

**Legally Privileged and FOISA Exempt**

Extension of Time Commercial Report

TIE, Edinburgh Tram Network,

High Level Review

May 2011

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## 1.0 Introduction

Cyril Sweett have been requested by Tie Ltd to carry out a high level estimate of the range of costs to which Tie Ltd may be liable for in respect to the potential Extension of Time which Infracore may receive for works to date. Cyril Sweett has been specifically directed to the documents noted below which were provided by Tie Ltd:-

- Acutus Extension of Time Risk Assessment email to Tie Ltd dated 4 May 2011
- Tie Ltd letter to Bilfinger Berger – Siemens – CAF Consortium dated 5 November 2009
- Agreed breakdown of Extension of Time amount for Extension of Time Claim Nr 1
- Schedule Part 4 - Appendix F Schedule of Rates

This is a very limited exercise at this stage due to the time constraints and limited extent of information available to Cyril Sweett. It should be noted that Cyril Sweett have been instructed to carry out an assessment of cost based upon the principles identified within the Tie Ltd letter of 5 November 2009 which are unlike that which Cyril Sweett would have anticipated under a standard form of contract.

Cyril Sweett would clarify that it is not a requirement of this report to take cognisance of the legal, time allocation or technical position of any disputes but instead to carry out a high level commercial estimate of range of costs for the potential extension of time liability following review of INTC Nr 1 on behalf of Tie Ltd.

## 2.0 Acutus Extension of Time Risk Assessment

2.1 The information provided by Acutus on the potential Extension of Time liability for Tie Ltd was based upon their judgement and general project awareness and not upon a completed or fully detailed analysis. The summary of this work is as follows:

Section	Infraco claim for Sectional Completion	Lower Risk Assessment (Acutus)	Upper Risk Assessment (Acutus)	Comment by Acutus
A Depot Works	526 days	340 days	646 days	Upper risk is that sought by Infraco plus 120 days.
B Link Track	588 days	340 days	708 days	Upper risk is that sought by Infraco plus 120 days.
C Off and On Street Works	566 days	340 days	686 days	Upper risk is that sought by Infraco plus 120 days.
D Commissioning	615 days	340 days	686 days	Section D works are complete 6 months after Section C and Acutus have used the same Lower and Upper values.

2.2 Cyril Sweett have discussed the above summary sheet with Tie Ltd and would make the following comments/assumptions:-

- The days identified by Acutus are calendar days and not working days
- The sections of work relate to the sections within the Schedule Part 1 Definitions
- It is Cyril Sweett's understanding that these timescales are in addition to any other Extensions of Time already agreed and awarded eg INTC Nr 1
- In general the lower risk assessment provided by Acutus is that 48.6 weeks (340 days) will be awarded
- The upper level risk assessment provided by Acutus is that between 92.2 weeks (646 days) and 101 weeks (708 days) will be awarded dependant on the section and we have applied these as appropriate
- Cyril Sweett have assumed that the periods of time relating to Acutus' lower and upper level risk assessment fully relate to contract clauses to which costs will be paid by Tie Ltd
- The only programme information Cyril Sweett have available is that which is provided within the INTC Nr1 Breakdown.

### 3.0 Principal for Assessment of Cost Liability

3.1 For the assessment of the range of cost liability Tie Ltd have requested that Cyril Sweett adopt the principles set out in their letter of 5 November 2009 and it is noted within the letter how further extensions of time should be evaluated. We have noted that this letter is not a contractual document and Cyril Sweett cannot confirm if this principle has been agreed to by Infracore.

3.2 In general the proposals within the letter of 5 November 2009 have noted the following with respect to the agreement of future Extensions of Time:-

- Bilfinger Berger Preliminaries works to be valued in accordance with the Spreadsheet 2 in Appendix F of the Schedule Part 4. Cyril Sweett make the assumption that the periods of time set out by Acutus fully relate to method related change and that Appendix F rates can be applied as per the Extension of Time spreadsheet provided for INTC Nr 1. It is noted that although the Contract refers to Sections A, B, C and D the Appendix F of the Schedule Part 4 refers to Section A and Section B; Tie Ltd have confirmed that Section A relates to the Off Street Works from Haymarket to Edinburgh Airport (Sections 2 – 7) and Section B relates to the On Street Works from Haymarket to Newhaven (Sections 1A, 1B, 1C and 1D).
- Bilfinger Berger Sub-contractor Preliminaries to be valued in accordance with the Spreadsheet 2 in Appendix F of the Schedule Part 4 Method Related Charges section. Tie Ltd have also provided a list of dates for each of the sub-contract works commencing to allow an approximate estimate of delay periods to be calculated. The sections referred to in Appendix F to the Schedule Part 4 do not fully correlate to that actually carried out so we have used information provided by Tie to carry out an estimate of cost.
- Escalation for Bilfinger Berger to be estimated as set out in the spreadsheet however it is noted however that there is no breakdown for the escalation breakdown amount of £21,614.36 and Cyril Sweett therefore assume that this amount was a commercial settlement. It is noted that the escalation amount is circa 0.97% of the Bilfinger Berger amounts.
- Siemens elements to be calculated on an actual cost basis using a cause and effect methodology. This is not possible for Cyril Sweett to do with the limited information and timescales and we have therefore taken average weekly costs from the INTC Nr 1 estimate and applied this to the timescales referred to earlier.

3.3 In reviewing the process we have made the following comments to Tie Ltd on this basis for evaluation :-

- Cyril Sweett's understanding of the Preliminaries rates set out in Appendix F Schedule Part 4 is that they are inclusive of Escalation (inflation). Within the overall Preliminaries £17,828,910 of Escalation costs are incorporated which is circa 33% of the overall Preliminaries total. It is our impression that due to the sums involved this escalation amount relates to the inflation for Bilfinger Berger's project works over the 169 weeks, but we have no information to confirm this. Cyril Sweett has assumed that this has been spread evenly throughout the rates however we cannot confirm this. Cyril Sweett would expect that if the rates are directly taken from Appendix F then there is only limited scope for further claims for escalation however this is not a position that we can provide certainty upon at this stage and have not taken this position in the upper level risk assessment.

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- Cyril Sweett has noted that overheads and profit amounts are included within the Preliminaries rates set out in Appendix F Schedule Part 4. It is not normal to include payment for overheads on Extensions of Time claims however we have not been able to review the contract to determine if this is the case for this project. In addition we did note that the circumstance for the Contractor on this project may make overheads an allowable head of claim.
  - The Insurances and Contractor's Bond have been included as a time related element although these are normally fixed preliminaries costs dependant on value of the project.
  - In the EOT Nr 1 assessment the Consortium offices were not included however this was an anomaly for that timescale and have been included within Cyril Sweett's assessment.
  - The basis for evaluation of Siemens Preliminaries is inconsistent with the Bilfinger Berger process and the contract is silent as to whether the Preliminaries rates included within Appendix F Schedule Part 4 are inclusive of Siemens Preliminaries.
  - There have been Preliminaries amounts added at 17% to Change Requests for Work carried out to date and this may lead to a potential duplication of cost. Cyril Sweett has reviewed the Change Request amounts and has made deductions for the lower risk level for this potential duplication. This has been based upon the £13,454,808 amount noted as being incorporated in Certified Amounts to date.
- 3.4 Loss of Profit has not been mentioned within the Tie Ltd letter of 5 November 2009 although we would expect this to be a potential head of claim from Infraco. With the information available to Cyril Sweett it has not been possible to provide a high level estimate for this item and this is therefore excluded from this report.
- 3.5 Disruption may also be a potential head of claim from Infraco. Cyril Sweett has no information on this aspect of the Extension of Time claim and has therefore excluded this from our estimates.

## 4.0 Extension of Time Costs Estimate – Lower Risk Assessment

4.1 Cyril Sweett have estimated the lower risk level of Extension of Time costs to be £16,709,000 as noted below. A more detailed breakdown of the Bilfinger Berger and Siemens amounts have been provided in Appendix D with a comment on the specific calculations where necessary.

<b>Element</b>	<b>Amount</b>
Bilfinger Berger	£9,850,000
Escalation for Bilfinger Berger	£97,000
Siemens	£8,717,000
Deduct	
Duplication of Preliminaries in Change Requests	(£1,955,000)
<b>Total</b>	<b>£16,709,000</b>

4.2 In general the Bilfinger Berger preliminaries have been estimated using the 49 weeks (340 days) noted by Acutus and referred to in 2.1 above. This has been modified for the Method Related Charges section where the commencement date of the works on site has been taken cognisance of. This approach is likely to lead to loss of profit claims from Infracore and we have therefore included an item for this in our calculations.

4.3 The lower level risk assessment assumes that we can apply the percentage of the Bilfinger Berger amount as calculated from the INTC Nr 1 spreadsheet. The amount of £96,530 is 0.98% of the £9,850,000 amount.

4.4 It should be noted that the calculation of the Siemens Loss and Expense is very crude at this stage due to the limited scope of this report and information available to Cyril Sweett. To calculate the Loss and Expense Cyril Sweett have taken the overall costs for the INTC Nr 1 amount and added amounts for the Siemens Traffic Management System and Siemens Maintenance Services and estimated a cost per week. This cost per week is then multiplied by the 49 weeks provided by Acutus.

## 5.0 Extension of Time Costs Estimate – Upper Risk Assessment

- 5.1 Cyril Sweett have estimated the upper risk level of Extension of Time costs to be £56,044,000 as noted below. A more detailed breakdown of the Bilfinger Berger and Siemens amounts have been provided in Appendix E with a comment on the specific calculations where necessary.

Element	Amount
Bilfinger Berger	£31,711,000
Escalation for Bilfinger Berger	£6,899,000
Siemens	£17,434,000
<b>Total</b>	<b>£56,044,000</b>

- 5.2 In general the Bilfinger Berger preliminaries have been estimated using the 98 weeks (686 days) noted by Acutus and referred to in 2.1 above. This has not been modified for the Method Related Charges section as an upper level risk should consider the worst case scenario with respect to the principles of INTC Nr 1 being fully applied.
- 5.3 In the upper risk assessment scenario it is assumed that the principle that escalation for the works is not included within the Preliminaries rates and that an inflationary amount should be applied to Bilfinger Berger's works cost of £82,125,313 for a 98 week period from the 2<sup>nd</sup> Quarter 2008. Cyril Sweett have analysed a variety of sources for information on civil engineering works inflation and have noted that there are two approaches to take as the information we have to review is silent on this aspect of the project:
- (i) Tender price indices
  - (ii) Resource cost indices

The BIS Indices have shown that tender prices have reduced by circa 4% from a factor of 1.02 to 0.98, between the 2<sup>nd</sup> Quarter 2008 and 2<sup>nd</sup> Quarter 2010 (reference BIS Tender Price Index – Location Scotland). The BIS Resource Cost Index for Road Construction has however identified that there has been a 8.4% increase in materials costs from a factor of 202 to 219, between the same periods (reference BIS Resource Cost Index of Road Construction). These are included within Appendix F.

Cyril Sweett have therefore taken the upper risk assessment value of 8.4% and applied this to the Bilfinger Berger works cost of £82,125,313 to estimate the total for inflation of £6,898,526 which we have rounded to £6,899,000.

- 5.4 It should be noted that the calculation of the Siemens Loss and Expense is very crude at this stage due to the limited scope of this report and information available to Cyril Sweett. To calculate the Loss and Expense Cyril Sweett have taken the overall costs for the INTC Nr 1 amount and added amounts for the Siemens Maintenance Services based upon the Tie Ltd information for EOT Nr 3 and estimated a cost per week. Tie Ltd has confirmed that they would not expect additional costs for Siemens Traffic Solutions. The overall Siemens cost per week has been multiplied by the 98 weeks provided by Acutus.
- 5.5 In the upper risk assessment Cyril Sweett have assumed that the potential deduction for Preliminaries amounts incorporated within Change Requests cannot be deducted from the amounts calculated through this assessment.



## Appendix A

Acutus Extension of Time Risk Assessment dated 4 May 2011

## Appendix B

Tie Ltd Letter Dated 5 November 2009

## Appendix C

### Appendix F of Schedule Part 4 – Preliminaries

## Appendix D

### Lower Risk Assessment Breakdown

## Appendix E

### Upper Risk Assessment Breakdown

## Appendix F

### BIS Indices