

ADDENDUM 1

1. Activity schedule

All amounts entered in the *activity schedule* are to be exclusive of VAT.

Part 1 – Preliminaries and General

All mounts to entered exclusive of VAT

A. Preliminaries and General		
Item	Description	Item Sub-Total
A.1	Site Establishment	
A.3	Personnel and Vehicle Permitting	
A.4	Safety File Compilation and Approval	
A.5	Personal Protective Equipment	
Preliminaries and General: Sub-Total A		

Part 2 – Project Execution

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B. Project Works Execution								
Section number	Section Description	Activity Description		Type	Qty	Unit Price	Activity sub-totals	Section Sub-total
1	Conduct Hazard and Operability study and Safety Integrity Level	B.1.1	Labour	SUM	1			
		B.1.2	Meetings	SUM	1			

	Assessment for the Fuel Hydrant Emergency Shutdown System	B.1.3	Reporting	SUM	1			
2	Standardise the Fuel Hydrant System Emergency Shutdown System	B.2.1	Procurement, Quality Assurance and Quality control	SUM	1			
		B.2.2	Packaging, Shipping and Storage	SUM	1			
		B.2.3	H41X compact and modular safety system, 19-inch, 4 units high, 12 slots for I/O modules, TÜV certified for safety applications up to SIL3. Modbus communication licences are included. Bundle consists of out of F-BASE RACK 02, F-CPU 01, F-COM 01, F-IOP 01, F-PWR 01.	H41X-MS	1			
		B.2.4	16 channel safety-related digital input module, SIL 3/Cat.4	F3236	1			
		B.2.5	LED cable plug, unwired	Z 7116/3236	1			
		B.2.6	8 channel safety-related input module, SIL 3/Cat.4, for proximity switches, line monitoring	F3237	3			
		B.2.7	LED cable plug, unwired	Z 7108/3237	3			
		B.2.8	01, F-PWR 01.	F3331	3			
		B.2.9	LED cable plug, unwired	Z 7138/3330	1			

	B.2.10	License for safe communication protocol HIPRO-S V2 to latest system	HIPRO-S V2	1		
	B.2.11	Floor Standing Panel IP65 and Accessories	Mild Steel	1		
	B.2.12	Panel Aircon 1000W	EVO	1		
	B.2.13	Puls QS20.244 220VAC/24VDC Din rail mounted power supplies	QS20.244	1		
	B.2.14	Puls UBC10.241 24VDC Din rail mounted DC-UPS complete with battery,	UBC10.241	1		
	B.2.15	10 Amp Switch Mode PSU 24Vdc	1606-XLS480EE	1		
	B.2.16	Panel Assembly & Accessories	PCI	1		
	B.2.17	Isolator digital input single channel	MTL	6		
	B.2.18	Isolator digital output single channel	MTL	6		
	B.2.19	Digital In/Output Field Termination Assembly	RDIP/RDOP	3		
	B.2.20	Stratix (Cisco IOS) Managed Swiches	1783-BMS10CGA	2		
	B.2.21	Fiber SPF's - Single Mode 1 Gig	SPF1GLX	4		
	B.2.22	System Hardware prelim design	DAYS	2		
	B.2.23	ESD System cabinet complete design	DAYS	2		

	B.2.24	WinnCC SCADA / PLC Changes	DAYS	8		
	B.2.25	IMCS SCADA Update	DAYS	1		
	B.2.26	FAT/SAT Testing and Documentation	SUM	5		
	B.2.27	System Logic Design in SILWORX	DAYS	3		
	B.2.28	SafeEthernet Communication Configuration	DAYS	2		
	B.2.29	HIPPRO S Communication to upgraded system	DAYS	3		
	B.2.30	Panel Installation & Commissioning	DAYS	5		
	B.2.31	Integration into the latest system Network	DAYS	2		
	B.2.32	Site Acceptance Test	DAYS	2		
	B.2.33	ESD Cabling - Degabon Armoured Cable and Installation	Per METER	1 700		
	B.2.34	ESB Buttons	Per Device	9		
	B.2.35	Network Configuration & Fiber Splicing	Lot	1		
	B.2.36	WinnCC SCADA / PLC Changes	DAYS	10		

3	Upgrade the Fuel Hydrant ESD programmable electronic safety system to the latest technology	B.3.1	1 x F-BASE RACK 02 1 x F-CPU 01 1 x F-COM 01 1 x F-IOP 01 2 X F-PWR 01	F-BASE RACK 02, F-CPU 01, F-COM 01, F-IOP 01,	6		
		B.3.2	Sillworx ESD Trip Logic Conversion	2 X F-PWR 01.	6		
		B.3.3	Safe Ethernet Communication Configuration	SUM	6		
		B.3.4	HIPPRO S Communication to upgraded system	SUM	6		
		B.3.5	OPC Setup and Configuration	SUM	6		
		B.3.6	WinCC and IMCS Interfacing	SUM	6		
		B.3.7	Panel Aircon 1000W	SUM	6		
		B.3.8	Installation & Wiring	SUM	6		
		B.3.9	Project Management	SUM	6		
		B.3.10	Documentation	SUM	6		
		B.3.11	Commissioning and Testing	SUM	6		
		B.3.12	Sillworx Software	SUM	1		
		B.3.13	Modbus Slave License	SUM	6		
		B.3.14	HIPRO-S Ver 2 Licence	SUM	6		
		B.3.15	OPC for upgraded system	SUM	2		

		B.3.16	Satellite Station Upgrade to upgraded/latest system	SUM	6			
Project Execution: Sub-Total B								

Part 3 – Project Close-out and Handover

C. Project Close-out		
Item	Description	Item Sub-Total
C.1	Operation and Maintenance Manuals	
C.2	Operation and Maintenance Training	
C.3	Development and Handover of As-Built Drawings	
C.4	Site De-establishment	
Project Close-out: Sub-Total C		

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Part 4 – Insurances

Item	Description	**Months	Monthly Fee	Amount
D.1	All ACSA-required insurances			
D.2	Other			
Insurances: Sub-Total D				R

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****These values are for costing purposes. The total amount of insurance fees paid will be a function of the duration of the contract.**

Part 5 – Project Contingency

D. Project Contingency		
Item	Description	Item Sub-Total
E.1	10% of Sub-Total A + Sub-Total B + Sub-Total C + Sub-Total D	
Project Contingency: Sub-Total E		

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