

Infrastructure Services

MUDFA Project Western Harbour Leith Docks Edinburgh EH6 60F Telephone 0131 561 2800 Facsimile 0131 561 2811

www.alfredmcalpineplc.com

30th November, 2007

Mr. Graeme Barclay

tie MUDFA Utilities Construction Director

Ref: AMIS/tie/letter/KAG/Projects/651

tie Limited.

Citypoint.

1st Floor,

65 Haymarket Terrace,

Edinburgh.

EH12 5HD

Dear Graeme,

Subject: MUDFA Affred McAlpine Infrastructure Services (AMIS) - Contract A150
MUDFA tie Limited and Stakeholder Constrained Programme; Revision 06 (Final)

Thank you for your letter Ref; DEL.MUDFA.6193.GB dated 27th November 2007.

In accordance with your comments please find attached six copies, together with CD-R of the above noted Programme,

AMIS MUDFA wishes to emphasise the criticality and importance of securing early agreement, in order to support schedule adherence under the above noted Programme, for the proposed traffic signalling and sequencing arrangements required to support the inner city section of the MUDFA Works and management of traffic.

Your comments in respect of the Edinburgh City Centre Works, as detailed on the Gantt chart being "managed separately" are noted; however in the opinion of AMIS MUDFA this aspect represents an integral element of this Clause 35 submission and is attached herewith as an Appendix.

Finally and as previously advised traffic control specification and requirement is outwith the MUDFA agreement and is to be secured by others, with expediency key to securing schedule adherence in January 2008 onwards.

Yours sincerely,

For and ଡା ପ୍ରତିଶାନିତ Alfred McAloine Infrastructure Services Ltd

Andrew Malkin

MUDFA AMIS Project Director

Attached/....

- 1 MUDFA tie Limited and Stakeholder Constrained Programme; Revision 06 (Final); six copies.
- 2 CD-R version of item 1 above (x1)
- 3 Appendix "A"



Alfred McAlpine Infrastructure Services Limited, Registered in England No. 00728599 Registered Office: Kinnaird House, 1 Pall Mall East, London SW1Y 5AZ



30th November, 2007 Page 2 of 2

Ref: AMIS/tie/letter/KAG/Projects/651

Copies:tie Project Team John McAloon

MUDFA Project Team Gil Cielland Rod Aves Taryne Lowe





Programme Notes and Assumptions

<u>Note</u>; in the context of these notes and assumptions the term "Programme" should be construed as the tie Limited and Stakeholder Constrained Programme at Revision 06 Final, submitted in accordance with the provisions of Clause 35.

- All current SDS preliminary drawings show single line utility diversions; no allowances have been made for multiple ducts, etc and only limited technical definition and detail are available to support detailed technical planning development at this stage.
- SDS Provider detailed IFC design development may produce additional diversions over and above the Preliminary and C4 Approval Pending drawings; consequently there may be an increase in the current scope of work anticipated at this stage.
- 3. If the assessed 1,250 IFC Utility design drawings, 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.
 - The balance, 1,076 No (86%) in total, have been assessed on the first generation preliminary designs issued by tie Limited to AMIS MUDFA in late October 2006; these drawings were predominately dated August 2006 and have not developed significantly in technical detail terms, hence the request to produce thumbnail sketches.
- 4. In recognition of items 1 and 3 above the procurement risks and dependencies, to support Construction Services are not reflected on the Programme. It has been assumed tie Limited shall approve the AMIS MUDFA proposal for the purchase of buffer stock set out under letter Ref; AMIS/tie/letter/KAG/Projects/341 dated 7th August 2007.
 - 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.
- 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.
- 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 and that the delays reported within the MUDFA Utilities Sub-Committee Report for September 2007 are redressed for programme compliance.
- 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 such that the AMIS MUDFA progress contemplated in the Programme is constrained.

Page 1 of 6

Attachment to letter Ref; AMIS/tie/letter/KAG/Projects/651 dated 30th November 2047



Programme Notes and Assumptions

- In recognition of items 1 and 3 above the construction durations have been derived from the single utility quantities set out in the tie Limited Anticipated Final Account; letter Ref; AMIS/tie/letter/KAG/Projects/523 dated 19th October 2007 refers.
 - Consolidated average outputs per linear meter and Traffic management arrangements have been derived from those established within the contractual framework, specifically Schedule Four and Schedule Eight.
- 9. In recognition of items 1 and 3 above no consideration has been given to the availability of any specialist plant, equipment or sub-contractors at this time.
- 10. Maintaining business and retail centre critical power supplies have not been considered in full at this stage in the planning development phase.
- Statutery Utility Company regulatory requirement to capture betterment has not been included in the development of the Programme and will be considered only under Clause 46
- 12. **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 traffic management infrastructure necessitated to support the Programme requirements.
- No consideration has been given to the impact of the Schedule 13 Requirements on Construction Services.
 - Particular concerns relate to British Airports Authority (BAA) / Edinburgh Airports Limited and Stakis Hotels in relation to Sections 7A and 7B due to the pending programme requirements.
- 14. In recognition of items 1 and 3 above service and supply maintenance or replacement has not been allowed for in the planning development, i.e. 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, then no provision has been included within the Programme at Revision 06.
- 15. 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.
- 16. 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.

Disruptive, extended and/or accelerated working has not been considered and is not viewed as appropriate.

Page 2 of 6

Attachment to letter Ref; AMIS/tie/letter/KAG/Prejects/651 dated 30th November 2007



Programme Notes and Assumptions

- 17. St. Andrews Square is no longer closed off. The programme contemplates, as requested by tie Limited, two lanes of traffic flowing either side of the square at all times. 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.
- 18. The programme does not take cognisance of the interfaces and/or dependencies associated with the INFRACO Contractor and/or TRAMCO service provider.
- 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.
- Durations and sequences for Leith Walk are based on the tie Limited sponsored Stakeholder requests.
- 21. 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.
- 22. 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.
- 23. No consideration given to Morrison Street or activities other than Utility diversions at Gogarburn Depot Advance Works.
- 24. 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.
- 25. The tie Limited and Stakeholder Constraints are considered to be in excess of the Schedule Eight Programme, including sequence, duration, mobilisations and demobilisations.
- 26. Traffic Management and Opening Notices are to be raised on issue of C4 drawings, by tie Limited, 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.
- 27. 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.

Page 3 of 6



Programme Notes and Assumptions

- 28. AMIS require all SDS Provider Planning data in P3 / P5 format; including programme logic, key deliverable dates and latest forecast dates, all updated weekly.
- 29. 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.
- Resolution of all Technical Queries shall be resolved in a timely and consistent manner, which adequately serves Construction Services; ie distributed on a daily basis following formal request.
- 31. 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 8th 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; and
- 32. AMIS MUDFA will endeavour to seek and implement 'left shift' and schedule compliance initiatives to safeguard the tie Limited dependencies.
- 33. The logic associated with the City Centre works is predicated upon the attached Appendix 'A' and the following Assumptions / Pre-Requisites;-
 - Princes Street Crossings and linear runs; all Traffic Management approvals and permits to be in place prior to Christmas closedown on 21st December 2007.
 - Central reservation removal, including the works cancelled for the week commencing 3rd December 2007 to be rescheduled and completed prior to linear works commencing. The programme as submitted contemplates this work being completed by the 7th December 2007, as per the approved Access Permit.
 - St Andrews Square Enabling works; work specification and scope of works to be issued by tie Limited, together with Traffic Management approvals by 10th 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.
 - 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 10th December 2007.
 - St Andrews Square BT (MUDFA); all Traffic Management approvals and permits to be in place by 21st December 2007, with all remaining trial holes to be undertaken first, including those originally planned to be undertaken between the 3rd and 7th December 2007.

Page 4 of 6



Programme Notes and Assumptions

- 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 and 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.
- vii The Mound; all Traffic Management approvals and permits to be in place by 21st December 2007. Princes Street central reservation to be removed and Frederick Street re-opened. New traffic signals to be installed at Hanover Street, Frederick Street, George Street and St. Andrews Square and modifications to existing traffic signals at Waverly Bridge / Princes Street Junction and 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.

- viii Lothian Rd and Shandwick Place Enabling Works:
 - Charlotte Square Modifications;
 - · Removal of parking on George Street;
 - Hope Street modifications:
 - Various one way systems to be revoked in support of the Wider Area Diversion Strategy; and
 - Access to Crescent from William Street to be re-opened

Work specification and 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.

- ix Lothian Road Junction / Shandwick Place (MUDFA Diversions); all Traffic Management approvals and permits t● be issued by tie Limited by 21st December 2007.
- 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 Street to Haymarket; AMIS MUDFA assume trial holes can be undertaken at this Section in parallel with the Chandwick Place MUDFA works.

Page 5 of 6



Programme Notes and Assumptions

xii Canning St to Haymarket; all traffic diversions and approvals to be sought by tie Limited.

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

Appendix "A"

		Phase 1 Phase 2													Phase 3													2h:	158	:																								
	7701/2008	4/01/2008	21/01/2003	28.05/2008	24/40/2000		11/02/2008	18/02/2008	25/02/2008	3/03/2008	@r03/2008	17,03/2,008	24/03/2008	31/03/2008	07/04/2008	14/04/2408	21/04/2008	28/04/2008	05/05/2008	2/05/2009	19/05/2008	000000	0007/00/07	A LOS COSTOS	\$8/08/2008	330612008	30/06/2008	07/07/2008	4/07/2008	110772008	8707/2006	A/DE/DANS	1/08/2008	8/08/2008	5/68/2008	1/09/2008	8/09/2008	15/09/2008	2/05/2008	Skeedrods.	00/10/2058	Carterine	10/10/2008	Passacea	NAT VOICE	0/11/2 0	17/11/2008	4711/2008	90000	8077777	8/12/2008	15/12/200	22/12/2008	4040004
rrocess Street Crossings (UDFA)					ľ				Ì																				ľ								Γ									Ĭ			Ī	House	-		75.	
rincess Street Linear Runs NUDFA)										-															-												L																	
Andrew St Enzaling Works listers, TL Lighting)									-							_									_				L			1																L	J					
: Davids Street Enabling orks (Rmv Blisters)																***************************************					L	L				0							-	٥														L						
Davids Street Enabling orks (Complete Solution)																							ļ		-								0.000	edinburgh international restival embargo				L		_							L	L						
Andrews St BT (MUDFA)							Ņ						¥	Ķ																			1	E											Ļ			L	-		9	2		
Andrews St BT (BT)		4		_	_	-	4	4	1			-	1	-	4	4										¥			×	×				۳ ا			H	H		H					L	7.5	-		-		Venna Channing Erahand	2		
edrick St Enabling Works						+	+	\downarrow	-	4	4	-	-	-	-	_	_			_	_				_	-	-	_	-		-	-	Ł	٣ وي		L	H	L	L	L	-		L	L	L		_	-			1	=		
ncess Street Central Res.					_	-	+	+	_	-	4	-	_	+	\downarrow	-	_		_	_			¥	¥	Ļ								į	Ons			L			L	-	_	L	L	L	_	_		-		,			
e Mound Phase 1 (MUDFA)		-		_		-	+	4	4	4	4	_	+	-	\downarrow	-	-		_		L	\downarrow	1	+		¥		×	×	×	¥		;	nati						Ļ		L	L	L	L	_	_	L	-		2	2		
e Mound Phase 2 (MUDFA)					_	-	-	-	-	1	-	\downarrow	4	_	4	_			_	_	_	Ļ	-	+	\downarrow	-	ļ.,	<u> </u>	-	1	4					_	-	L				L	L	L	ļ	L	_		ŀ		Ü	ก ก		
e Mound Phase 3 (MUDFA)						-	-	_	_			1	-	1	4	-	_					1	-	1	\perp	_	_	L	-	-	1	-	5	5		_				L	L				L	L					>	Ž		
thian Rd / Shandwick Place / narlotte Square Enabling					Ļ																				_	1	1	_	_	_	ļ		•			_		L			L				L	L		-						
nthian Rd Junction (MUDFA)				_																					_	_	-			-	_	-	i	E C							_							L						
endwick Place West End to thian Rd Junction (MUDFA)																									L				*****			Section 2																						
Andrews St (MUDFA) (Street osed)				_		ļ	1	1	1				1				-						\downarrow																						_									
nning Stio Haymarket JDFA)						1	-	-			-	-	_				-				-	-	_	_																					_				1					
N West Markand Street						-	-		-	MARKET	-	-			-		-					-					-									-						-	-											