

Corrigendum- 4

Project name:-

**Procurement, Construction and Commissioning for Renovation & Modernization
of Milan Mela Complex in Kolkata, West Bengal, India**

E-Tender Reference No. :WBTP0/34/17-18 ,dt- 5.2.2018

E-Tender ID:2018_WBIDC_153194_1

NON TECHNICAL

1. The last date for submission of bid has been extended to 30.03.18 from 23.03.18
2. Section-2 page no.9- ITB- (4)-Eligibility Criteria- 4.1.4-
In place of 31st December **2018** the month shall be 31st January 2018.
3. Section -3- Qualification Information-3.3.
Works performed asover last 7 (seven) years. In this portion the 'design built' shall be omitted.

TECHNICAL

SL. NO	REFERENCE	DESCRIPTION	CLARIFICATION
CIVIL			
1	Civil BOQ item no 10	30 mm thick gang saw cut stone	Type of stone mentioned here is Granite
2	Civil BOQ item no 57	Multiwall Polycarbonate sheeting	Rate approved by PWD (inclusive of all)
ARCHITECTURE			
1	General	Outdoor Hexahedral panoramic LED Sphere Display system	Model Manufacturer contact details- Tina YANG Aiting(Ms.) Sales Engineer/Marketing SpecialistYaham Optoelectronics Co.,Ltd Mobile/Whatsapp/Wechat: +8613923769564 E-mail : tina_young@yaham.com Website:Address : www.yaham.com
2	General	Special Items L1,L2 & L3	Please ignore R.O. for special items L1,L2 & L3 in the BOQ

ELECTRICAL

3	Electrical Clause no.1 & 2a A. CIRCUIT CUM POINT WIRING	S.No 1. Distribution wiring in 2X 22/0.3(1.5 sqmm) single core stranded 'FR' S.No 2a. Wiring for circuit/Submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor	Kindly confirm that FR or FRLS wire to be considered as in point FR & Circuit FRLS is mentioned, FRLS to be considered.
4	Electrical Clause no. 9 & 13 A. CIRCUIT CUM POINT WIRING	Supply and Fixing CRC sheet metal(16SWG) JB cum Switchboard of the following sizes complete with three no suitable size Copper bar with holes(for Ph,N& E)	Size of copper conductor - (20X9)mm of Length suitable for JB.
5	Electrical Clause no. 1.1, 1.2 & 1.3 B. UNDERFLOOR RACEWAY & JUNCTION BOXES 1 GI Raceway & Junction boxes	1.1 Providing and fixing of PVC race way, factory fabricated of the following size. 1.2 Providing and fixing of PVC duct connector, factory fabricated with necessary connection of the following size. 1.3 Providing and fixing of PVC Fastening clamp with necessary connection of the following.	Race way -PVC JB-GI, as mentioned in the BOQ
6	Electrical Clause no. 1 DISTRIBUTION BOARDS	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240V, on surface/recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc., as required. (But without MCB/RCCB/Isolator) Make - Legrand	Standard thickness as provided by LEGRAND (1.6 to 2.0 mm) according to size.
7	Electrical Clause no. 3 Compression Glands	Supplying and fixing compression type gland complete with brass gland, brass ring & rubber ring for dust & moisture-proof entry of XLPE/PVC a Meteroured cables as below:	can be single or double but should be heavy duty
8	Electrical Clause no. 7, Page no.19 I UPS SYSTEM	Supply and fixing in position 1000 mm wide rubber matting of 1100 volts grade as per electricity rules (exact length rubber mats to be worked out as per site requirement). Thickness of rubber mats shall be not	As per IS Amendment of Insulating mats for electrical purposes-IS 15652:2006 (superseding IS 5424:1969) - 2.0 mm thick 1 Mtr x 1 Mtr Electromat shall be used,

		less than 6 mm	
9	Electrical Page no.19 J SOLAR POWER SYSTEM	Supply ,Testing & Installation for 60KW peak Solar Power Grid system(Complete in all respect)	On-Grid, battery not required
10	Electrical Clause no. 1, Page no.20 L DISMANTLING CHARGES(INCLUDIN G SHIFTING OF MATERIAL UPTO 5 K.M FROM SITE)	d) Reinstallation of VCB, Transformer, panel etc	You have to read like this-Dismantling, Removing, shifting and reinstallation of existing 11KV grade 3 panel HT VCB, 11KV/415V, 2 no. s1500 KVA Transformers, LT panel/DB and other electrical items. The Scope includes the following: a) Determination of existing HT, LT and control cables from the existing 3 panel HT VCB b) Dismantling of 3 panel VCB and transformers from existing foundation. c) Shifting & transportation of the 3 panel VCB, transformer Panel, DB up to clients d) Reinstallation of 2 no transformers.
11	Electrical Clause no. 1, Page no.20 Section I: 11 KV 4 Panel VCB Switchboard (SUBSTATION)	1 11 KV CONSUMER 4 PANEL VCB SWITCH BOARD 1.1 MATERIAL: 11KV CONSUMER 4 PANEL VCB SWITCH BOARD SHALL BE ISSUED BY EMPLOYER AS FREE ISSUE ITEM AT SITE.	This is not a free issue item. Please consider item no.1 excluding two lines mentioned in 1.1
12	Electrical Clause no. 10, POINT WIRING	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed steel conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required. Distribution through 3x1.5sqmm standard copper PVC insulator in 19mm polythene pipe embeded in wall to light/ fan/ calling bell system control with modular switch	In this item, both steel conduit & 19mm polythene pipe is mentioned. Please consider PVC pipe
13	Electrical Clause no. 10, CABLE TRAY	Supplying and installing following size of perforated painted with powder coating M.S. cable trays with perforation not more than 17.5%, in convenient	consider the quantity as 30 Meter instead of 30 M.T(Metric Ton) and of 750 mm wide and fabricated out of 50x50x6 mm angle and 25x6mm flat

		sections, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc. as required. MT.30	
14	Electrical Clause no14.1 & 14.2 FITTINGS AND FIXTURES	14.1 2x28 watt TL5 recessed type light fittings (Philips type TBS520-2xTL5-28W-MI EBE or Equivalent approved make) with 2 no. 28 watt flouresenttubes.with master TL5-28W 14.2 1x28 watt T5 light fittings (Philips type TMS122 M 1xTL5-28W EBT or Equivalent approved make) with 1 no. 28 watt flouresent tubes. with master TL5-28W	Please consider the note as mentioned in the BOQ
15	Electrical Clause no17.i& 17.ii SAFETY EQUIPMENTS	i) 11KV Grade Chequered Rubber Mat (2 Mtr. x 1 Mtr.) x 12 mm Thick. ii) 415V Grade Chequered Rubber Mat (2 Mtr. x 1 Mtr.) x 6 mm. Thick	As per IS Amendment of Insulating mats for electrical purposes-IS 15652:2006 (superseding IS 5424:1969) - 2.0 mm thick 1 Mtr x 1 MtrElectromat shall be used for 415V & 2.50 mm thick for 11 KV Grade.
FIRE FIGHTING WORKS			
16	BOQ- PAGE NO. 900, sec-D, Sr. No.5 Sprinklers Head	Supply & fixing of Sprinkler Head	Rossete plate is required for all sprinklers
17	BOQ- PAGE NO. 900, sec-D, Sr. No.5 Sprinklers Head	Supply & fixing of Sprinkler Head	Sprinkler should be Quick response type
HVAC WORKS			
1.1A VFD DRIVEN WATERCOOLED CENTRIFUGAL CHILLER:- 625TR x 3Nos (2W+1S)			
18	BOQ 1.1.A	Starter panel free /Unit Mounted standing with VFD(IP54 rated),	In the BOQ it is mentioned both types of VFD shall have IP54 while in technical Page 8 it is mentioned free standing Vfd shall be Ip54 and unit mounted shall be NEMA 1 .NEMA 1 is not equivalent to IP54. IP54 for both the type of free standing and Unit mounted can be followed
19	technical specification , page 8	To Limit Harmonic generation from VSD, Active Harmonic Filters as per IEEE 519 must be used at the source itself	The THDi for the VFD 35 -40%, is acceptable. This is normal for VFD, the VFD shall be dual DC choke , the VFD shall be Ip54 and UL certified.

CHILLER			
1.1) VFD DRIVEN WATERCOOLED CENTRIFUGAL CHILLER:- 625TR x 3Nos (2W+1S)			
20	1.1A	1 Set- lubrication device consisting of automatic electric oil pump, oil cooler, oil strainer, automatic pressure regulating valve, oil heater, thermal switch etc. as required for the functioning of complete equipment	Oil cooler can be refrigerant cool type which will be complete unit mounted & no piping work should be allowed at site for cooling oil cooler.
21	-	General -Water flow rate	2.66 GPM/TR -Evaporator , GPM/TR -Condenser
CHILLER			
1.1.B) VFD DRIVEN WATERCOOLED SCREW CHILLER:-200TR x 1No(Working)			
22		Lot-Factory Charged refrigerant gas and compressor oil.	1) The chillers shall be charged with refrigerant at site. As per Global practice, chillers are vaccumisedand nitrogen charged and shipped to site. At site, refrigerant is supplied by chiller vendor & trained service engineers follow the procedure of vaccumising and refrigerant charging. Kindly note that York will not be able to participate in the tender without above requested changes which will restrict fair competition.
CHILLER- QUERIES			
23	Chiller shall operate with Low Pressure future generation refrigerant R-514A(HFO) which is also approved as per CPWD		Acceptable
24	Impeller shall be installed on the motor shaft only(Direct Drive) and no speed increasing gear is required(which will reduce the wear and tear and noise level of the equipment).		Acceptable
25	Please note THD level shall be limited between 35-40% with standard Filter.		Acceptable
COOLING TOWER			
26	BOQ no. 3.1	- Flow type	Hot water basin will not be applicable. As per point 4 of technical specification, the cooling tower should be of counter flow type. Counter flow type cooling towers have a pressurised distribution system comprising of header pipe and branch arms. Hot water basin and nozzles as mentioned, are a part of gravity flow type system, which is a typical characteristics of crossflow cooling towers.
27	BOQ no. 3.1	Efficiency class type	Motors should be efficiency class IE-3
28	BOQ no. 3.1	Range and Approach	Range and approach to be (4.2°c & 2.77°c),

29	-	Additional approved makes	1.(water treatment scale prevention system -Ion exchange) 2. (MS/GI pipe -Jindal Kolkata) 3. (Motorized butterfly valve -Belimo) 4. (Ball valve -Advance/ Rapid control/Emerald) 5. (Y/POT Strainer -Rapid control) 6. (Pid valve with actuator & with thermostat
TECHINICAL QUERIES HVAC			
30	Technical specification HVAC List of make	HVAC Approved List	The contractor shall provide make of item within the list make, however choice of make within the list of make can be with contractor however performance should not be compromised.
31	Technical specs- HVAC QUALITY ASSURANCE- General Requirements WATER COOLED SCREW CHILLER WITH VFD	Chiller shall be designed and constructed to meet UL requirements and shall have labels appropriately affixed.	The Chiller should be as per the norms of UL requirements.
32	BOQ Item No. 3 Cooling Tower-3 50TR [5W+IS] Cooling tower fans and motor driven	Statically & dynamically balanced axial flow, Gear/direct driven fans with TEFC induction motor of class F insulation,	Cooling tower motor driven should be direct driven.
33	Technical specification-HVAC FACTORY BUILT AIR HANDLING UNIT (AHU) Rating Air Handling Unit Fan Type	In Technical Specs:- The supply air fan shall be AMCA certified centrifugal type with forward/backward curved blades double inlet double width type. For static pressure upto 65mm forward curved blades shall be used and for higher sizes backward curved blades shall be used. In BOQ :- IMPORTED FANS adequate sized multi-row chilled water coil for cooling application with plug type fan.	Plug type fan to be considered
34	Technical specification-HVAC FACTORY BUILT AIR HANDLING UNIT (AHU) Rating Air Handling unit Casing Panel thickness.	In Technical Specs:- Double skin panels shall be 25mm thick, made of 0.8mm pre- plasticized and pre-painted with PVC guard, GSS sheet on outside and 0.8mm galvanized sheet inside with Polyurethane foam insulation of density not less than 38 kg/cu. m injected in between by	Please go ahead with specification mentioned in BOQ for PUF thickness

		<p>injection moulding machine. In BOQ:-Horizontal VFD DRIVEN Floor Standing Double Skin Air Handling Units with 43mm thk. PUF insulated Panels with Aluminium anodised construction and thermal break profile Following Capacities With 20G G.I.Plain Inner & 24G G.I. outer pre-coated.</p>	
35	General	<p>Technical specifications and terms remain unchanged for rest of the queries.</p>	