

Bill of Quantities

Project: SJH - Phase 1 Electrical Works
Building: SJH campus

Details: Generator Works

Autoc ode	Description	Quantity	Unit	Rate	Total
1	PREAMBLES				
1.A	1. The following works are to be priced in accordance with the detailed design, specifications and scheme drawings as prepared by BDP. (Building Design Partnership)		Note		
	2. The tenderer is deemed to have visited the site to fully acquaint themselves with the scope of the works and conditions pertaining thereto		Note		
	3. The tenderer shall note that this Bill of Quantities (BOQ) is measured in accordance with the ARM4 Supplement 2 – Agreed Alternative Rules for the Measurement of Services Installations (Issue 1 2013) including Amendments issued 15 November 2019 unless otherwise stated.		Note		
	4. The tenderer is referred to the locational drawings, Architect's, Engineers, Mechanical & Electrical drawings, details, specifications, reports and all tender documentation accompanying this Bill of Quantities.		Note		
	5. For preliminaries particulars, please refer to tender documentation.		Note		
	6. The Tenderer is to provide a fully quantified schedule of rates to support their BOQ submission with all rates and prices extended. This will be requested within 15 working days following the issuance by the employer of Letter of acceptance (MF 1.4) to the successful tender.		Note		
	7. The work is measured as net fixed in position; as per the drawings; the tender shall allow for coordination which shall be deemed to be included within the rate.		Note		
	8. The Electrical BOQ shall be priced in strict accordance to the Electrical Specification, Drawings and Schedules listed:		Note		
	– Specifications: SPEC-001 – SJH Electrical Specification – Phase 1				
	– Drawings: (6-)E002 LV Schematic				

PREAMBLES

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2 GENERATOR INSTALLATION

2.A	<u>Notes on Pricing</u>				
	1. The Contractor shall provide complete design, supply, delivery, installation, testing, commissioning, and handover of the 2.8MVA diesel generator sets and all associated systems as specified herein and shown on the drawings.		Note		
	2. All equipment, materials, accessories, and installation works necessary for a complete and operational system shall be included whether specifically mentioned in the BOQ or not.		Note		
	3. The Contractor shall verify all site conditions, dimensions, access routes, and service coordination prior to commencement of works.		Note		
	4. Electrical equipment rates to include for all ancillary items integral and associated with the equipment; including but not limited metering, fuses, shunts, earth terminals, surge protectors, factory inspection tests etc as required by the specifications and noted on the drawings.		Note		
	5. All works shall comply with the latest editions of applicable IEC, ISO, BS, local authority regulations, environmental requirements, and manufacturer recommendations.		Note		
	6. Generator ratings shall be continuous/prime rated unless otherwise specified.		Note		
	7. The generator package shall be supplied as a fully integrated factory-assembled and factory-tested unit.		Note		
	8. Generator sets shall be suitable for operation under local ambient conditions specified in the project documents.		Note		
	9. Alternators shall be brushless type with AVR and suitable for nonlinear loads.		Note		
	10. Control systems shall support automatic and manual operation, remote monitoring, alarms, shutdowns, and synchronization functionality where required.		Note		
	11. Noise levels shall comply with project acoustic requirements and local environmental regulations.		Note		
	12. Fuel consumption data submitted by the Contractor shall be certified by the manufacturer.				
	13. Exhaust emissions shall comply with applicable environmental standards.				
	14. The contractor shall carry out the works, complete and in accordance with the information as set out in the following specification section and drawing:		Note		
	– Specifications: SPEC-001 – SJH Electrical Specification – Phase 1 – Drawings: (6-)E002 LV Schematic <u>ELECTRICAL SUPPLY & ELECTRICITY CENTRE</u> <u>EQUIPMENT</u> Standby Generator				

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2	GENERATOR INSTALLATION	(Continued)			
	<u>Supply, install, test and commission 2 No. 2.8MVA diesel generator sets complete with synchronisation panel, automatic controls, acoustic enclosures, fuel and exhaust systems, associated cabling and all ancillary equipment in accordance with HTM 06-01 Class A Category 2 requirements and project specification PEC-001 – SJH Electrical Infrastructure Specification – Phase 1. Generators shall be factory assembled, tested and CE certified by a single manufacturer, complete with stainless steel flue systems, earthing/bonding, load testing, commissioning, training and all builder's work necessary for a complete operational standby power installation.</u>				
2.B	2.8MVA Diesel Generator Set	2	Nr		
	<u>GENERAL</u>				
2.C	Testing & commissioning	1	item		
2.D	Operating and maintenance manuals	1	item		
2.E	Working drawings	1	item		
2.F	Co-ordination drawings	1	item		
2.G	As built drawings	1	item		
2.H	Identification plates, labels and the like	1	item		
2.I	Keys, tools and spares parts (as required)	1	Item		
2.J	Marking the position of holes, mortices and chases	1	Item		
2.K	Any other works in this section	1	Item		

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3 BUILDERS WORK

3.A	INSPECTION, TESTING, COMMISSIONING & HANDOVER				
	<u>The Contractor is referred to the Electrical Drawings packages, Electrical Particular Specification and MEP Builders Works Schedule for details.</u>				
	General items to be allowed for in accordance with Electrical Particular Specification.	1	item		

BUILDERS WORK

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4	GENERALLY				
	INSPECTION, TESTING, COMMISSIONING & HANDOVER				
	<u>The Contractor is referred to the Electrical Drawings packages, Electrical Particular Specification and MEP Builders Works Schedule for details.</u>				
4.A	General items to be allowed for in accordance with Electrical Particular Specification.	1	item		
4.B	Allowance made for ID Plates, labels etc.	1	item		
4.C	Liaison with and Co-Ordination of the Installation	1	item		
4.D	Site Supervision, Site Facilities and Waste Disposal	1	item		
4.E	Inspection of Installation, Complete	1	item		
4.F	Final Clean of Installation, Complete	1	item		
4.G	Testing Installation, Complete	1	item		
4.H	Commissioning Installation, Complete	1	item		
4.I	Operating & Maintenance (O&M) Manuals	1	item		
4.J	As-Built Drawings	1	item		
4.K	Client Demonstration and Handover	1	item		
4.L	Any other works in this section	1	Item		

GENERALLY

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