

DOC. NO. 4
SPECIFICATIONS

PHILIPPINE BIDDING DOCUMENTS

(As Harmonized with Development Partners)

Procurement for the

MODERNIZATION OF TWO (2) UNITS PASSENGER ELEVATORS IN THE HIGHER EDUCATION DEVELOPMENT CENTER (HEDC) BUILDING

Location: HEDC Bldg., C.P. Garcia Ave., UP Campus, Diliman, Quezon City

Government of the Republic of the Philippines

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Section VI. SPECIFICATIONS

| Item | Specification | Statement of Compliance |
|------|---------------------------------|---|
| | | <p>Bidders must state here either "Comply" or "Not Comply" against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of "Comply" or "Not Comply" must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer's un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidders statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the provisions of ITB Clause 3.1(a)(ii) and/or GCC Clause 2.1 (a)(ii).</p> |
| | TECHNICAL SPECIFICATIONS | |



**PROCUREMENT FOR THE MODERNIZATION OF TWO (2) UNITS
PASSENGER ELEVATORS CHED CENTRAL OFFICE (CHED-CO) BUILDING,
C.P. GARCIA AVE., DILIMAN, QUEZON CITY**

The passenger elevator shall have the following minimum specifications and features:

SPECIFICATIONS

| | |
|--------------------------|---|
| Elevator Use/Model | Two (2) Units Passenger |
| Capacity | 1000kgs |
| Speed | 1.0m/sec |
| Motor | Permanent Magnet Motor |
| Traction machine | Gearless |
| Car Design | |
| No. of Stops | 4 |
| Number of Openings | 4 |
| Ceiling | Standard Hairline Stainless Steel |
| Walls | Hairline finished stainless steel sheet, 1.2mm thickness with hairline finished stainless steel round pipe type handrail at three (3) sides |
| Doors | Hairline finished stainless steel sheet, 1.2mm thickness |
| Front Return Panel | Hairline finished stainless steel sheet, 1.2mm thickness |
| Door Opening | 900mm (W) x 2100mm (H) |
| Floor | Granite Tiles (12mm thickness) |
| Door Type | Hairline finished stainless steel with Safety rays (at least 2-beams) |
| Car Sill | Hairline finished stainless steel with safety rays (at least 2-beams) |
| Doors in Floors | Hairline finished stainless steel sheet |
| Emergency Light in Car | Emergency light with charger and battery |
| Entrance Sill | Extruded hard aluminum |
| Signal Fixtures | Hall buttons , Car position indicator, Combined hall buttons, Hall position indicator and Direction arrows |
| Electric Power Supply | 220VAC, 3 Phase, 60 Hertz |
| Electric Lighting Supply | 220VAC, 1 Phase, 60 Hertz |
| Other Features | Automatic Rescue Device |

GENERAL GUIDELINES

This TERMS OF REFERENCE establishes requirements of the Commission on Higher Education for the supply and installation of elevator equipment parts for the upgrading/retrofitting and remodeling of two (2) units passenger type elevators, 1,000kgs capacity, 1.0m/sec rated speed with 4 stops/4 door openings. The modernization covers the supply and installation of the following: **main control cabinet system, traction machine, steel rope, new encoder, automatic rescue device, car opening panel, hall button and hall position indicator, elevator hall door lock cable, shaft switch/elevator leveling sensor, traveling cable, communication cable, leveling plate, leveling magnetic, stable switch, voice announcement, arrival chime, car door mechanical hanger operator, landing door mechanical hanger, car roof inspection box and cable, pit inspection box, car ceiling/flooring/walls, speed governor and overload device alarm protection.**

The Elevator Installer/Contractor shall be an Authorized Installer by the Manufacturer and to have at least 5 years in the Installation, Testing and Commissioning, Operation, Maintenance and Training, with at least Two (2) similar finished projects of passenger elevator system.

MOBILIZATION

- The Contractor shall prepare all necessary materials and equipment needed for mobilization and shall be placed only on the area designated by CHED.
- Prior to the commencement of the project, the contractor shall undertake a thorough examination of the area to avoid difficulties in the implementation of the project that would adversely affect the operation of CHED.
- The Contractor shall secure necessary Access/Work Permit from the CHED prior to the commencement of the project.

SCOPE OF WORK

The Contract shall include but not limited to the following works:

- Provision of new elevator equipment parts and materials for the upgrading/retrofitting and remodeling of two (2) units passenger elevator system in the HEDC Building, using the existing elevator shaft.
- All civil works needed for the modification of elevator shaft slab, for the dismantling and installation of elevator equipment and accessories.
- All minor civil works including holes for the armored cable entry, louvers, and cutouts or modification required for the installation of the equipment and testing to final finishes.
- All dismantling and clearing of the old elevator parts, equipment and devices, with proper inventory and placed in secured location designated by CHED.
- Rectification of water proofing membrane (if any) due to damages caused by the dismantling and installation of elevator equipment parts.
- Rectification of any water leak along elevator shaft and pit, if any.
- Transportation of materials and equipment for installation purposes.
- Provide spare parts, special tools, testing and diagnostic equipment and measuring instruments.
- Training and transfer of technology.
- Documentation
- Maintenance for a specified period of one (1) year
- Services

SERVICES

The Services to be performed by the Contractor shall include, but not limited to, the following:

- Design, manufacture, supply, system quality management, installation, testing, including integrated testing and commissioning of the completed system as brought out above;

- Submission of shop drawings re: installation of elevator components for approval before commencement of work at site/fabrication/manufacture (if any). Such drawings shall be based on the requirements laid down in the specifications and as per site conditions. The manufacture of equipment shall commence only after the drawings are approved by CHED.
- PERT/CPM/Bar Chart and construction schedule for the execution of work.
- The Contractor shall ensure that senior planning and erection personnel from his organization are assigned exclusively for the project. They shall be at least a licensed Mechanical, Electrical or Civil Engineer by qualification and have minimum 5 years' experience in this type of installation. The Contractor shall appoint one (1) senior supervisor/resident engineer posted at the site on full time basis. Such supervisor shall be licensed engineer and have a minimum 5 years' experience in this type of installation.
- System operations and maintenance support services;
- Training of Procuring Entities' Maintenance Unit staff.
- After the completion of work and before the issuance of Certificate of Final Completion, work shall be thoroughly cleaned, and properly adjusted, so that it is in proper operating condition. The entire work shall be left in a clean condition satisfactory to the CHED.
- Decommissioning, removal and/or disposal of temporary works, and;
- Obtaining statutory clearances for the commissioning of the two (2) units passenger elevators from the civil authorities (Mechanical Permit and Permit to Operate).

MATERIAL RECOVERY

- The contractor shall remove all redundant materials and cables from the site. The contractor shall handle all redundant equipment with care and deliver to a location designated by CHED where it shall be stored in a neat and orderly manner.
- Recovery work shall occur after the completion of every stage of the above mentioned works and as directed by the CHED representative/s/inspection team in-charge.

DESIGN AND PERFORMANCE REQUIREMENTS

- **Compliance:** Design, fabrication and performance shall comply with all the latest applicable provisions of the Codes, Standards and recommendation of the entities listed below.
- **Codes:** work in this Section shall comply with all governing local codes, National Electrical Code, and all "Local Laws" and cited reference standards; appeals ruling and standard.
- **Standards:** Except as modified by governing Codes and by this Section, Work shall comply with the latest governing provision standards.
- **Elevator equipment and components:** shall be designed, constructed, installed and adjusted to secure performance in accordance with the current applicable codes and within the original manufacturer's design standards with respect to smooth, quiet, convenient and efficient operation, durability, economy of maintenance and operations, standards of safety.

DELIVERY, STORAGE AND HANDLING

- Work shall commence within seven (7) calendar days upon receipt of the Notice to Proceed (NTP). CHED will continue in operation during the execution of this contract and the Contractor shall cooperate with CHED in scheduling the work. The Contractor shall carry on its work in such a way as not to cause interruption of or interference with the operations of CHED.
- **Delivery:** Materials shall be delivered ready for use, in the approved manufacturers original and unopened containers and packaging, bearing the label as to type of materials, brand name and manufacturer's name.
- **Storage:** Materials shall be stored under cover in dry and clean location designated by CHED. Delivered materials which are damage or otherwise not suitable for installation shall be removed and replaced with acceptable materials at no additional cost to the CHED.

ACCEPTANCE INSPECTION AND TEST

- Upon completion of the installation work for the elevators, perform all acceptance and test with representative/s of CHED and Contractor.

- All malfunction and deficiencies revealed by the test shall be forthwith corrected by the Contractor at no additional cost to CHED
- All safety devices shall be tested for proper operation.
- Run test.

MODE OF PAYMENT

- Upon acceptance of NOTICE TO PROCEED, the Contractor in accordance with the Project Delivery shall be the basis for the Payment.

| Particular | PROJECT DELIVERY | PAYMENTS |
|------------|--|----------|
| Part 1 | Submission of program of work, PERT/CPM and construction schedule. surety bond | 15% |
| Part 2 | Dismantling, installation, testing and commissioning of elevator 1 | 40% |
| Part 3 | Dismantling, installation and testing of elevator 2 | 35% |
| Part 4 | Final testing, commissioning and upon CHED's representative/s evaluation of 100% completion & acceptance including the contractor's submission of complete documentary requirements/turnover | 10% |

- The penalty for each day of delay shall be one-tenth (1/10) of one percent (1%) of the total unperformed works.

PROJECT DURATION

- 150 - Calendar Days from Notice to Proceed (NTP) to completion and handover.
- The Contractor shall consider that the dismantling of the old elevators and the installation of new elevators shall be phased that at any one time, there will be one (1) elevator working:

| PARTICULAR | ELEVATOR 1 | ELEVATOR 2 |
|------------|--|--|
| Part 1 | Submission of program of work, PERT/CPM and construction schedule. surety bond | |
| Part 2 | Dismantling, installation, testing and commissioning of elevator 1 | Old (existing) elevator 2 is operational |

| | | |
|--------|--|---|
| Part 3 | New/modernized elevator 1 is operational | Dismantling, installation and testing of elevator 2 |
| | New/modernized elevator 1 is operational | New/modernized elevator 2 is operational |
| Part 4 | Final testing, commissioning and upon CHED's representative/s evaluation of 100% completion & acceptance including the contractor's submission of complete documentary requirements/turnover | |

WARRANTY

- In order to assure that manufacturing defects shall be corrected by the Contractor, a warranty shall be required from the Contractor for a period of one (1) year. The warranty shall include monthly preventive maintenance, including labor and parts. Warranty obligations shall commence upon Completion and Final Acceptance of the Project.

The obligation for the warranty shall be covered by, at the Contractor's option, either retention money in an amount equivalent to **ten percent (10%)** of every progress payment or a special bank guarantee equivalent to **ten percent (10%)** of the total Contract Price. The said amount shall only be released after the lapse of the warranty period.

STANDARD FEATURES

- If a car stops between floors due to some equipment malfunction, the controller checks the cause and if it is considered safe to move the car, the car will move to the nearest floor at a low speed and the doors will open.
- If a car stops at a door zone due to the failure of normal power, the car will re-level to secure the floor level with the doors open after the normal power has recovered.
- When a car has responded to the final car call in one direction, the system regards remaining calls in the other direction as mistakes and clears them from the memory.
- If the elevator doors do not open fully at the destination floor, the doors will close, the car automatically moves to the nearest or next floor where the doors will open.
- A buzzer sounds to alert the passengers that the car is overloaded. The doors will remain open and the car will not leave the floor until enough passenger exited the car.

- Should an obstacle prevent the door from closing, the doors will repeatedly open and close until the obstacle is removed.
- Closing can be reopened by pressing the hall button corresponding to the traveling direction of the car.
- Exclusive operation where the car is withdrawn from the group control operation for independent use such as maintenance or repair, and respond only to car calls.
- An infrared-light beam cover the full width of the door as it opens or closes to detect passenger or object.

ENHANCEMENT FEATURES

- In the event of power failure, the elevators own rechargeable battery power moves the car to the nearest floor.
- A full-loaded car will by-pass hall calls in order to maintain maximum operating safety.
- If there is no calls for a specific period, the cars lighting and ventilation fan is automatically shut off to conserve energy.
- Emergency bell.
- If the doors remain open longer than the preset period, an override alarm alerts the passengers that the doors will close.
- Voice announcer to announce the car direction and floor number.
- A Two (2) way communication in the car connected to Ground Floor Entrance Guard Counter.
- Emergency lighting, turns ON, at the least of 2 hours, immediately when power fails, and provide a minimum level of illumination within the car.

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