hunter as Adjudicator. The decisions were issued on 16 November 2009.

3.2 These adjudications were commenced by tie in order to get clarity on an Infraco Notice of tie Change ('INTCs') raised by Infraco in relation to changes between BDDI and IFC at these two locations.

3.3 As mentioned above, one of the pricing assumptions in Schedule Part 4 (clause 3.4.1.1) is that:

"*The Design prepared by the SDS Provider will not (other than amendments arising from the normal development and completion of designs):*

1.1 in terms of design principle, shape, form and/or specification be amended from the drawings forming the Base Date Design Information (except in respect of Value Engineering identified in Appendices C or D to this Schedule Part 4)...."

3.4 That meant that the price assumes there would be no design changes of this nature between the Base Date Design Information (the design as it stood at 27 November 2007) and the Issued for Construction Drawings. As I've explained in the main body of my statement, the design was developing as Infraco were pricing the Contract. The only way that Infraco could provide a firm price, was to freeze the design at a particular date, and price the changes which might come thereafter.

3.5 Clause 3.5 of Schedule Part 4 provided that:

"*The Contract Price has been fixed on the basis of inter alia the Base Case Assumptions noted herein. If now or at any time the facts or circumstances differ in any way from the Base Case Assumptions (or any part of them) such Notified Departure will be deemed to be a Mandatory tie Change requiring a change to the Employer's Requirements and/or the Infraco Proposals or otherwise requiring the Infraco to take account of the Notified Departure in the Contract Price and/or programme in respect of which tie will be deemed to have issued a tie Notice of Change on the date that such Notified Departure is notified by either Party to the*

other. For the avoidance of doubt tie shall pay to the Infraco, to the extent not taken into account in the Estimate provided pursuant to Clause 80.24.1, any additional loss and expense incurred by the Infraco as a consequence of the delay between he notification of the Notified Departure and the actual date (not the deemed date) that tie issues a tie Change Order, such payment to be made by tie following evaluation, agreement or determination of such additional loss and expense pursuant to Clause 65 (Compensation Events) as if the delay were itself a Compensation Event."

3.6 In respect of both Carrick Knowe and Gogarburn, our position was that a number of design changes constituted Notified Departures, being changes between BDDI and IFC which were not simply normal development and completion of designs. At Carrick Knowe, tie accepted one element only as a Notified Departure (a change to the Galleries). tie did not accept that any of the changes at Gogarburn constituted Notified Departures.

3.7 These were very important adjudication for Infraco as this example underpinned the entire issue of the meaning of Schedule Part 4 (Pricing Assumptions). If we did not succeed on this adjudication, then we had a major issue in that the Contract Price would be totally unworkable for Infraco. By this I mean that we believed that Schedule Part 4 had carved out of the 'lump sum fixed price' (which tie continually referred to), those items where Infraco had not been able to provide a price, and where the risk remained with tie. In particular, this included the risk of the preceding utilities diversion (MUDFA) works not being completed, and changes to the design given that the design had not been finalised at the point at which the Infraco Contract was signed (May 2008). If Schedule Part 4 did not operate as we believed it did, and we were obliged to carry out work as per the amended design (for example), then we would lose a lot of money on this Contract.

3.8 Likewise and from tie's perspective, this was also a very important adjudication. If they lost on this issue, then they could not maintain that this was a lump sum fixed price contract.

3.9 tie's argument in this adjudication was as follows. They considered that all of the alleged design changes at Gogarburn, and all of those at Carrick Knowe (except those that related to the galleries) were not Notified Departures but rather were simply part of Infraco's obligation to complete the design of the Edinburgh Tram Network including, but not limited to, the achievement of full compliance with the Employer's Requirements for the deliverables to enable the Edinburgh Tram Network to be procured, constructed and commissioned. They maintained that all other items of work which flowed from the Infraco Notification of tie Change, came about through normal development and completion of the designs.

3.10 tie referred to Infraco's general obligation to carry out and complete the detailed design obligations set out in the Contract, and made much of the fact that the design of the Works had been novated to the Infraco. We did not dispute any of this and fully acknowledged our obligations to complete the design. Where we had a dispute was in relation to how we were to be paid for carrying out these works.

3.11 In addition, tie took the view that in order for an entitlement to payment to arise in respect of a Notified Departure, it was not enough for Infraco to simply identify a change between BDDI and IFC. Infraco would need to:

3.11.1 demonstrate and prove that the evolution and completion of the design to Issued for Construction stage exceeds normal development and completion of the designs.

3.11.2 demonstrate and prove that a Notified Departure has occurred; and

3.11.3 provide a sufficient, adequate and competent estimate.

3.12 This latter point references the issue which tie continually took with us in relation to the Estimates which we were to submit under Clause 80. They argued that if the Estimates were late/ inadequate/ lacking in detail, then they were not obliged to consider them and no entitlement to payment in respect of an alleged Notified Departure could arise.

3.13 Both we and tie had appointed expert engineers to review the changes between BDDI and IFC and provide a view on whether these changes were 'normal development and completion of design' or whether they amounted to Notified Departures, being a change of '*design principle, shape, form and/or specification'* outside of this concept of 'normal development and completion of design'.

3.14 In reaching his decision on both adjudications, the adjudicator looked at why Schedule Part 4 had been included in the Contract. He concluded that it wouldn't have been necessary if the Infraco obligation was simply to meet the Employer's Requirements. He stated at paragraph 7.17 of both decisions:

"*My finding is that Schedule Part 4 was included because the design was incomplete and therefore some unknowns existed that were beyond the capabilities of the Responding Party to include within their price. In other words how the BDDI was to be developed to IFC could be known in respect of certain factors but not all factors and the unknown or insufficiently developed elements were captured by the provision of the wording in Schedule Part 4.*"

3.15 He also had to give meaning to the design development obligation which the Infraco were to include within their price. In this regard he held that:

"My finding is that (the) position is best summed up as follows. The risk which ought properly to be transferred to the Referring Party is where development and completion of designs is outside of the normal course of development of the detail shown in the initial design i.e. the Base Date information, into the detail needed to construct the works as described all to meet the Employer's Requirements. I would go one step further and clarify that the Employer's Requirements have to be sufficiently well developed within the BDDI procedure as a baseline for proceeding in such a manner. I include this further step as it is clear to me that the Employer's Requirements have in terms of the price for the works been limited by the BDDI and the Schedule Part 4 agreement in respect of the agreed price. I find that to arrive at any other conclusion would, in my view, make Schedule Part 4 meaningless."

3.16 He then applied a series of steps to work out whether something was a Notified Departure or was normal design development. An example at Carrick Knowe was that the Specification (part of the Employer's Requirements) called for bat boxes. The performance specification stated that requirements for bats were to be taken into account. The BDDI drawings showed nothing at all in relation to bat boxes. He concluded therefore that there was nothing that Infraco could have priced in relation to the requirement to provide bat boxes and therefore that this was a Notified Departure (essentially, we couldn't 'develop' a design which did not exist in the first place).

3.17 He then went on to apply a test:

3.17.1 The first step was to establish whether any Pricing Assumption could be shown to have occurred. Here the issue was whether the design prepared by the SDS designer had or had not changed *'in terms of design principle, shape, form*....' etc.

3.17.2 Then the issue was whether the simple fact of a change in design principle, shape form etc, meant that a Notified Departure had automatically occurred. This was Infraco's position. tie instead maintained that Infraco could have to prove that that change was outside of the evolution and completion of the design to IFC in a way which was outside of normal development and

completion of designs. In response to this, the Adjudicator came up with a two stage test:

(a) A comparison between the BDDI and IFC drawings would reveal whether the facts and circumstances had changed. The changes would need to be changes in design principle, shape, form or specification to fall within Pricing Assumption 3.4.1.1.

(b) Secondly, the change had to be assessed to conclude whether they are categorised as design development in which case they would not constitute a Notified Departure.

3.17.3 He then applied a third test to make sure that the change did not arise from a breach of contract, an Infraco change or a change in law.

3.17.4 At paragraph 7.42 of his decision, the adjudicator quoted from the submissions made on behalf of Infraco in the adjudication and which seem to have influenced his decision. It is useful to quote those paragraphs:

"The Responding Party accepts that it has carried out a due diligence exercise on the design, it accepts that SDS was novated to it, it accepts that it was responsible for development of design and ultimately for delivering the Edinburgh Tram Network. There has been no omission by the Responding Party in not referring to these obligations in its analysis of pricing assumption 3.4.1. That is because Schedule Part 4 relates not to what the Responding Party is obliged to do under this contract but how it is to be paid for performing those obligations....the Responding Party fully accepts that the Employer's Requirements require anti pigeon measures. The Responding Party's obligation to provide anti pigeon measures is entirely distinct from how it is to be paid for carrying out this work. The same could be said about all of the change identified, the Responding Party accepts that it has an obligation to complete the design in all respects and to construct in accordance therewith, but this is a separate matter to how it is to be recompensed for doing so."

3.17.5 The adjudicator went on to firmly agree with this analysis and stated that "*I am sufficiently persuaded by the Responding Party's argument on this point to concur with them that there is a distinction between their obligation to design the works and the price that they are to be paid and I reach this conclusion as it is clear from clause 4.3 of the Infraco Contract that "nothing in this agreement shall prejudice the Infraco's right to claim additional relief or payment pursuant to Schedule Part 4 pricing.*""

3.18 In applying these tests to the changes from BDDI to IFC at both Carrick Knowe and Gogarburn, the adjudicator found substantially in Infraco's favour, albeit that in respect of Carrick Knowe, he held that three of the many changes were design development, and not a Notified Departure and so he awared his costs on a 75/25% basis with tie picking up the 75%.

3.19 On Carrick Knowe, the adjudicator did not deal with the issue of what constituted a relevant and acceptable Estimate for the purpose of establishing the value to be placed on a Notified Departure as he had not been asked to do so. However, on Gogarburn he had been asked by tie to decide that Infraco had no entitlement to additional loss and expense/ time as a consequence of or connected with the date of issue by Infraco of the INTC and or the date of delivery to tie of the Estimate. The adjudicator determined that these were matters associated with the administration of the change mechanism and he held that *'timeous administration of the change mechanism is not a condition precedent to establishing whether or not a Notified Departure has occurred and I therefore need say nothing further in relation to the submissions of the Referring Party on that point'*.

3.20 Although the main issue here was what constituted a Notified Departure, this finding was also very important to us due to the many and ongoing debates we were having with tie about late submission of Estimates etc. Mr Hunter's decision was effectively saying that the issue of whether something was or was not a Notified Departure, was separate from the issue of how it was administered. tie were found wholly liable for the Adjudicator's fees in the Gogarburn adjudication.

3.21 We were clearly very pleased with the results of these two adjudications which we considered established important points of principle which we could use in future discussions with tie in establishing what was and was not a Notified Departure where there had been a change in design between BDDI and IFC. Unfortunately and as I explain in the main body of my Witness Statement, tie didn't see it like this and we had further adjudications on very similar points where tie reverted to their original arguments (see below on Russell Road Retaining Wall and Section 7A Track Drainage).

4. RUSSELL ROAD RETAINING WALL TWO: DECISION OF ALAN E WILSON DATED 4 JANUARY 2010

4.1 This was another adjudication issued not long after Carrick Knowe and Gogarburn, which dealt with changes between BDDI and IFC in relation to a structure known as the Russell Road Retaining Wall Two.

4.2 Here, Infraco had identified that the four sections of the retaining wall had changed between BDDI and IFC. Two sections which had previously shown an L shaped gravity structure for the foundation, had changed to a cantilevered wall on piles. In addition, the two sections which had originally shown cantilevered wall on piles, now showed that the piles were of increased number, length and diameter than those shown on the BDDI drawings. Infraco had raised an INTC (no. 146) in respect of these changes.

4.3 In the period running up to the adjudication, tie had indicated that it accepted that a Notified Departure had occurred but wanted further details on who had instigated the design change. In the meantime however, tie issued a tie Change Order with reference to INTC 146 on the basis that the tie Change was urgent and therefore it instructed Infraco to proceed with the Works before the Estimate was agreed. tie was entitled to do this with reference to Clause 80.15 of the Infraco Contract.

4.4 By the time the issue got to adjudication, tie took the view that there was no Notified Departure and nothing was due to Infraco. The issues referred were:

4.4.1 Whether the change from the L shaped gravity structure to a cantilever wall on piles (the Foundations claim) amounted to a Notified Departure under clause 3.4.1.1 of Schedule Part 4;

4.4.2 whether the changes to the Foundations and to the number, size and length of the piles, being changes to the Piling, constitute Notified Departures and hence deemed Mandatory tie Changes

4.4.3 the value of each Change.

4.5 It was Infraco who referred this dispute to adjudication (and who were therefore the Referring Party).

4.6 Many of the same arguments as had been relied upon by tie in the Carrick Knowe and Gogarburn adjudications, were also relied upon by them in this adjudication (despite the fact that they appeared to have accepted that a Notified Departure may have occurred). tie therefore argued that Infraco was to deliver the whole of the works specified in the Employer's Requirements and the Infraco Proposals for a lump sum, fixed and firm price. tie also argued that he provisions for the possibility of change are

not intended to place the risk or consequences of any and all changes on tie. In particular, this applied to the normal development and completion of the design. tie again took the view that Infraco had to prove that the changes in dispute were not normal development and completion of design and also to show that different facts and circumstances apply to those changes, than existed prior to the date of the Contract. tie stated that the Price was not just for what was shown on the BDDI but also for the Employer's Requirements subject to Specified Exclusions and Pricing Assumptions. tie also maintained that the mere occurrence of the change did not result in an entitlement for Infraco as it must comply with the requirements of Clause 80. tie maintained that Infraco had not complied with Clause 80 and therefore that it had no entitlement on this basis either.

4.7 In contrast and as set out at paragraph 46 of the adjudicator's decision, Infraco's position was again to accept that it was responsible for delivering the Infraco Works in accordance with the Employer's Requirements and Infraco Proposals but as in the previous adjudications, that had to be distinguished from how much it was to be paid and any consequential time effects. This was not a normal design and construct contract where the contractor accepted all of the risk. The Pricing Assumptions were not unilateral statements in the nature of tender qualifications but were agreed terms of the Contract to provide a mechanism whereby Infraco was paid for matters that were uncertain – the alternative would have been a much higher Contract Price. In response to the tie argument about compliance with Clause 80, our position was that that clause concerned valuation, not whether or not a Notified Departure had occurred.

4.8 Another issue which arose here were arguments concerning Ground Investigation reports which although dated after BDDI, were available before the Infraco Contract was signed in May 2008. tie argued that this was knowledge which was within Infraco's possession and insofar as ground condition issues lead to the changes in the design of the foundations and piling, then it was something which was only the normal evolution of the design and should therefore have been included within the Contract Price. tie also referred to a due diligence report which reviewed the design at February 2008 and which was included with Infraco's Proposals (Schedule Part 30 of the contract). tie's argument here was that in considering what was normal development and completion of design, this information also had to be taken into account when considering whether a design change was a deviation from Pricing Assumption 3.4.1.

4.9 In deciding how to interpret these issues, the adjudicator reviewed various clauses of the Infraco Contract.

4.10 He noted that a Notified Departure was *'where now or at any time the facts and circumstances differ in any way from the Base Case Assumptions save to the extent caused by a breach of contract by the Infraco, an Infraco Change or a Change in law'.*

4.11 He also recited Clause 3.5 which I have referred to above, noting that what was important in terms of whether a Mandatory tie Change had occurred, was whether or not *'now or at any time the facts or circumstances differ in any way from the Base Case Assumptions (or any party of them) such Notified Departure will be deemed to be a Mandatory tie Change...'*

4.12 Base Case Assumption is defined as meaning the *'Base Date Design Information, the Base Tram Information, the Pricing Assumptions and the Specified Exclusions'*. As mentioned elsewhere, BDDI was the design information and drawings issued to Infraco up to 25 November 2007. Pricing Assumptions are as set out in clause 3.4 of Schedule Part 4. The Specified Exclusions are 'the items for which Infraco has made no allowance within the Construction Works Price as noted in section 3.3 below..'. The relevant part of the Specified Exclusions was 3.3 (c) which provided:

"*Ground conditions that require works that could not be reasonably foreseen by an experienced civil engineering contractor based on the ground conditions reports*

provided to BBS on 20 and 27 of November and 6 December 2007. Additionally the Contruction Works Price does not include for dealing with replacement of any materials below the earthworks outline or below ground obstructions/voids, soft material or any contaminated materials."

4.13 This latter Specified Exclusion became relevant in the adjudication because both in the due diligence report, and the GI reports themselves, there was information which showed risk in relation to ground conditions at Russell Road which tie maintained resulted in knowledge on the part of Infraco which had to be taken into account in considering the meaning of normal development and evolution of the design. In other words, even if there was a design change in design principle, shape, form and/or specification, that design change had to be viewed in light of the facts and circumstances known to Infraco which had to be taken into account when deciding whether a Notified Departure had occurred (because of the definition of Notified Departure).

4.14 Ultimately the adjudicator agreed with Infraco that the state of knowledge of Infraco was not relevant because the Infraco Contract made express provision for the information and knowledge upon which the Price and other obligations are based[1]. Clause 3.3(c) was not to be taken to have qualified Clause 3.4.1.1.

4.15 On the meaning of clause 3.4.1.1 the adjudicator sought to re-write this to include definitions of design principle, shape, form and outline specification. He also sought to rewrite the body of the clause which he claimed included a tautology.

4.16 Overall, applying his definition of how clause 3.4.1.1 was to be interpreted and applied to the changes at Russell Road Retaining Wall Two, the adjudicator determined that both the changes to the Foundations and the changes to the Piles were Notified Departures and that as such, they were Mandatory tie Changes. He carried out an extensive exercise to value these changes. He awarded Infraco a total of £1,461,857.21 out of the total being sought by Infraco of £1,840,407.73. tie's previous 'commercial proposal' had been only an offer to pay £292,237.22 (albeit this offer had been withdrawn by the time of adjudication) which shows that we were justified in taking this matter to adjudication. This was the adjudication where tie tried to misinform the media as to the true outcome of this adjudication. I have dealt with this in the main body of my Witness Statement.

4.17 Whilst this adjudication confirmed the principle of our entitlement to treat changes between BDDI and IFC as Notified Departures, it was also very important in terms of tie's arguments surrounding the inadequacy of our Estimates and our alleged failure to comply with Clause 80 of the Infraco Contract. We had submitted 'part Estimates' which dealt with the cost elements but not time. tie had previously accepted this but now argued that the onus was on Infraco to comply entirely with Clause 80, and that having failed to issue a competent Estimate, there could be no valid assessment of the 'alleged Notified Departure'. tie argued that to be a valid Estimate, we would have had to include for matters such as providing reasons for the design changes, showing compliance with design submission requirements, providing details of the factual and technical grounds for Change, showing that we had complied with the duty to mitigate, and also confirming that there was no Infraco Breach, Infraco Change or Change in Law.

4.18 In response to this, the adjudicator held that the Contract does not provide a quality standard for Estimates[2]. The only consequence of an Estimate falling below what was contractually or reasonably required would be that the other party can raise in defence the absence of information and that the entitlement could be reduced due to lack of evidence. A party could not reject an Estimate simply because it said it was badly executed. He pointed out that Clause 80.10 of the Infraco Contract provides that if parties cannot agree 'on the contents of the Estimate' it may be referred to the Dispute

[1] para 58 of the Russell Road decision
[2] para 118 of the Russell Road decision

Resolution Procedure. He also agreed that on the evidence, tie had agreed in any case to the submission of a *'part Estimate'*. He further concluded that there was no express condition precedent to an Estimate being valued.

5. TOWER PLACE BRIDGE: DECISION OF JOHN HUNTER DATED 18 MAY 2010

5.1 This was another adjudication which concerned changes between BDDI and IFC, this time at a structure known as Tower Place Bridge. Both Infraco and tie accepted that a Notified Departure occurred. There was a dispute about the value of this Mandatory tie Change, which actually related to the change in scope between the IFC drawings, and the BDDI drawings. What this dispute actually related to, was whether or not certain drawings were included in the BDDI definition, or not. tie claimed that they were not, and we claimed that they were.

5.2 The definition of BDDI in the Infraco Contract was not particularly helpful here. Clause 2.3 of Schedule Part 4 (Pricing) defines the BDDI as "the design information drawings issued to Infraco up to and including 25th November 2007 listed in Appendix H to this Schedule Part 4." However, Appendix H was simply a one page definition with one line on it which stated 'All of the Drawings available to Infraco up to and including 25th November 2007'. This was a circular definition which didn't help to determine whether the relevant drawings were or were not included.

5.3 tie claimed that lots of design information was made available to Infraco up to and including 27 November 2007 and that it was necessary to look at the whole 'factual matrix' to determine what was/ was not included in the BDDI. Information was uploaded to an electronic data room, and the information was also provided on compact disc. tie maintained that the drawings they wanted to rely on were included in the BDDI because they had been uploaded to the electronic data room.

5.4 In response, our position was that the data room was not accepted as being the primary means by which the parties had agreed that design information would be made available – it did not reflect what we understood to be the BDDI. We maintained that the share point (data room) system at the time of BDDI (27 November 2007) was very unreliable and hence, drawings had to be issued on CD and lists of documents prepared. The drawings that tie wanted to say were part of the BDDI, were not on any of our lists or CDs of available BDDI drawings.

5.5 On the facts and circumstances before him, the adjudicator could not find that the drawings which tie were relying on, constituted the BDDI. He agreed that the data room seemed to have had operational issues and multiple functions. There was no evidence of the drawings actually being included in the BDDI. The drawings which tie wanted to rely on could not be shown to be the correct base line from which to review the design change as required by clause 3.4.1.1 of Schedule Part 4.

5.6 Thereafter the remainder of the dispute concerned valuation of the changes from BDDI to IFC. There was mixed success for both parties on the valuation principles as a result of which the Adjudicator found parties liable to pay his fees on a 50/50 basis.

6. SECTION 7 A TRACK DRAINAGE: DECISION OF GORDON COUTTS QC DATED 24 MAY 2010

6.1 This is another adjudication which dealt with changes between BDDI and IFC and again concerned clause 3.4.1.1 of Schedule Part 4. The issue here was with the standard of drawings available for us to price at BDDI stage. There was only one outline drawing for the whole of the drainage in this section, which seemed to differ from an earlier preceding but more detailed drawing for part of the section.

6.2 The issues before the adjudicator were really twofold:

6.2.1 what was the correct BDDI drawing (and hence the base line) from which to review the changes between BDDI and IFC status; and

6.2.2 what did the word 'amend' mean where it appeared in clause 3.4.1.1 of Schedule Part 4. tie ran the argument (which they had also run in Russell Road Retaining Wall Two) that for there to be an amendment, there needed to be a design there in the first place. If there was no design at all for part of the drainage in this section, then it could not be said that there had been an 'amendment' to the design by the time that it appeared for the first time in the IFC drawings. In this latter situation, tie maintained that it was simply evolution and development of the design and was within the Construction Works Price in the Contract.

6.3 tie brought this adjudication but lost on both points of principle, with some issues of valuation remaining in which there was a measure of mixed success. Although it is not worth going into the details, on the first question, the adjudicator held that Infraco was right to rely on the later of the two available BDDI drawings, and where there was no detail for a particular section shown, was correct to extrapolate the information that it did have and to assume that the design of the drainage would be substantially the same along the whole length of the section, and to price on this basis.

6.4 In relation to the second argument, the pricing assumption assumes that the Design "*in terms of design principle, shape, form and/or specification (shall not be)* ***amended*** *form the drawings forming the Base Date Design Information...*" . The issue was whether an amendment could be something which was never there in the first place By reference to the Oxford English Dictionary, the adjudicator held determined that the word 'amend' is defined as *'a change or addition to a document'*. He also made reference to the Fifth Amendment to the Constitution of the United States, and noted that it could not be said that this was not an addition providing something which was not previously showing. On this basis, he preferred Infraco's interpretation that the change as shown on the updated IFC Section 7A drainage drawing, did fall to be assessed as an amendment with reference to this pricing Assumption.

6.5 The adjudicator awarded his fees 80/20 with tie picking up the larger element given Infraco's substantial success in the adjudication.

7. DELAYS RESULTING FROM INCOMPLETE MUDFA WORKS: DECISION OF ROBERT HOWIE QC DATED 26 JULY 2010

7.1 This was again, a very important adjudication decision for us. It dealt with the operation of the access and time provisions in the Contract and was an application, to a certain point in time, for an extension of time for the delays caused by the MUDFA Works. I have referred to this in summary in the main body of my Witness Statement.

7.2 There was a preliminary issue in this adjudication which the adjudicator had to deal with first of all. This was to do with whether the Estimate which we had submitted for this Notified Departure, was adequate or not. As I've explained in my Witness Statement, all Notified Departures were to be dealt with in accordance with Clause 80. tie kept arguing that our Estimates were not 'competent' because they didn't include information on mitigation (or what we would call, acceleration) measures which they believed were required. They had many other complaints about the format and content of the Estimate for this particular Notified Departure. I had to give evidence before Mr Howie at the hearing which took place on this Preliminary Issue, as did Steven Bell and Susan Clark of tie.

7.3 tie also argued that it would have been open to Infraco to pursue its entitlement to an extension of time in respect of the MUDFA delays as a Compensation Event under Clause 65.

7.4 On this preliminary point, the adjudicator held in our favour. He stated that where a Notified Departure had occurred, it could **only** be pursued under Clause 80. This was a very important principle for us to win on because it meant that, if Clause 80 applied, we believed we were not permitted to proceed with work which was the subject of a Notified Departure, where a tie Change Order had not been issued (or the matter had been referred to the dispute resolution procedure with reference to Clause 80.15). This was subsequently confirmed in the Murrayfield Underpass adjudication which I discuss below.

7.5 The adjudicator also held that failure to produce a fully detailed Estimate, did not bar our entitlement to seek an extension of time here. Again, this was a very important decision given the many debates we had had to this point in time with tie, about whether our Estimates were 'adequate'.

7.6 Following the determination of this preliminary issue, the Adjudicator had to go on to consider our overall entitlement to an extension of time. This was based on our Estimate of 6 August 2009, which showed the impact of the MUDFA Programme received in April 2009 (MUDFA Revision 8). Pricing Assumption 24 in Schedule Part 4 assumed that the MUDFA Works would be completed in accordance with the requirements of our Programme (that is, they would have been completed in advance of our works). To the extent that this was not the case (i.e. the MUDFA Works were still ongoing), then this was a Notified Departure and a Mandatory tie Change which had to be dealt with via Clause 80 of the Infraco Contract.

7.7 At this point in time, we were looking only for a decision on the amount of delay caused by the continued MUDFA Works up to March 2009. We knew that there were further MUDFA delays beyond this, and other delays caused by design changes (BDDI to IFC) but we were looking for a starting point, given that beyond the original extension of time (which was to do with the slippage in the SDS Design Programme at contract award), tie had refused to agree any updated Programme.

7.8 The extension of time we were looking for was as follows:

(a) Planned Sectional Completion Date for Section A: 187 Calendar Days (to 13 December 2010)

(b) Planned Sectional Completion Date for Section B: 185 Calendar Days (to 10 January 2010)

(c) Planned Sectional Completion Date for Section C: 251 Calendar Days (to 22 November 2011)

(d) Planned Sectional Completion Date for Section D: 257 Calendar Days (to 20 May 2012)

7.9 To put this into some context, by March 2009, we knew that the MUDFA delays to that point had caused a delay to completion of over 9 months, and this was only for part of the delay that we knew about.

7.10 Lots of issues came up in this adjudication over the course of a three day hearing before the adjudicator. Those issues concerned things such as, whether we were obliged to accelerate the works by adding additional resources where a delay had occurred (as tie maintained), or whether, in mitigating, we were entitled to stick with the resources which we had planned to use (that is, not bring in additional resources at our own cost in order to reduce overall delay). The adjudicator found in our favour on this point.

7.11 In addition, there are lots of ways of proving delay. We had chosen a prospective, and in some ways, theoretical approach to showing delay by impacting the Programme with the MUDFA Programme. In contrast, tie maintained that we should have carried

out a retrospective analysis, by looking at the actual delay caused by the MUDFA Works being delayed. The adjudicator found in our favour on this, based on a proper reading of clause 80 i.e. the Estimate required that we give our reasonable opinion about the impact on the Programme at the time the Notified Departure occurred (the Estimate to be issued within 18 days of the event arising, it could only be prospective).

7.12 When the adjudicator issued his decision, we were successful in obtaining an extension of time in respect of Section A, the depot and first tram delivered to site, of 154 days, which was the majority of what we were seeking. He did not give us an extension of time for the remaining sections because of the way in which the extension of time claim had been prepared: we had based this on 'Designated Working Areas' (with reference to clause 18.1.2 of the Contract) being the same thing as the intermediate sections in our Programme. The adjudicator unfortunately decided that this was not correct. We were entitled under Clause 18.1.2 to an exclusive licence to occupy the Designated Working Areas required to carry out our works but the adjudicator decided that this was not the same thing as the intermediate sections (which were too long) and that Designated Working Area should be interpreted as only *'denoting so much of the land, worksite or public road as the JV requires to occupy at a given moment in order to carry out that part of the Infraco Works which, according to the Programme, it ought then to be executing there.'*

7.13 In spite of not getting a full extension of time, we had won some important points of principle in this adjudication, not least:

7.13.1 that Notified Departures had to be dealt with via Clause 80, not Clause 65;

7.13.2 that mitigating delay did not require Infraco to spend its own money by increasing resources beyond those provided for;

7.13.3 that tie still had to deal with our applications for payment/ time even if it believed the Estimate was not as complete or full as it should have been; and

7.13.4 that it was correct that extensions of time be assessed on a prospective and not a retrospective basis.

7.14 As there was mixed success for both parties, the adjudicator ordered that his fees be paid on a 50/50 basis between us and tie.

8. MURRAYFIELD UNDERPASS (CLAUSE 80.13): DECISION OF LORD DERVAIRD DATED 7 AUGUST 2010

8.1 I have mentioned this adjudication decision at various points in my main Witness Statement. It was the most important to Infraco from the point of view that it dealt with one of the major points of contention between tie and Infraco: whether we were entitled to stop work when the value of a Notified Departure had not been agreed and tie had not issued a tie Change Order.

8.2 We maintained throughout that the Infraco Contract did **not permit** us to proceed with Work which was the subject matter of a Notified Departure until we had a tie Change Order. tie maintained that this made no 'commercial sense' and with reference to various parts of the Infraco Contract, including Clause 34.1, tie argued that we were obliged to comply with any instruction issue by tie or tie's Representative, and that, by refusing to comply with their instructions, we were a 'delinquent contractor'.

8.3 This adjudication related to a structure known as the Murrayfield Underpass, a new structure adjacent to the railway line at Murrayfield. Again this was a BDDI to IFC change. We intimated that this was a change by INTC in September 2008. Our Estimate was submitted in September 2009 and sought a total of £134,396.71. tie accepted that this was a Notified Departure and had accepted the value of a small

portion of the Estimate (the security gates). The dispute did not concern the remaining valuation of the change, but concerned a letter which we received from tie on 19 March 2010, which stated:

"*You are instructed to commence, carry out and complete the following works with due expedition. In the event that any item of the said works is, becomes or is alleged to be the subject of a tie Notice of Change, and Infraco Notice of tie Change, a tie Change Order or a Mandatory tie Change Order, at any time, this instruction shall be deemed to have been given and shall operate for such works pursuant to Clause 80.13.*

We remind you that pursuant to Clause 108, this Agreement constitutes an entire Agreement and in particular refer you to the terms of Clause 34.1 regarding your compliance with instructions from tie's Representative."

8.4 The issue was whether we were obliged to comply with tie's instruction as contained in this letter.

8.5 In terms of Clause 34.1, we were obliged to comply with any instruction from tie or tie's Representative 'provided that such instructions are given in accordance with the terms of this Agreement and will not cause Infraco to be in breach of this Agreement..."

8.6 Having received this instruction from tie, our position was to rely upon Clause 80.13 which states the following:

"*Subject to Clause 80.15, as soon as reasonably practicable after the contents of an Estimate have been agreed tie may:*

80.13.1 issue a tie Change Order to Infraco, or

80.13.2 except where the Estimate relates to a Mandatory tie Change, withdraw the tie Notice of Change, in which case Infraco shall be entitled to claim the reasonable additional costs incurred by the Infraco in complying with this Clause 80 in relation to that tie Notice of Change including the cost of any abortive works where tie has instructed Infraco to commence works prior to the agreement of the Estimate.

Subject to Clause 80.15 for the avoidance of doubt the ***Infraco shall not commence work in respect of a tie Change Order until instructed through receipt of a tie Change Order*** *unless otherwise directed by tie*".

8.7 We considered that the important words were the ones in bold above. We could not commence the work which was the subject of a Notified Departure, and hence subject to the Clause 80 tie Change regime, until we had agreement on the relevant Estimate by the issue of a tie Change Order.

8.8 If it didn't agree with the value we had placed on the tie Change Order there was an answer for tie - it could refer the matter to the dispute resolution procedure and instruct us to proceed meantime under Clause 80.15. If we proceeded under clause 80.15, we were entitled to recover our demonstrable costs under Clause 80.16. We didn't think that Clause 34.1 operated as tie intended - they could only instruct us to do something which was in accordance with the Agreement and which wouldn't cause us to be in breach of the Agreement. If we proceeded with the Work before we had a tie Change Order, we would be in breach of Clause 80.13.

8.9 tie's position was that they had the power to instruct under Clause 34.1 and that the last few words of Clause 80.13 made it clear that tie could either issue a tie Change Order, or it could 'otherwise direct' Infraco to proceed. tie claimed that by its letter of 19 March 2010, it was 'otherwise direct(ing)'.

8.10 Lord Dervaird found in favour of Infraco, his reasons being set out at paragraph 21 of his Decision and beyond. He did not agree that the words 'unless otherwise directed'

meant that tie could bypass the first part of Clause 80.13. tie's only alternative to get Infraco to carry out the work was Clause 80.15, that is, refer the disputed Estimate to the DRP provisions and then issue an instruction pursuant to that Clause.

8.11 He also held that Clause 80.13 and the Clause 80.15/80.16 regime, were there to protect the interests of both Parties. Infraco did not have to proceed where there was no agreement as to cost – it only had to do so if the Estimate was agreed, or if it had the protection of Clauses 80.15/16 in that its demonstrable costs would be recoverable. Likewise tie get the protection of Infraco not proceeding with work and claiming in respect of that work, where the value of the change (Notified Departure) has not been agreed. However, if the matter is urgent, tie can utilise Clause 80.15 and 80.16 at which point it becomes liable for Infraco's demonstrable costs. Clause 34.1 and 34.3 did not offer a relief for tie here either – the valuation of tie Changes has to be dealt with in accordance with Clause 80, including Clause 80.13.

8.12 We were therefore entirely successful in this Adjudication and tie had to pick up all of the adjudicator's fees. Even despite this, and as I explain in my witness statement, tie refused to accept this decision and looked for further ways to get round this issue. This was disappointing. If tie had accepted what this, and all the other adjudication decisions determined, we could potentially have found solutions much earlier than we did.

9. DEPOT ACCESS BRIDGE: DECISION OF BRYAN PORTER DATED 22 SEPTEMBER 2010

9.1 This was a dispute which we referred to adjudication. It was about the valuation of a Notified Departure at one of the trams structures - the depot access bridge (S32). It concerned changes between BDDI and IFC and was accepted by tie as a Notified Departure. We believed that we were entitled to an additional £1.2 million for the change, and an additional £550,000 in respect of the cost of the temporary works associated with the Change. In contrast, tie valued the Notified Departure at minus £4.8 million and minus £12,000 in respect of the temporary works. This meant that there was a difference between us of slightly over £6m in respect of the valuation of this change.

9.2 Part of the reason for the huge difference between us and tie was to do with the fact that tie said that the valuation of a change to an adjacent structure - the A8 retaining wall – also had to be taken into account when valuing the depot access bridge. We raised a jurisdictional argument that it was not possible for the Adjudicator to consider the Retaining Wall argument as it was not part of the dispute referred to him. Following a legal argument on what the adjudicator had to consider, tie were found to be correct on this point.

9.3 However, when he went on to consider the valuation of the Notified Departure, the adjudicator (Bryan Porter) found that he did not agree with tie's argument that the Retaining Wall could not be separated from the Depot access bridge as they were one continuous feature. He found that they could be separated and that all he was being asked to do was determine the value of the portion which related to the access bridge.

9.4 There were a number of other measurement/ valuation disputes between us and tie on various aspects of the change. On all of these, we were largely successful, the adjudicator determining that the value of Notified Departure was approximately £800,000 and the value of the temporary works was £433,000. As a result, we were found liable for the fees in connection with the jurisdictional challenge which I refer to above (which were minimal) and tie were found liable for all of his fees on the main body of this dispute.

9.5 This was another example of us having to take something to adjudication which, had tie been behaving sensibly, should have been capable of being resolved by our respective quantity surveyors.

10. LANDFILL TAX: DECISION OF LORD DERVAIRD DATED 28 NOVEMBER 2010

10.1 This adjudication was concerned with payment by the Infraco of Landfill Tax for the disposal to landfill of contaminated material removed from the Infraco Works.

10.2 The Infraco required to deal with contaminated material in the course of the Infraco Works. That involved disposal of contaminated material to landfill, at which point the Infraco required to pay the landfill site operator Landfill Tax corresponding to the quantity of contaminated material disposed of.

10.3 The disposal to landfill of the contaminated material represented a Notified Departure under the Infraco Contract as Specified Exclusion 3.3c (set out earlier in my statement) provided that the Construction Works Price did not include for dealing with replacement of any materials below the earthworks outline or below ground obstructions/voids, soft material or any contaminated materials. The Base Case Assumptions also included Pricing Assumption 3.4.11 which included that *"The Infraco shall not encounter any below ground obstructions or voids, soft material or any contamination..."* As such, the Infraco was entitled to recover from tie the payments made in respect of Landfill Tax.

10.4 Change Estimates for INTC's 506 and 551 which related to the disposal of contaminated excavation arisings at Russell Road Retaining Wall 4 were the first INTC's to be submitted which included costs for the payment of Landfill Tax. tie responded to these INTC's denying liability for payment of Landfill Tax associated with the disposal of the arisings.

10.5 Subsequent INTC's were issued by the Infraco which included Estimates for repayment of Landfill Tax for contaminated material. tie refused to agree the Estimates or pay any monies in relation to Landfill Tax.

10.6 tie's position was that the Infraco was not entitled to be reimbursed for the Landfill Tax paid on the disposal of contaminated materials because the Infraco failed to apply for an exemption to payment of Landfill Tax.

10.7 The Infraco disagreed with tie's position. The Infraco was not obliged to apply for an exemption, and even if it had, it would not have received one given that the contaminated materials disposed of were not eligible for an exemption - exemptions to payment of Landfill Tax were limited to waste resulting from reclamation of contaminated land falling within certain categories. Waste arising from construction activities did not qualify, and so the Infraco Works would not have qualified.

10.8 Following tie's refusal to agree Estimates or make any payments in respect of Landfill Tax, the Infraco raised adjudication proceedings asking for certain declarators in relation to its entitlement to payment for Landfill Tax, the main ones being that (i) it had not been established that the Infraco Works would have qualified for an exemption to payment of Landfill Tax; (ii) the Infraco was not obliged to apply for an exemption; and (iii) the Infraco was entitled to be reimbursed for Landfill Tax paid on the disposal of contaminated materials.

10.9 The Adjudicator, Lord Dervaird, found wholly in favour of the Infraco confirming that the Infraco Works would not have qualified for an exemption to payment of Landfill Tax, but even if it had, the Infraco was not obliged to apply for such an exemption, and that the Infraco was entitled to be reimbursed for Landfill Tax paid on the disposal of contaminated materials.

10.10 The Adjudicator found tie wholly liable for payment of his fees and expenses.

11. **APPROVAL OF SUB-CONTRACT TERMS: DECISION OF ROBERT HOWIE DATED 13 DECEMBER 2010**

11.1 This was an adjudication which was concerned with the subcontracts which Infraco was to enter into. As will be clear, each of the three parties to the Infraco had very different skill sets and would be carrying out different elements of the work required to complete the Project.

11.2 As BCUK, we had prepared a number of subcontracts with subcontractors who we wanted to appoint for various different parts of the works. In accordance with Clause 28 of the Infraco Contract, we required to get tie's approval to enter into subcontracts and then also to get their approval to the form of subcontract.

11.3 Paragraph 28.4 provided as follows:

*"The Infraco shall obtain **tie's** approval to the form of sub-contract for any work which is to be sub-contracted to each Key Sub-Contractor in advance of such sub-contract's execution. **tie** shall notify the Infraco of its approval within 10 Business Days of a request for such approval by the Infraco which approval may only be withheld by **tie** acting reasonably if:*

*28.4.1 the sub-contract does **not in substance reflect the Infraco and the relevant Key Sub-Contractor as parties to such sub-contract**, the provisions listed in Schedule Part 38 (Approved Suppliers and Sub-Contractors and Trades) Part II in so far as they relate to the work that is to be sub-contracted; or*

28.4.2 the terms of the sub-contract will result in Infraco being unable to perform its obligations under this Agreement."

11.4 The dispute which we eventually referred to adjudication was whether tie was correct to hold that all three members of the Infraco (BCUK, Siemens and CAF) required to be parties to each and every subcontract that any one contractor entered into. We believed it would cause an undue administrative burden if this were to happen: it would take a long time for each of the other parties to agree the terms of one of the subcontracts that BCUK for example were intending to enter into. We considered tie's position to be unreasonable.

11.5 Ultimately, this was just another example of tie being unreasonable but it was beginning to impact upon our ability to enter into subcontracts and was therefore holding up issues. We referred the matter to adjudication and Robert Howie as adjudicator, issued his decision on 15 December 2010. He found against Infraco holding that the correct interpretation of clause 28.4.1 (and in particular the words highlighted in bold above), was that all three parties had to enter into each and every subcontract.

11.6 Ultimately when we reached agreement at mediation in March 2011, and as reflected in the terms of MoV 4 which was negotiated thereafter, it was acknowledged that this provision was actually unworkable. By clause [15.1] of MoV 4 it was acknowledged that there was no requirement for each Infraco Member to be a party to any sub-contract with any Key Sub-Contractor.

12. **PAYMENT OF PRELIMINARIES**

12.1 In around March 2010, tie started to deduct sums of money from our interim payment applications which we believed were due in respect of our Preliminaries costs. Preliminaries are sums included in the Construction Works Price in respect of costs which we incurred due to the passage of time. So for example, this would include the cost of maintaining the site offices at Edinburgh Park, and other consumables such as telephones, site vehicles etc. The Interim Certificates affected by tie's deductions were numbers 29, 30, 31, 32 and 33 from March to July 2010.

12.2 This was at around the same time as tie were trying to make our lives difficult on so many fronts : they were serving Remediable Termination Notices, many tens of letters per week (if not into the hundreds), performing audits, denying us permits to work and was at the same time as many adjudications were under way. It seemed part of the campaign to make life as difficult as possible.

12.3 tie's argument was entirely spurious. Schedule Part 5 of the Infraco Contract set out the sums of money we were to be paid on a monthly basis. There were sums due in respect of Preliminaries which were set out in the Milestone Payment Schedule. These were sums of money spread over the 42 month period of the Project. We believed that these sums became payable on a monthly basis, simply due to the passage of time.

12.4 Having paid these sums monthly until February 2010, tie then decided that the Preliminaries were Construction Milestones or Critical Milestones which required the issue of the appropriate Certificate, before the sum became due for payment. We disagreed fundamentally with this, and believed that in accordance with the relevant clauses of the Infraco Contract (Clauses 66 and 67), Preliminaries were due for payment on a monthly basis being "other costs or expenses which have been expressly approved by tie and/or to which the Infraco is entitled in accordance with this Agreement...." (Clause 66.5).

12.5 We referred this issue to adjudication in November 2010. Lord Dervaird found in Infraco's favour on this point, determining at paragraph 16 of his Decision that:

"In these circumstances it appears clear that Preliminaries, not being identified other than by reference to the passage of time, are simply a time based cost. Schedule Part 5 refers to them solely in respect of the passage of each of the months specified. It follows that the Preliminaries fall due for Payment under Clause 66 and 67 of the Infraco Contract as other costs or expenses to which the Infraco is entitled in accordance with this Agreement".

12.6 Again, we had won on a point of principle and a point of contractual interpretation. The adjudicator however held that we had not submitted enough supporting information on the valuation of the preliminaries in each of the affected months and so we were liable for 25% of his fees with tie liable for the remaining 75%.

12.7 This decision was actually issued during the mediation process with tie from 8 to 11 March 2011.