

## CORRIGENDUM No.1

06.08.2019

**Tender No: WAP/ENVT/CSEZ/ H-3082/2019/10 dated 15.07.2019**

**Title: NIT for Supply, Installation, Testing & Commissioning of Passenger Lift for CSEZ Admin Building**

<b>Sl. No</b>	<b>Event</b>	<b>As per uploaded NIT</b>	<b>Revised as follows</b>
1	Last date & time of Procurement/ download of tender Document	06.08.2019 up to 11:00 hours	20.08.2019 up to 11:00 hours
2	Last date & time for online submission of Technical & Financial Bid.	06.08.2019 up to 13:00 hours	20.08.2019 up to 13:00 hours
3	Offline Submission of Tender Fees, EMD etc. as detail in Tender	06.08.2019 up to 15:00 hours	20.08.2019 up to 15:00 hours
4	Online opening of Technical Bid	06.08.2019 at 15:30 hours	20.08.2019 at 15:30 hours
5	Section – VIII: Additional Condition & Technical Specifications for Lift	<b>Revised Section –VIII is attached</b>	

## **SECTION-VIII**

### **ADDITIONAL CONDITIONS AND TECHNICAL SPECIFICATIONS**

#### **GENERAL CONDITIONS**

##### **1. Scope**

These general specifications cover the details of equipment to be supplied, inspection as may be necessary before dispatch, delivery at site, installation, testing commissioning and handing over in working condition of Passenger Lifts including obtaining statutory approvals.

##### **1.1 Related Documents:**

These technical specifications shall be read in conjunction with the General conditions of contract with all correction slips, as well as schedules and drawings. In the event of any discrepancy between those specifications and inter-connected contract documents, the technical requirements as per the tender specifications shall be followed and deemed to be having over-riding value.

##### **2. Only the following manufactures of Lifts are Approved for this work:**

1. M/s OTIS
2. M/s Mitsubishi
3. M/s Schindler
4. M/s Johnson
5. M/s Kone

##### **3. Conformity with statutory Acts, Rules, Regulations, Standards and Safety Codes:**

The installation shall be carried out in conformity with the local lifts Act and Rules. For example, the Bombay Lifts Act for Bombay, the West Bengal Lifts and Escalators Act for West Bengal, the Bombay Lifts Act as extended to Delhi for Delhi etc. All other places where no local Lifts Act as in force the Bombay Lift Act shall be followed. The installation shall also conform to requirements of local Municipal Bylaws. Extracts of Bombay Lift Act and Rules as applicable for Delhi are appended at Appendix 'IV' of CPWD General Specification for Electrical works Part-III- Lifts & Escalators -2003

##### **3.1 Indian Electricity Act Rules:**

All electrical works in connection with installation of electric lifts shall be carried out in accordance with the provisions of Indian Electricity Act 1910 and the Indian Electricity Rules 1956 amended upto date. The electrical works shall also conform to CPWD General Specifications for Electrical works Part-I(Internal) 2005 and Part-II (External) 1994 amended up to date wherever relevant.

##### **3.2 Safety Codes and Labor Regulations:**

The contractor shall at his own expenses arrange for the safety provisions as per the statutory regulations, IS recommendations, regulations under factory Act etc., where applicable and instructions issued from time to time in respect of all labour employed by him directly or indirectly for the installation of the lift.

The contractor shall provide necessary barriers, warning signs and other safety measures etc., wherever necessary so as to avoid accident. In addition all safety procedures as outlined in Appendix 'VI' shall be complied with.

In case of default the department shall be at liberty to make arrangements and provide facilities as aforesaid and recover the cost from the contractor. He shall also indemnify CPWD against claims for compensation arising out of his negligence in this regard.

### **3.3 Fire Regulations:**

The installation shall be carried out in conformity with the local fire regulations and rules there under wherever they are in force.

### **4. Works to be done by the contractor:**

In addition to the manufacture, supply, installation, testing and commissioning of the lift including all auxiliary equipment, following works shall be deemed to be included within the scope of the work to be done by the contractor.

4.1 All minor building work necessary for installation of equipment such as making of openings in walls/floors, either of RCC or brick masonry etc. and restoring them to original condition and finish. The scope of minor building work includes all grouting of foundation concrete pad to be formed or made as base for supporting R.S. joist etc., grouting and anchoring of all boards clamps, supports foundation bolts, installation in position of R.S. joists in the machine room, lift well or in the pit. Such works shall exclude cutting of marble work and construction of partition wall wherever involved.

4.2 Supply of necessary R.S. joists or angle iron supports brackets etc. for installation of the lift either in the machine room or at other placers as may be necessary including their installation in position

4.3 All electrical works except bringing in main connection and earth connection to the machine room terminated on suitable switch fuse unit/board. All electrical works including inter-connection from this switch/board and loop earthing from the earth bar to be provided in the machine room shall be done by the successful contractor.

4.4 Responsibility to ensure safety of lift materials against pilferage damage till the installation is handed over to the consignee.

4.5 All scaffolding as maybe necessary in the lift well during erection work and subsequently removed.

4.6 Temporary barricades with caution boards at each landing to prevent accident during execution of work.

4.7 Supply and installation of landing facia plates made of steel, car apron plates, sill support angles with necessary clamps, foundation bolts supports etc.,as are necessary in connection with the installation of the lift.

4.8 Steel ladder to be provided for access to lift pit wherever required under regulations.

4.9 The Bidder shall on completion of the project, obtain a clearance certificate from Kerala State Electrical Inspectorate as per prescribed norms. All the documents required for the same have to be prepared by the agency for obtain the clearance. **The statutory payments required for the same if required will be reimbursed against submission of evidentiary proof.**

### **5. Coordination with other agencies:**

The successful contractor shall coordinate lift installation work with other contractor/agencies engaged in construction of building if any and exchange freely all technical information so as to make the execution of works contract smooth.

### **6. Completeness of tender:**

All fittings, equipment, units assemblies and accessories, hardware, foundation bolts, terminal lugs for electrical connections, cable glands, junction box and items which are useful and necessary for efficient assembly in operation and installation shall be deemed to have been included in the scope of work. The installation shall be complete in all details whether such details have been mentioned in the specifications or not.

## 7. Information to be supplied by contractor after award of work

Within a period of 2 weeks from the date of receipt of letter of acceptance the contractor shall provide the department his programme bar chart for submission of preliminary drawing, manufacturing of equipment, installation, testing, commissioning and handing over. This should be correlated with the building completion programme. The contractor shall be required to submit in required copies the following drawings and information within the above 2 weeks period for approval of the Kerala State Electrical Inspectorate/department before commencing the work.

- a. All general arrangement drawings:
- b. Details of foundation for equipment, load data location etc., of various assembled equipment as may be needed generally by other agencies for purpose of their work. The data will include breaking load on guides, reaction of buffers on lift pits, reaction on support points in machine room, lift well etc.
- c. Complete layout dimensions for every unit/group of units with dimensions required for erection purposes.
- d. Any other drawing/information not specifically mentioned above but deemed to be necessary for the job by the contractor.
- e. List of items to be carried out by the department in accordance with the tender accepted.

## 8. Commencement of work

As soon as the preliminary drawings are approved, the contractor should commence work. The contractor shall also send seven sets of final drawings to the department who shall return one copy.

- a. These specifications together with drawing cover manufacture, testing as may be necessary before dispatch, delivery at site, all preparatory works, supply, assembly, and installation, testing & commissioning and putting into operation of lifts

9. The work shall be executed as per CPWD General Specifications for Electrical Works (Part-III Lifts & Escalators 2003 amended upto date) as per relevant IS and as per directions of Engineer-in-charge. These additional specifications are to be read in conjunction with above and in case of variations; specifications given in this Additional conditions shall apply. However, nothing extra shall be paid on account of these additional specifications & conditions as the same are to be read along with schedule of quantities for the work.

11. The tenderer should in his own interest visit the site and familiarize himself with the site conditions before tendering.

12. No T&P shall be issued by the Department and nothing extra shall be paid on account of this.

## 13. Terms of Payment

On account payments for part work (after stipulated and statutory deductions) as assessed by the Engineer – in-charge for the applicable items in the Contract shall be payable at part rates not exceeding the percentage indicated against the stages of work.

S. N	Stage of work	Percentage of Rate (On pro-
a	After initial inspection and delivery at site in good condition etc.	80%
b	After completion of Installation in all respect.	10%
c	After testing commissioning trial run and handing over to the department.	10 %

For other items, the part rates will be decided by the Engineer-In-Charge of the work and shall be binding on the contractor.

#### **14. Completeness of Tender:**

- a) All sundry equipment, fittings, unit assemblies, accessories, hardware items, foundation bolts, termination lugs for electrical connections and all other items which are useful and necessary for efficient assembly and installation of equipment and components of the work shall be deemed to have been included in the tender irrespectively of the fact whether such items are specifically mentioned in the tender documents or not.
- b) For item/equipment requiring initial inspection at manufacturer's works the contractor will intimate the date of testing of equipments at the manufacturer's works before dispatch. The department also reserves the right to inspect the fabrication job at factory and the successful tenderer has to make the arrangement for the same. The successful tenderer shall give sufficient advance notice regarding the dates proposed for such tests/ inspection to the department's representative(s) to facilities his presence during testing / fabrication. The Engineer-in-charge at his discretion may witness such testing /fabrication. The cost of the Engineer's visit to the factory will be borne by the Department. Also equipment may be inspected at the manufacturer's premises, before dispatch to the site by the contractor.

#### **15. Storage and Custody of Materials:**

The lift machine room may be used for storage of sundry materials and erection equipments if available or else the agency has to make his own arrangement. No separate storage accommodation shall be provided by the department. Watch and ward of the stores and their safe custody shall be the responsibility of the contractor till the final taking over of the installation by the department.

#### **16. Care of Building:**

Care shall be taken by the contractor while handling and installing the various equipments and components of the work to avoid damage to the building. He shall be responsible for repairing all damage and restoring the same to their original finish at his cost. He shall also remove at his cost all unwanted and waste materials arising out of the installation from the site of work.

#### **17. Performance Guarantee:**

The tender shall guarantee among other things, the following-

- (a) Quality, strength and performance of the materials used.
- (b) Safe mechanical and electrical stress on all parts under all specified conditions of operation.
- (c) Satisfactory operation during the maintenance period.

#### **18. Guarantee**

All equipment's shall be guaranteed for a period of 12 months from the date of taking over the installation by the department against unsatisfactory performance and/or break down due to defective design, workmanship of material. The equipment or components, or any part thereof, so found defective during guarantee period shall be forthwith repaired or replaced free of cost, to the satisfaction of the Engineer-in-charge. In case it is felt by the department that undue delay is being caused by the contractor in doing this, the same will be got done by the department at the risk of and cost of the contractor. The decision of the Engineer-in-charge in this regard shall be final.

#### **19. Data Manual and Drawings to be furnished by the tenderers:**

- a) **With Tender:** The tenderer shall furnish along with the technical bid of the tender: detailed technical literature, pamphlets and performance data for appraisal.

**b) After Award of work:** The successful tenderer would be required to submit the following drawings within a month of award of work for approval before commencement of installation.

(a) All general arrangement drawings.

(b) Details of foundations for the equipment, load data, location etc. of various assembled equipment as may be needed generally by other agencies for purpose of their work. The data will include breaking load on guides, reaction of buffers on lift pits reaction on support points in machine room, lift well etc.

(c) Complete layout dimensions for every unit/ group of units with dimensions required for erection purposes.

(d) Any other drawing/ information not specifically mentioned above but deemed to be necessary for the job by the contractor.

The successful tenderer should furnish well in advance three copies of detailed instructions and manuals of manufacturers for all items of equipment regarding installation, adjustments operation and maintenance i/c preventive maintenance & trouble shooting together with all the relevant data sheets, spare parts catalogue and workshop procedure for repairs, assembly and adjustment etc. all in triplicate.

## **20. Extent of Work**

- a) The work shall comprise of entire labour including supervision and all materials necessary to make a complete installation and such tests and adjustments and commissioning as may be required by the department. The term complete installation shall not only mean major items of the plant and equipment covered by specifications but all incidental sundry components necessary for complete execution and satisfactory performance of installation with all layout charts whether or not those have been mentioned in details in the tender documents in connection with this contract.
- b) Minor building works necessary for installation of equipment, foundation, making of opening in walls or in floors and restoring to their original condition, finish and necessary grouting etc. as required.
- c) Maintenance (Routine & Preventive) for one year from date of completion and handing over.
- d) The work is turnkey project. Any item required for completion of the project but left in-advertently shall be executed with in the quoted rates.
- e) Temporary scaffolding for execution of work.

## **23. Inspection and Testing:**

- a) Copies of all documents of routine and type test certificates of the equipment, carried out at the manufacturers premises shall be furnished to the Engineer-in-charge and consignee.
- b) It is the responsibility of the agency to obtain all the **statutory approvals required for installation and commissioning from Kerala State Electrical Inspectorate**. The statutory payment required for the same will be paid/reimbursed to the agency against evidentiary proof.
- c) After completion of the work and **statutory approvals for commissioning**, the contractor shall offer the installation for testing operation and handing over.

## **24. Compliance with Regulations and Indian Standards:**

- a) All works shall be carried out in accordance with relevant regulation, both statutory and those specified by the Indian Standards related to the works covered by these specifications. In particular, the equipment and installation will comply with the following:

- (i) Factories Act.
  - (ii) Indian Electricity Rules.
  - (iii) I.S. & BS Standards as applicable
  - (iv) Workmen's Compensation Act
  - (v) Statutory norms prescribed by local bodies like CEA, NDMC etc.
- b) Nothing in this specification shall be construed to relieve the successful tenderer of his responsibility for the design, manufacture and installation of the equipment with all accessories in accordance with currently applicable statutory regulations and safety codes.
- c) Successful tenderer shall arrange for compliance with statutory provisions of safety regulations and departmental requirements of safety codes in respect of labour employed on the work by the tenderer. Failure to provide such safety requirement would make the tenderer liable for penalty of Rs. 50/- for each default. In addition, the department will be at liberty to make arrangement for the safety requirements at the cost of tenderer and recover the cost thereof from him.

## **25. Indemnity**

The successful tenderer shall at all times indemnify the department, consequent on this works contract. The successful tenderer shall be liable, in accordance with the Indian Law and Regulation for any accident occurring due to any cause and the department shall not be responsible for any accident or damage incurred or claims arising there from during the period of erection, construction and putting into operation the equipment and ancillary equipment under the supervision of the successful tenderer in so far as the latter is responsible. The successful tenderer shall also provide all insurance including third party insurance as may be necessary to cover the risk. No extra payment would be made to the successful tenderer due to the above.

## **26. Erection Tools**

No tools and tackles either for unloading or for shifting the equipment for erection purposes would be made available by the department. The successful tenderer shall make his own arrangement for all these facilities.

## **27. Co-operation with other agencies**

The successful tenderer shall co-ordinate with other contractors and agencies engaged in the construction of building, if any, and exchange freely all technical information so as to make the execution of this works contract smooth. No remuneration should be claimed from the department for such technical cooperation. If any unreasonable hindrance is caused to other agencies and any completed portion of the work has to be dismantled and re-done for want of cooperation and coordination by the successful tenderer during the course of work, such expenditure incurred will be recovered from the successful tenderer if the restoration work to the original condition or specification of the dismantled portion of the work was not undertaken by the successful tenderer himself.

## **28. Insurance and Storage**

All consignments are to be duly insured up to the destination from warehouse to worksite at the cost of the supplier. The insurance covers shall be valid till the equipment is handed over duly installed, tested and commissioned.

## **29. Verification of correctness of Equipment at Destination**

The contractor shall have to produce all the relevant records to certify that the genuine equipment from the manufacturers has been supplied and erected.

### **30. Painting**

This shall include cost of painting of entire exposed iron work complete in the installation. All equipment works shall be painted at the works before dispatch to the site.

### **31. Training**

The scope of works includes on job technical training of two persons at site. Nothing extra shall be payable on this account.

### **32. Maintenance**

- a) Sufficient trained and experienced staff shall be made available to meet any exigency of work during the guarantee period of one year from the handing over of the installation.
- b) The maintenance, routing as well as preventive for one year from the date of taking over the installation as per manufacturer's recommendation shall be carried out and the record of the same shall have to be maintained.

### **33. Interpreting Specifications**

In interpreting the specifications, the following order of decreasing importance shall be followed in case of contradictions:

- (a) Schedule of quantities
- (b) Technical Specifications
- (c) Drawing (if any)
- (d) General Specifications
- (e) Relevant IS or other international code in case IS code is not available.

### **34. Running in Period:**

After satisfactory final inspection, the contractor shall demonstrate the trouble free running of the installation for a period of not less than 30 days before the department takes over. During this period the lift shall be kept either automatic or manual mode by the department. After the installation has operated without any major breakdown for 30 days it shall be taken over by Department. During this 30 days period the lift shall be deemed to have run trouble-free, if the number of break downs during this period are not more than four calls excluding false calls and levelling defects. The contractor should include one year of free running maintenance after completion of 30 days of trouble free running.

### **35. Date of Acceptance:**

Subject to the guarantee clause date of taking over the installation after 30 days of trouble free operation shall be the date of acceptance. Any undue wear and tear of components or during the running in period shall be made good by the contractor free of charge.

### **36. Intending tenderer may note that IEEMA price variation clause is not applicable in this contract.**

A separate supplementary agreement shall be made with the associated lift manufacturer of successful tenderer for item-97 of sub head VIII of schedule of work i.e. Comprehensive Maintenance for 5years after free guarantee period of 1<sup>st</sup> one year. The security deposit corresponding to the contract amount for SITC of lift (Item 98 of SH-VIII) shall be released on the expiry of guarantee period stipulated in the contract and only after entering into the maintenance contract with department/ client.

### **37. Maintenance contract agreement will be executed with the Manufacturer after completion of free maintenance period of 1 year. Security deposit will be released only after the same.**

**TECHNICAL SPECIFICATIONS FOR LIFT**

		<b>Passenger Lift</b>
No. of units		One
Designation		Passenger
Group	`Car Group Control	
General	Load (kg)	680kg
	Passengers (No.) at 68kg	10
	Speed (m/s)	1.00
	Drive type	Gearless
	Car operating Panel	1 no.
Floors Served	Travel floors	G plus 1 Floor
	Openings floors	G plus 1 Floor
	Number of openings	2
	Front openings	Yes
	Rear openings	No
Car sizes	Min. Inside Width (mm)	As per IS/NBC
	Min. Inside Depth (mm)	As per IS/NBC
	Inside height to false ceiling (mm)	As per IS/NBC
	Roof pocket	No
Doors	Type	SOD
	Clear width (mm)	900
	Clear height (mm)	2,000
	No. entrances per lift car	One
Lift well	Inside width (mm)	1850
	Inside depth (mm)	1950
	Pit depth (mm)	1600
	Travel (m)	3.35
	Headroom (mm)	4100 (if required shaft can be extended)
	Counterweight Safety Gear	Yes
Machinery Space	Separate from lift well or MRL	MRL