

Appendix C - MUDFA Works - tie Limited and Stakeholder Imposed Programme (Rev. 06 Final); Programme Notes and Assumptions

ID	Notes / Assumptions ; 30 th November 2007
1	All current SDS preliminary drawings show single line utility diversions; no allowances have been made for multiple utility trenching ducts, etc and only limited technical definition and detail are available to support detailed technical planning development at this stage.
2	SDS Provider detailed IFC design development may produce an increase or decrease to the measured diversions over and above the Preliminary and C4 Approval Pending drawings; consequently there may be a corresponding increase or decrease in the current scope of work anticipated at this stage.
3	<p>Of the assessed 918 IFC Utility design drawings (including Section 3 requirement), including composite drawings required for the MUDFA Works 157 No. have been provided for completed and current Worksite and 17 No. have been provided for review purposes. These design details, 174 No. in total, have been adopted in preparation of the Revision 06 Programme.</p> <p>The balance have been assessed on the current and best available information, i.e. the first generation preliminary designs issued by tie Limited to AMIS MUDFA in late October 2006; these drawings were predominately dated August 2006.</p>
4	<p>In recognition of items 1 and 3 above the procurement risks and dependencies, to support Construction Services are not reflected, in full, on the Programme, which is based on the current and best available information.</p> <p>The procurement and/or committed cost of all material, logistic support and the like in advance of a Work Order Confirmation Notice from tie Limited shall be at the commercial risk of tie Limited, under an agreed instruction, with due diligence being exercised by AMIS MUDFA.</p>
5	<p>AMIS MUDFA has assumed that the tie Limited / Statutory Utility Company Agreements support the Programme, i.e. through the provision of appropriate support, resources, approvals, technical input and the like, according to the demarcation schedule, as formalised under letter Ref: AMIS/tie/letter/KAG/Projects/610 dated 20th November 2007.</p>
6	AMIS MUDFA has assumed that tie Limited secure the necessary Statutory Utility Company C4 approvals of SDS Provider detailed utility designs, in accordance with the dates set out in the Programme.
7	<p>No allowance or provision has been made for any other Non-MUDFA works or services being undertaken by Statutory Utility Companies or any other third party during the currency of each Worksite.</p> <p>Other parties, Statutory Utility Companies may, with the agreement and approval of AMIS MUDFA, work in each Worksite during the currency of the MUDFA Works, with all such Works, cost and schedule adherence, treated as a Change under Clause 46.</p>

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8	<p>In recognition of items 1 and 3 above the construction durations have been derived from the following quantities, as defined in tie Limited email of 15th October 2006, timed at 1237hrs;</p> <table border="1" data-bbox="353 337 1413 984"> <thead> <tr> <th data-bbox="353 337 1167 408">MUDFA Utilities</th> <th data-bbox="1167 337 1413 408">Single Utility Quantities (LM)</th> </tr> </thead> <tbody> <tr> <td data-bbox="353 408 1167 450">Power Systems</td> <td data-bbox="1167 408 1413 450">8,587</td> </tr> <tr> <td data-bbox="353 450 1167 492">Gas - Mains & Branch</td> <td data-bbox="1167 450 1413 492">4,416</td> </tr> <tr> <td data-bbox="353 492 1167 534">Water - Clean</td> <td data-bbox="1167 492 1413 534">6,971</td> </tr> <tr> <td data-bbox="353 534 1167 576">Water - Foul & Gravity Piping</td> <td data-bbox="1167 534 1413 576">2,192</td> </tr> <tr> <td data-bbox="353 576 1167 618">Telecoms - British Telecom (BT)</td> <td data-bbox="1167 576 1413 618">6,063</td> </tr> <tr> <td data-bbox="353 618 1167 660">Telecoms - Tele West (TW)</td> <td data-bbox="1167 618 1413 660">1,166</td> </tr> <tr> <td data-bbox="353 660 1167 702">Telecoms - Cable & Wireless (C&W)</td> <td data-bbox="1167 660 1413 702">2,351</td> </tr> <tr> <td data-bbox="353 702 1167 744">Telecoms - THUS</td> <td data-bbox="1167 702 1413 744">1,171</td> </tr> <tr> <td data-bbox="353 744 1167 786">Telecoms - EasyNet (EN)</td> <td data-bbox="1167 744 1413 786">173</td> </tr> <tr> <td data-bbox="353 786 1167 828">Telecoms - NTL</td> <td data-bbox="1167 786 1413 828">0</td> </tr> <tr> <td data-bbox="353 828 1167 870">Street Lighting</td> <td data-bbox="1167 828 1413 870">540</td> </tr> <tr> <td data-bbox="353 870 1167 912">Surface Water Systems</td> <td data-bbox="1167 870 1413 912">192</td> </tr> <tr> <td data-bbox="353 912 1167 954">Miscellaneous & Other UTL Systems</td> <td data-bbox="1167 912 1413 954">1,445</td> </tr> <tr> <td data-bbox="353 954 1167 984" style="text-align: right;">Total:</td> <td data-bbox="1167 954 1413 984">35,265</td> </tr> </tbody> </table> <p data-bbox="185 1018 2074 1085">Consolidated average outputs per linear meter (LM) and traffic management arrangements have been derived from those established within the contractual framework, specifically Schedule Four and Schedule Eight.</p>	MUDFA Utilities	Single Utility Quantities (LM)	Power Systems	8,587	Gas - Mains & Branch	4,416	Water - Clean	6,971	Water - Foul & Gravity Piping	2,192	Telecoms - British Telecom (BT)	6,063	Telecoms - Tele West (TW)	1,166	Telecoms - Cable & Wireless (C&W)	2,351	Telecoms - THUS	1,171	Telecoms - EasyNet (EN)	173	Telecoms - NTL	0	Street Lighting	540	Surface Water Systems	192	Miscellaneous & Other UTL Systems	1,445	Total:	35,265
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9	The <u>requirement for availability</u> of any specialist plant, equipment or sub-contractors will be identified by tie Limited, in advance, under Clause 8.																														
10	As the Programme is based on the current and best available information maintaining business and retail centre critical power supplies have not been considered, in full, at this stage in the planning development phase.																														
11	Statutory Utility Company regulatory requirements, which are additional to the MUDFA works (i.e. betterment), <u>which are not included in the best and current information available at October 2007</u> , have not been not been included in the development of the Programme and will be considered only under Clause 8, Work Ordering and/or Clause 46, Change; as appropriate..																														

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ID	Notes / Assumptions ; 30 th November 2007
12	<p>tie Limited to provide AMIS MUDFA with traffic light designs, wiring schematics, phase schedules and all associated documentation in relation to any temporary or permanent modifications to <u>existing</u> traffic management infrastructure necessitated to support the Programme requirements.</p> <p>AMIS MUDFA provide Worksite specific Traffic Management, i.e. Phasing Plans.</p>
13	<p>The impact of the Schedule 13 Requirements on Construction Services has been considered insofar as is practical or reasonable in recognition of the current and best available information.</p> <p>Particular concerns relates to British Airports Authority (BAA) / Edinburgh Airports Limited and Stakis Hotels in relation to Sections 7A and 7B due to the pending programme requirements.</p>
14	<p>Service/supply maintenance or replacement, not included in the design <u>and information</u>, reasonably and practically, available at the date of finalising the Programme has not been allowed in the planning development.</p> <p>If the main is to be replaced by the MUDFA Contractor and regulations require branches from that section of main to be replaced, i.e. lead pipe upgrade and gas/metal plastic upgrade, no provision has been included within the Programme at Revision 06.</p>
15	<p>No consideration has been given to any divergence with the provisions and basis of the Addendum to Preambles within Schedule Four, i.e. CARP Part 10, Miscellaneous Matters, items 1 to 4 inclusive and 5.1 to 5.10 inclusive.</p>
16	<p>Work site activities and durations are based on five (5 No.) working days, comprising 40 hours per week for operatives and staff, as contemplated within Schedule Four rates and prices.</p> <p>Disruptive, extended and/or accelerated working has not been considered and is not viewed as appropriate.</p>
17	<p>Previous iterations of the Programme contemplated the full closure of St. Andrews Square. The agreed programme contemplates, as requested by tie Limited, two lanes of traffic flowing through either side of <u>St Andrews</u> the square at all times.</p> <p>AMIS MUDFA has assumed that the scheduled works at St. Andrews Square, by others (CEC nominated Contractor) will have no impact on the MUDFA Works, or programme requirements.</p>
18	<p>The programme does not take cognisance of the interfaces and/or dependencies associated with the INFRACO Contractor and/or TRAMCO</p>

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	service provider.
ID	Notes / Assumptions, 30th November 2007
19	No allowance made, to the Worksite durations / dependencies for the impact of Prime Cost and Provisional Sums not subject to a formal Work Order from tie Limited as at 29th November 2007. Provisions have been made within the P3 cost and resource modelling only, to the values and phasing instructed by tie Limited.
20	AMIS MUDFA shall use their best endeavours to mobilise all resources in recognition of the demands and requirements of the Programme; any abortive costs associated with the unproductive and inefficient allocation of these resources, including the consequential relocation and/or redeployment costs will be consistently underwritten by tie Limited.
21	No consideration given to benefits derived from Value Engineering / Risk and Trade Off Proposals and the like, with the exception of Section 6, 7A and 7B.
22	No consideration given to MUDFA utility diversions only. Utility diversion activities which are not required to accommodate the Edinburgh Tram project are not incorporated in the programme.
23	The Programme will be adopted as a basis for the management and application of the Commercial Agreement and MUDFA Contractor Incentivisation Proposal currently under review between the parties.
24	Traffic Management and Opening Notices are to be raised on issue of C4 drawings, by tie Limited, assisted by AMIS MUDFA where appropriate under the Contract, in accordance with the durations set out in the Programme and at no risk to AMIS MUDFA should late and/or changes in design detail require Traffic Management Plan modification.
25	The Programme assumes horizontal and vertical alignment for Sections 7A and 7B are correctly established; Risk and Trade Off dependent; criticality will be addressed by tie Limited and yield 50% / 50% gainshare opportunities.
26	AMIS require all SDS Provider Planning data in P3/P5 format, including programme logic, key deliverable dates and latest forecast dates, all updated weekly.
27	SDS Provider utility IFC designs and design related information, in terms of accuracy and schedule adherence, will serve Construction Services in a consistent and robust fashion, all requiring virtually no re-work by AMIS MUDFA.
268	Resolution of all Technical Queries shall be resolved in a reasonable, depending upon the circumstances, timely and consistent manner, which

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	adequately serves Construction Services; i.e. distributed on a daily basis following formal request.
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279	Issues pertaining to the Longstop Date, Time for Completion, Extension of Time for Completion, together with Liquidated and Ascertained Damages, as detailed in letter Ref: AMIS/tie/letter/KAG/Projects/353 dated 8 th August 2007 shall be addressed by tie Limited following agreement of the Programme in accordance with the provisions of the MUDFA terms and conditions accordingly.
2830	AMIS MUDFA will endeavour to seek and implement 'left shift' and schedule compliance initiatives to safeguard the tie Limited dependencies; and
2931	The logic associated with the City Centre works is based/predicated upon the requirements of the stakeholders and Schedule 13 agreements and having all traffic management approvals and work permits issued to meet the Programme requirements attached Appendix 'A' and the following Assumptions / Pre-Requisites:-
i	Princes Street Crossings and linear runs; all traffic Management approvals and permits to be in place prior to Christmas closedown on 21 st December 2007. Central reservation removal, including the works cancelled for the week commencing 3 rd December 2007 to be rescheduled and completed prior to linear works commencing. The programme as submitted contemplates this work being completed by the 7 th December 2007, as per the approved Access Permit.
ii	St Andrews Square Enabling works; work specification and scope of works to be issued by tie Limited, together with Traffic Management approvals by 10 th December 2007, for AMIS MUDFA pricing, which is to include the new traffic signal designs required at the junction of North St Andrews Street and York Place.
iii	St Davids Street Enabling works; to be completed by others, under the direction and control of tie Limited. In the event tie Limited wish AMIS MUDFA to complete these works, work specification and scope of works (to include road pavement designs, levels, drainage details, signage, traffic signals, markings and the like) to be issued by tie Limited, together with Traffic Management approvals by 10 th December 2007.
iv	St Andrews Square BT (MUDFA); all traffic Management approvals and permits to be in place by 21 st December 2007, with all remaining trial holes to be undertaken first, including those originally planned to be undertaken between the 3 rd and 7 th December 2007.
v	St Andrews Square BT (MUDFA); IFC designs to be reviewed by SDS Provider and tie Limited to take account of the survey information received from the trial holes undertaken to date, noting the majority of the trial hole survey cards indicate there is no space available to undertake the works reflected in the current IFC Designs.

vi	Frederick St Enabling works; work specification/scope of works to be issued by tie Limited, together with Traffic Management approvals by 10th December 2007, for AMIS MUDFA pricing; this is to include the new traffic signals and pedestrian crossing designs.
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vii	The Mound; all traffic Management approvals and permits to be in place by 21st Dec.07. Princes St, central reservation to be removed and Frederick St re-opened. New traffic signals to be installed at Hanover Street, Frederick Street, George Street & St Andrews Square and modifications to existing traffic signals at Waverly Bridge / Princes Street Junction & Market Street / North Bank Street Junction, together with enabling works at Market Street. AMIS MUDFA has made no allowance for demobilisation of the Mound Construction Sites during the August 2008 embargo.
ix	Lothian Rd Junction / Shandwick Place (MUDFA Diversions); all traffic Management approvals and permits to be issued by tie Limited by 21st December 2007.
x	St Andrews Square (MUDFA); AMIS MUDFA have assumed that the St Davids Street works will be completed by others and that the four lane traffic flow can be diverted to St Davids Street allowing St Andrews side of the Square to be closed to all traffic giving sole access to AMIS MUDFA to undertake the Utility Diversions.
xi	Canning St to Haymarket; AMIS MUDFA assume trial holes can be undertaken at this Section in parallel with the Chandwick Place MUDFA works.
xii	Canning St to Haymarket; all traffic diversions and approvals to be sought by tie Limited.

***** Notes and Assumptions End *****