To,

All Bidders

Amendment-V

Dated: 07.09.2013

Subject:- Package-II: Tender for Construction of EMERGENCY BLOCK including Associated Services and Operation & Maintenance during Defect Liability Period at Safdarjung hospital, New Delhi.

Dear Sir,

This has reference to the subject works,

The following AMMENDMENT-V/CLARIFICATION-V may be noted, which shall be treated as a part of the tender to be uploaded along with tender. The revised estimated cost and amended provisions of following Medical Gas Manifold items, Integrated Modular Items and minimum manpower requirements for operation & maintenance works may please be noted as follows. Bidders are also requested to note the revised schedule of bid submission & opening given at point D below:

A. Medical Gas Manifold System (MGMS)

BOQ Item No.	Existing Provision		Amended Provision	
	Description	Qty.	Description	Qty.
12.2	Theatre vacuum unit.(Imported)	26	Theatre vacuum unit.	26
12.3	Ward Vacuum Unit .(Imported)	603	Ward Vacuum Unit	603

B. Integrated Modular OT

BOQ Item No.	Existing Provision		Amended Provision				
	Integrated Modular OT	RATE	AMOUNT	Integrated Modular OT	RATE	AMOUNT	
	Total	2180300	4360600	Total	21803000	43606000	

BOQ Item No.	Existing Provision	Amended Provision			
	Description	Qty.	Description	Qty.	
22	INTEGRATED OT NAVIGATOR SYSTEM FOR COMMUNICATION AND CONFERENCING (Teaching Purpose) Complete with all accessories as per technical specification	1 lot	INTEGRATED OT SYSTEM FOR COMMUNICATION AND CONFERENCING Complete with all accessories as per technical specification.		
	d Documentation: Video and picture sequences of several sources can be distributed to a maximum of 8 monitors for easy access of the entire staff.		d Documentation: Dual Channel HD Digital documentation system for parallel recording of two video sources. Should have 1 Tera Byte internal storage and should have streaming feature for exporting to external PC for remote viewing of recordings.		
	X) LCD Diplay 42" FWD-S42HI		x) 42" LED Large screen HD Monitor		

In accordance to above, the Estimated cost of revised cost of Medical Gas Manifold works and Integrated Modular OT Works are enclosed with this amendment. Bidders are requested to quote their percentage rates in the BOQ Sheet considering this amendment.

C. Minimum daily Manpower requirement for operation & maintenance work for building & services shall be as follows:

Sl no.	Description of	General	Shift 1	Shift 2	Shift 3	Total
	Manpower	Shift 9: 00	from 6	from 2 pm	from 10	
		am to	am to 2	to 10 pm	pm to 6	
		5:30 pm	pm		am	
1	In charge/Head	1				1
	supervisor					
2	Diploma Holder (3				3
	Civil, Electrical,					
	Mechanical)					
3	Plumber		1	1		2
4	Sewer man		1	1		2
5	Mason/carpenter	1				1
6	Pump operator	1				1

7	Electrician		1	1	1	3
8	Plant room operator		1	1	1	3
9	Manifold plant room operator		1	1	1	3
10	Server room operator having IT background	1				1
11	Mali for Horticulture	1				1
12	Lift operator for each lift		1	1	1	3
13	DG operator		1	1	1	3
14	AHU's operator		1	1	1	3
15	Helpers for all above	8	16	16	12	52

D. Package – II works: Extension of online bid submission & opening as follows:

Last Date for filling / uploading/submission through e-tender: up to 15:00 hrs on 13.09.2013.

Date of opening: on 13.09.2013 at 15:30 hrs

All other terms and conditions of the tender shall remain unchanged.

Prospective bidders are advised to regularly scan through HSCC web site as corrigendum/amendments etc., if any, will be notified on HSCC web site and separate advertisement will not be made for this.

Thanking you,

Yours faithfully,

Enclosure : MGMS BOQ(Estimated Cost)

Integrated Modular OT BOQ(Estimated Cost)

(P.S.Rao)

Dy. General Manager (Civil)

Amendment-V- EMERGENCY BLOCK, SAFDARJANG HOSPITAL, NEW DELHI

Estimated cost FOR MGMS WORKS (Amended)

Estimated Cost (Emergency)

The prices are to be quoted in the below mentioned form and shall include the Supply, installation, testing, commissioning of **Medical Gases Manifold System (MGMS)** and its maintenance (during the Defect liability period) at site including all the equipments, ancillary materials as specified and all such items what so ever which may be required to fulfill the intent and purpose as laid down in the specifications, conditions and or the drawings.

Item No.	Description 2	Unit 3	Qty 4	Rate In Rs (in Figure) 5	Amount in Rs. 6
1	OXYGEN SYSTEM				
1a	Oxygen Manifold of 16+16 Cylinders capacity(Bulk cylinder D Type). The Oxygen Manifold should be hydraulically tested to 3500 psig pressure. The Oxygen Manifold shall be complete with all accessories etc as required complete as per specifications. The oxygen manifold shall have provision to connect the system with liquid oxygen vesselImported	Set	1	325000	325000
1b	Fully Automatic Control Panel for the Oxygen Manifold system complete with all accessories etc. complete as per specificationsImported	Set	1	475000	475000
1c	8 Cylinder Emergency Oxygen Manifold with a high flow regulator with gauges and safety valves complete with all accessories etc. as required complete as per specificationImported	Set	1	88000	88000
1d	Terminal (Oxygen) outlets with probes/adapters complete as per specificationsImported	Nos.	603	6250	3768750
1e	High Pressure tubing flexible having Antistatic core as per ISO with proper colour coded complete as per specifications.	Metre	905	375	339375

1f	Oxygen Cylinders (D- Type) for Manifold as per Specifications enclosed	Nos.	40	16000	640000
1g	Liquid Oxygen System with 10 KL Tank complete as required with all accessories as per technical specification	Lot	1	4500000	4500000
2	Nitrous Oxide System				
2a	Nitrous Oxide Manifold of 6+6 Cylinder capacity(Bulk cylinder D Type). The Nitrous Oxide Manifold should be hydraulically tested to 3500 psig pressure. The N2O manifold shall be complete with all accessories etc. and complete as per specificationsImported	Set	1	254000	254000
2b	Fully Automatic Control Panel for N2O system and complete with all accessories etc. as required and complete as per specificationsImported	Set	1	475000	475000
2c	2 Cylinder Emergency Nitrous Oxide complete with high flow regulator with gauges, safety valve and other accessories etc. complete in all respect complete as per specificationsImported	Set	1	32000	32000
2d	Nitrous Oxide Terminal Outlets with probes/adaptors complete as per specifications Imported	Nos.	16	6250	100000
2e	High Pressure tubing flexible having Antistatic core as per ISO with proper colour coded complete as per specifications.	Metre	24	375	9000
2f	Nitrous oxide Cylinders (D- Type) for Manifold as per Specifications.	Nos.	14	20000	280000
3	VACUUM SYSTEM				
3a	Triplex Vacuum System(2 Working+1 Standby) of 220 cfm capacity complete with base plate, belt guards, V-belts, motor and starter, ball valves, silencers, copper piping interconnection, vacuum storage tank with compatible capacity and other required accessories and fitting etc. Rotary vene air cooled typed.complete in all respect and as per specificationsImported	Set	1	9440000	9440000

3b	Vacuum Terminal Outlets with probes/adapters complete as per specificationsImported	Nos.	603	6250	3768750
3c	High Pressure tubing flexible having Antistatic core as per ISO with proper colour coded complete as per specifications.	Metre	905	650	588250
4	AIR COMPRESSOR				
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4a	Quadruplex (3 working + 1 Standby) medical compressed air supply system. The system shall comprise of totally oil less, reciprocating type, air Cooled design air compressors each having 70 cfm capacity at 8.5 bar. The compressors shall be be complete with a suitable HP, 3 phase, ODP NEMA construction motor and control panel. The compressed air system shall be complete with suction silencer with filters, after cooler, moisture separator, non return valves, pressure storage tank of compatible capacity, air dryer and all other accessories etc. required for the system and complete as per specifications. The compressed air system shall be complete with dew point apparatus and carbon monoxide monitoring facility as per specificationsImported	Set	1	9696200	9696200
	Compressed Air Terminal Outlets with probes/adapters complete as per specifications Imported				
4b	For C.A. (4 Bar)	Nos.	233	6250	1456250
4c	For C.A. (7 Bar)	Nos.	13	6250	81250
4d	High Pressure tubing flexible having Antistatic core as per ISO with proper colour coded complete as per specifications.	Metre	369	375	138375

5	DISTRIBUTION PIPING (Indigenous)				
	Copper piping of different sizes for distribution and supply of O2, N2O, Compressed Air and vacuum to various areas of the hospital. The copper pipes shall be solid drawn, seamless, deoxidised, non arsenical, half hard, tempered and degreased material conforming to BS-6017/1981, Table-2 (Cu-DHP) and manufactured as per BS-2871/1971 Part-I Table-X. The copper pipes shall be supplied with Lloyd's test certificate and installed as per HTM-22 of UK specifications with utmost cleanliness. After installation the pipes shall be painted with 2 coats of synthetic enamel paint and colour codification as per IS-2379 of 1963. The piping shall be complete with all fittings conforming to BS 864 and as per specifications.				
а	108 mm Odx 1.5 mm thk	Metre	65	5400	351000
b	76 mm ODx 1.5mm thk	Metre	181	3760	680560
С	54mm ODx 1.2mm thk	Metre	378	2940	1111320
d	42mm ODx 1.2mm thk	Metre	1226	1890	2317140
е	28mm ODx 0.9mm thk	Metre	2109	1365	2878785
f	22m ODx 0.9mm thk	Metre	2975	900	2677500
G	15mm ODx 0.9mm thk	Metre	2791	630	1758330

h	12mm ODx 0.7mm thk	Metre	2269	500	1134500
6	MODULAR BED HEAD PANELS 1.5 mtr.				
	Bed head panels for installation of outlets with provision for mounting necessary gas outlets. The bed head panel shall be provided with electrical points, switches, wiring etc. The panels shall be made in extruded aluminium profiles with powder coating and shall accomodate the gas outlets, electrical sockets etc. complete as per specificationsImported	Nos	25	84600	2115000
7	PENDANT				
	Suspended technical column ensuring the fitting out of electrical and medical gas equipment for ICU. A rust-inhibitive coated anchoring plate shall ensure its fixing between the concrete ceiling and false ceiling for a later mounting of the column after the fixing of ceilingsImported	Nos	59	160000	9440000
8	ALARM				
	Master (Main) Alarm Panel to indicate any abnormality of gas pressures and other failures of the system. The alarm system shall be complete with digital display, sensor module and power supply. The alarm shall be complete with all indications controls, wirings, accessories etc. complete as required and as per specifications Imported		1	400000	400000
	Area Alarms for all critical areas The alarm system shall be complete with pressure sensors, indications alarms etc. and with all accessories as required as per specifications.				
а	5S	Nos	16	245000	3920000

b	3 S	Nos	7	210000	1470000
С	2 S	Nos	4	190000	760000
9	VALVE BOX				
а	2S	Nos	4	40000	160000
			_		
b	3 S	Nos	7	48000	336000
_	58	Nos	16	55000	99000
С	55	INOS	10	55000	880000
	ANAESTHETIC GAS SCAVENGING SYSTEM				
10	(AGSS) (Imported)				
	Duplex Medical Vacuum System The system shall comprise of two oil less rotary vane vacuum pumps, a control panel and a receiver all mounted on a common base frame. One pump shall be a standby The system shall be complete with all accessories as required and as per specifications.	Set	1	2200000	2200000
	AGSS Terminal Outlets with probes/adapters complete as per specifications	Nos.	16	7500	120000
	AGSS Hose Assembly	Nos.	16	26250	420000
11	ELECTRICAL DISTRIBUTION PANEL (Indigenous):-	Nos.	1	350630	350630
	Panel shall incorporate isolators for the Isolator for Medical I. Compressed air system. II. Isolator for Medical Vacuum System III. Isolator for AGSS System.				
12	ACCESSORIES				

12.1	Oxygen Flowmeter with Humidifier (0-15 litres/minute) with adapter, tubing etc. complete with all the required accessories and shall be complete as per specificationsImported	Sets	603	5630	3394890
12.2	Theatre vacuum unit. The vacuum regulator will be step-less adjustable and have large vacuum guage providing digital indication of the suction supplied by the regulator complete with all accessories and as per specifications.	Set	26	9000	234000
12.3	Ward Vacuum Unit wall mounted type complete with all accessories as required and as per specifications.	Set	603	2770	1670310
13	CARBON DI OXIDE SYSTEM				
13a	2 + 2 Cylinder Co2 Manifold with gauges and safety valves complete with 4 Nos Pigtail pipes & 4 Nos non-return valves with middle frame all accessories etc. complete as per specification	lot	1	84600	84600
13b	Automatic CO2 Control Panel 1500 LPM with heater Systemomplete as per specification-Imported	Nos.	1	475000	475000
13c	Terminal (Carbon di Oxide) outlets with probes/adapters completeas per specification - Imported	Nos.	13	6520	84760
13d	CO2 'D' Type Cylinder	Nos	4	20000	80000
13e	High Pressure tubing flexible having Antistatic core as per ISO with proper colour coded complete as per specifications.	Nos	14	375	5250
14	Turnkey	Lot	1		200000
	The above quoted rates will be inclusive of all taxes, duties and other charges.			Total Rs.	78164775

Estimated cost FOR Integrated Modular OT (Amended)

Estimated Cost (Emergency Block)							
	PART-I						
	Package - Supply, installation & commissioning of INT THEATRE and one (1) year Defect Liability Period	EGRATE	D MODU	LAR OPERAT	ION		
	The prices are to be quoted in the below mentioned form and shall include the supply, installation, testing, commissioning & Defect Liability Period at site of all the equipments, ancillary materials as specified and all such items what so ever which may be required to fulfill the intent and purpose as laid down in the specifications and or the drawings.						
Item No.	Description 2	Unit 3	Qty 4	RATE in Rs.5	AMOUNT in Rs. 6		
1.0	WALL & CEILING CONSTRUCTION Complete with all accessories as per technical specification -Imported	Lot	2				
2.0	CEILING FILTRATION SYSTEM / LAMINAR AIR FLOW SYSTEM (AIR MANAGEMENT SYSTEM) Complete with all accessories as per technical specification-Imported	Lot	2				
3.0	OPERATION THEATRE FLOORING (ANTISTATIC CONDUCTIVE TILES) Complete with all accessories as per technical specification	Lot	2				
4.0	DOORS AND FRAMES (AUTOMATICALLY HERMETICALLY SEALED SLIDING DOOR) Complete with all accessories as per technical specification	Nos	4				
5.0	PRESSURE RELIEF DAMPERS Complete with all accessories as per technical specification	Nos	2				

6.0	EXHAUST AIR CABINETS Complete with all accessories as per technical specification	lot	2	
7.0	INTERNAL DUCTING Complete with all accessories as per technical specification	lot	2	
8.0	PERIPHERAL LIGHT CUM CLEAN ROOM LUMINARIES Complete with all accessories as per technical specification	lot	2	
9.0	OPERATION THEATRE CONTROL PANEL Complete with all accessories as per technical specification -Imported	Nos	2	
10.0	ADJUSTABLE MOVABLE BOOM ARM SYSTEM Complete with all accessories as per technical specification -Imported	Lot	2	
11.0	X-RAY FILM VIEWER Complete with all accessories as per technical specification	Nos	2	
12.0	HATCH/PASS BOX Complete with all accessories as per technical specification	Nos	2	
13.0	WRITING BOARD (LIST BOARD) Complete with all accessories as per technical specification	Nos	2	
14.0	DIGITAL DISPLAY PANEL Complete with all accessories as per technical specification	Nos	2	
15.0	STORAGE UNIT Complete with all accessories as per technical specification	Nos.	2	

16.0	DISTRIBUTION BOARD ELECTRICAL WIRING, CONDUITING WITH FIXTURES INSIDE THE OPERATION THEATRE Complete with all accessories as per technical specification	Nos	2		
17.0	SCRUB STATION Complete with all accessories as per technical specification	Nos	2		
18.0	MEDICAL GAS LINE INSTALLATION Complete with all accessories as per technical specification	Lot	2		
19	VIEW WINDOW Complete with all accessories as per technical specification	Nos	2		
20	OT LED LIGHT WITH CAMERA AND MONITOR Complete with all accessories as per technical specification-Imported	Nos.	2		
21	OT SIGNAGE Complete with all accessories as per technical specification	Nos.	2		
22	INTEGRATED OT SYSTEM FOR COMMUNICATION AND CONFERENCING Complete with all accessories as per technical specification -Imported	Lot	2		
23	TURNKEY WORK	Lot	2		
	TOTAL		2	21803000	43606000
	The above quoted rates will be inclusive of all other charges.				

HSCC- EMERGENCY BLOCK, SAFDARJANG HOSPITAL, NEW DELHI