

PREAMBLE

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1. General Requirements

The Bidder's attention is drawn to the General Conditions of Contract (GCC), Particular Conditions of Contract (PCC), Specifications and Bid Drawings, General Specifications, SHE Manual which are to be read in conjunction with the Bill of Quantities. This Preamble shall serve as a definitive guide to the measurement of quantities and payment.

The Bidder should quote the rates considering that this contract is on Turnkey basis.

This is a contract for Design Verification, Detail Engineering, Supply, Installation, Testing and Commissioning of Environment control System (ECS), Tunnel Ventilation System (TVS), Building Management System (BMS), Electrical & Mechanical System (E&M) and DG works for two underground metro stations at CHHOTI CHAUPAR and BADI CHAUPAR on east west corridor of Jaipur metro phase 1B.

A Detail Design Consultant (DDC) has the responsibility up to the CRD & CSD stage Bidders are required to coordinate accordingly.

Bid Prices

The Bidder is required to note the following while quoting his prices:-

- (i) The Bidder is required to carefully study the provisions under the GCC & PCC and consider them while preparing his offer. Bidder shall be solely responsible for obtaining the benefits that they have considered in their bid and in case of failure to receive such benefit the Employer shall not compensate the Bidders. It will be the responsibility of the contractor to avail the maximum benefit available to JMRC in terms of the above provisions
- (ii) The rates and prices quoted for each item in the Bill of Quantities shall be as per PCC.

1.1 Quantities

For the purpose of this Contract, all unit quantities given in the Bills of Quantities are the estimated quantities of the Works and are intended in the first instance to provide a common basis for Bidding and Bid Evaluation. When a contract has been entered into, the function of priced Bills of Quantities is to provide for the valuation of the work executed. No alteration of any rate or price shall be allowed on account of any difference between the quantities billed and the actual quantities measured from the drawings.

The Bidder shall make himself completely acquainted with all conditions, obligations, specifications, drawings, etc. of the Bid Documents before giving his prices. He shall have no right to claim any price revision on the basis of ignorance of the Bid Documents or local conditions, or to make any claims as regards the integrity of the unit prices of the Bills of Quantities.

The Fan Pressure, pump heads and Sound power given in the BOQ/ Drawings are indicative and will be used for payment of item close to the rating specified in the BOQ. The contractor shall be responsible for determining the final fan pressure and pump heads as per their detailed engineering drawings, acoustic treatment requirement, and motor power based on the equipment offered, site installation and final duct routing before ordering the equipments. The contractor shall submit the calculations for acceptance of the engineer.

1.2 Units and Currency

All sizes and quantities entered in the Bills of Quantities are in metric units.

The Bidder shall fill in each column with unit rate or lump sum, whichever the case may be, for each bill item of the various Bills, provided that he should consider it a reimbursable item, on the basis of the Bid Documents and pre-bid survey. The rates and the total amount against each item have to be filled in by the Bidder.

- The Bidder are required to submit his priced offer in **Indian Rupees** or any combination of currencies as per ITB. The detail of currencies utilised in the bid offer shall be submitted in ITB.
- Progress payments in relation to each Section will be certified and paid, in accordance with the provisions **of the GCC, SCC** in the currencies shown against the relevant Bill item in the Bill of Quantities.
- Plant & equipment to be supplied from abroad and foreign component (if any) of installation services may be quoted in international trading currencies as specified above. All indigenous plant & equipment and installation services etc shall be quoted only in INR.

1.2.1 Rates and Sums to be for Work Complete

Bidders shall be deemed to have read the Bid Documents and reviewed the Drawings to ascertain the full scope of the requirements included in each item prior to filling in the rates and prices. The entered rates

and prices to include the full scope of the Contract, including overheads and profits and shall bear a proper relationship to the cost of carrying out the work described.

Notwithstanding any limits that may be implied by the wording of the individual items and/or the explanations in the Preamble, the rates and sums, which the Bidder enters in the Bill of Quantities, shall be for the work finished complete in every respect.

The Bidder shall be deemed to have taken full account of all requirements, liabilities, obligations and risks, whether expressed or implied, and to have priced the items accordingly. The Items in the Bills of Quantities are the only items against which payment will be made. The cost of any item of work not specifically described or measured in the Bills of Quantities but required for the execution of the Contract shall be considered included in the unit rates for the measured items in the Bills of Quantities. The rates and sums shall therefore include all incidental and contingent expenses and risks of every kind necessary to supply, install, test and commission (including Integrated Testing and Commissioning) complete, and remedying any defects in the whole of the Works in accordance with the Contract.

1.2.2 Allowances in rates

Full allowance shall be made in the rates and sums against the various items in the Bills of Quantities for all costs involved in performing the following except to the extent that work is specifically described and paid for in the Bills of Quantities. The list below is not exhaustive and the Bidders are expected to take all costs involved while quoting the rates that will not be subject to variation on any account.

- a) all setting out and survey work;
- b) temporary access , watching and security , lighting;
- c) paying fees and giving notices to Authorities;
- d) payment of all patent rights and royalties;
- e) safety precautions and all measures to prevent erosion and suppress fire and other hazards;
- f) interference to the Works by persons, vehicles, and the like being legitimate users of the facilities on or in the vicinity of the Site;
- g) supplying, maintaining and removing on completion, the Contractors own accommodation, offices, depots, stores, workshops, transport, welfare services and other facilities including telephones and facsimile machines and all charges in connection therewith;
- h) The supply, inspection, testing, packaging and transportation of materials and of the Works as specified including the provision and use of equipment.
- i) providing, transporting to the Site, setting to work, operating (including all fuel and consumable stores), maintaining and removing from the Site upon completion all Construction Plant and Contractor's Equipment necessary for the execution of the Works and including the cost of all tests and other requirements in respect of such; plant and equipment;
- j) working adjacent to or across existing services and installations;
- k) co-ordination and interference to the Works by the works of Designated Contractors and others employed by JMRC being legitimate users of the facilities on or in the vicinity of the Site;

- l) remedying of defects and shrinkage, and works of amendment, reconstruction, replacement of other faults, fair wear and tear excepted, during Defects Liability Periods;
- m) Protections to be implemented against Electro magnetic interference effects following line energisation.;
- n) Insurance, including all risks in supply, erection, storage, transit, third party, Workmen's Compensation and others;
- o) All tools, and equipment required for all tests prior and after delivery, and for testing and commissioning installed systems;
- p) Carrying out all modifications to the given drawings, preparing construction detailed drawings and supplying originals, copies, and electronic files in accordance with employer's requirement.
- q) All risk Insurance after arrival of goods in India
- r) Custom clearance / Port Clearance
- s) Handling at Port of arrival in India
- t) Inland transportation from port of arrival to site of work
- u) Various bank guarantees/warranties/undertakings

1.2.3 Bid Pricing

The Bidder shall take regard of the actual site conditions and the estimated quantities entered in the various bills. The Bidder shall price his bid accordingly and the unit prices entered against a bill line item shall be the full and only price paid for all work performed against that item except as described in the bid Documents.

1.2.4 Measurement and Payment

- 1) This Contract is primarily a **BOQ based contract** with items that are described herein. For the BOQ items the total price paid for a work item will be varied by the quantities actually performed. The contract may contain some lump sum items for which special payment terms are described.
- 2) The measurement and payment described is for the purpose of making a valuation of the work acceptable to the Engineer, and Interim Payments to the Contractor, as work proceeds. The works as executed will be measured for assessment of progress for interim payments in accordance with the method adopted in the Specification, the Bills of Quantities and under the items as set forth notwithstanding any custom to the contrary.
- 3) Building works will be measured in accordance with the local practice as proposed by the Contractor and accepted and approved by the Employer. For the measurement of "Numbers" and "Sets" these shall be by count, using dimensions and contents as described in the specifications.

- 4) For the purposes of making interim payment for Lump Sum items and line items not subject to re-measure, such as described as "Lot", the Contractor shall submit with his bid a breakdown of the rates making up the total for those items for which the Contractor may wish to receive interim payments. These breakdowns shall be subject to the approval of the Engineer, and no interim payment shall be made on such items until the breakdown has been approved, with the approval of Engineer. The items described as 'set' may also be broken down in a maximum of two lots for the purpose of interim payment under exceptional circumstances when it is established that the contractor is not able to complete the 'set' for reasons not attributable to him.
- 5) Notwithstanding anything stated herein the Engineer retains the right to withhold payment on any pay item due for payment when the service to be performed is not performed, or is not carried out to the Engineer's satisfaction.
- 6) Prices for documents, drawings, design calculations, test procedures, interface co-ordination documents, operation and maintenance manuals and the like for review by the Engineer shall be the full compensation for documents and the like in accordance with the specifications. Compensation shall include for the preparation, submission, and all subsequent revisions, changes required and re-submitted as necessary as required by the specifications until accepted by the Engineer.
- 7) Not Used
- 8) Prices for Integrated Testing and Commissioning shall be full compensation for the integrated testing and commissioning of plant and equipment supplied under the Contract in accordance with the drawings and specifications. Compensation shall include for preparation, submittals, and revisions as required by the Engineer of testing plans and procedures; co-ordination with other Designated Contractors; conduct of approved tests as directed by the Engineer on equipment, sub-systems, and systems; revisions, re-testing, fault finding, adjustments and reworking as necessary; submittals of all test reports and other documents all to the approval of the Engineer. The Contractor will make payment for each Section after certification and acceptance of the Employer's representatives that the sub-systems and systems, including all equipment have successfully completed the test procedures, and have been set-to-work and all test results and other documentation, as described in the specifications.
- 9) **Prices for supply items shall be for the full compensation for supplying the items in accordance with the drawings and specifications. Compensation shall include for all costs incurred in procurement/manufacture, testing, inspection, shipping, hauling, off-loading, storing at site in Jaipur. Payment will be made for the items delivered and stored in a place and manner approved by the Engineer. Payment on delivery will be made against the following documents:**
 - **provision of Indemnity bond ;**
 - **proof of insurance; and**
 - **Packing list**
 - **Type Test Certificates**
 - **Actual Purchase Bill**
 - **Inspection Report as Applicable****Stage Payment Schedule**

The payment shall be release as under:

| S.No. | BOQ Item Type | Payment after Delivery | Payment after Erection | Payment after installation and FAT | Payment after successful Testing & Commissioning i.e. integrated Testing & Commissioning & Handing over |
|-------|---|------------------------|------------------------|------------------------------------|---|
| 1. | SITC | 75% | 15% | - | 10% |
| 2. | Supply | As Quoted | - | - | - |
| 3. | ITC | - | - | - | 100% |
| 4. | Installation & equipment testing | - | - | As Quoted | - |
| 5. | System Testing and commissioning & handing over | - | - | - | 100% |

SITC – Supply, Installation, Testing & Commissioning

- 10) Prices for installation/erection of items of plant and equipment shall be for the full compensation for the installation/erection of plant and equipment in accordance with the drawings and specifications. Compensation shall include for all costs incurred for transporting to location, off-loading and moving to point of installation/erection; provision of specified foundations; preparing for installation/erection and mounting on foundations; supply of left out items, aligning, fastenings and securing devices; adjusting as necessary, making good and clearing the location on completion, all to the approval of the Engineer. Payment will be made for each item of installed plant and equipment completed and accepted by the Engineer.
- 11) Testing and commissioning shall be full compensation for the testing and commissioning of Plant and equipment forming the Works in accordance with the specifications. Compensation shall include for all testing and putting-to-work of all equipment, sub-systems, and systems; re-testing, fault finding, adjustments and reworking as necessary; submittals of all test reports and other documents all to the approval of the Engineer. Payment will be made after certification by the Contractor and acceptance by the Engineer that the sub-systems and systems, including all equipment have successfully completed the test procedures, and have been set-to-work and that all test results and other documentation, as described in the specifications, have been approved by the Engineer.

1.3 Explanation for BOQ (Bill of Quantities)

The Bill of Quantities (BOQ) has schedule as under:

PRICES FOR WORKS ON UNDER GROUND SECTION FROM CHHOTI CHAUPAR TO BADI CHAUPAR.

PART-I, ECS,TVS AND BMS WORKS

- PART-A : BOQ for Associated Electrical Works
- PART-B : BOQ for ECS Works

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- PART-D : BOQ for BMS works ECS and E&M
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Detailed Scope of works for AMC beyond DLP under the contract is given in the Appendix-B1, and Details of Spares for which the price is to be quoted is placed in the Appendix-C1. The list of preferred make is given in Appendix-A1.

PART-II, E&M WORKS

- PART A : BOQ FOR ELECTRICAL WORKS
- PART B : BOQ FOR PLUMBING WORKS
- PART C : BOQ FOR FIRE PROTECTION SYSTEM
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Details of Spares for which the price is to be quoted is placed in the Appendix-B2. The list of preferred make is given in Appendix-A1.

PART-III, DIESEL GENERATOR (DG SET- OPTIONAL)

- BOQ FOR DIESEL GENERATOR(DG SET)

The item descriptions are intended to briefly describe the work to be performed under that item and to identify associated work. It is not a full and complete description of the work to be performed. The Contractor shall carry out all the work necessary to meet the requirements of the Specification. The BOQ item shall be executed in conjunction with the specification.

Schedule for Civil works items: CPWD General Specifications for certain building works shall also from part of the bid. Work for these items material must be executed according to these specifications. The Bidder shall quote his price in percentage above or below the estimated cost for these items.

- 1.4 Man Power need to be deployed as per the requirement of work fronts as made available. Key managers need to be mobilized within one month from the date of issue of LOA.**
- 1.5 The work of AMC beyond DLP shall be awarded by JMRC if so desires through a supplementary contract, however the contractor shall be bound to execute the same.**
- 1.6 The prices for AMC shall be inclusive of service tax. Bidders need to submit the performance guarantee for an amount of 10% of supplementary contract value at the time of signing of supplementary agreement.**
- 1.7 The Bidders are required to assist in operation of plants for initial period of 6 Months beyond the revenue operation date.**