Republic of the Philippines
CAVITE STATE UNIVERSITY
Don Severino delas Alas Campus
Indang, Cavite

BILL OF QUANTITIES

REPAIR AND IMPROVEMENT OF INTERNATIONAL HOUSE II
2nd POSTING
ABC: ₱5,842,928.32 **Bill of Quantities**
COLLEGE/UNIT/CAMPUS: MAIN CAMPUS

Item No.	Description	Unit	Quantity	Unit Price (Pesos)	Amount (Pesos)
I	SITE CLEARING AND PREPARATION (Pesos _____ _____ _____ and _____ centavos)				
II	CARPENTRY WORKS (Pesos _____ _____ _____ and _____ centavos)				
III	MASONRY AND TILE WORKS (Pesos _____ _____ _____ and _____ centavos)				
IV	PLUMBING WORKS (Pesos _____ _____ _____ and _____ centavos)				
V	ELECTRICAL WORKS (Pesos _____ _____ _____ and _____ centavos)				
VI	PAINTING WORKS (Pesos _____ _____ _____ and _____ centavos)				
	GRAND TOTAL				_____
	Write grand total in words	_____ _____ _____			

Submitted by: _____ Date: _____
Name of Bidder/Bidder's Representative: _____
Position: _____
Construction Company/Contractor: _____

CAVITE STATE UNIVERSITY

SCOPE OF WORK:

A. REPAIR AND IMPROVEMENT OF INTERNATIONAL HOUSE II – 2nd POSTING

GENERAL NOTES:

1. The project should be finished in 180 calendar days.
2. Site inspection is a must. Verify the actual condition of the site.
3. Provide the following:
   - Billboard
   - Bankhouse with office
   - Temporary comfort rooms
   - Site temporary enclosure may be blue sack or any suitable materials that may enclose the workplace.
4. The area should be cleared/cleaned before and after the construction work at least ten meters away from the building line. Unusable used formworks, excessive soil fill, and all other unwanted debris of construction works should be disposed properly.
5. All areas affected by the renovation/ repair works shall be restored/ retouched plain cement finished.

B. Technical Description

I. Site Clearing and Preparation

1. Function Hall (Ground Floor)
   - This work includes dismantling of the following:
     - Ceiling including ceiling joists
     - Lighting fixtures, wiring devices and electrical materials
     - All dismantled ceiling boards and ceiling joists will be subjected to inventory and inspection by the project inspector/end-user before disposal
2. Comfort Rooms (Function Hall at Ground Floor)
   - This work includes dismantling of the following:
     - Door
     - Ceiling including ceiling joist
     - Plumbing Fixtures
     - Lighting fixtures, wiring devices and electrical materials
     - All doors and hardwares must be turn over to the project inspector/end-user
     - All dismantled ceiling boards and ceiling joists will be subjected to inventory and inspection by the project inspector/end-user before disposal
     - All dismantled plumbing and electrical fixtures will be subjected to inventory and inspection by the project inspector/end-user before disposal.
     - Chipping and removal of floor and wall tiles
3. Guest Rooms (Ground Floor to Fourth Floor)
   - This work includes dismantling of the following:
     - All main doors of the guest rooms including door jamb
     - Damaged ceiling and cornices at the following rooms:
       - ❖ 106
       - ❖ 110
       - ❖ 112
       - ❖ 203
       - ❖ 205
       - ❖ 206
       - ❖ 208
       - ❖ 210
       - ❖ 212
       - ❖ 305
       - ❖ 311
     - Doors and door jamb leading to balcony at the following rooms:
       - ❖ 201
       - ❖ 203
       - ❖ 204
       - ❖ 205
       - ❖ 303
       - ❖ 306
       - ❖ 313
       - ❖ 409
     - Bathrooms
       - ❖ Door
       - ❖ Ceiling including ceiling joist
       - ❖ Plumbing Fixtures

❖ Lighting fixtures, wiring devices and electrical materials
- All doors and hardwares must be turn over to the project inspector/end-user
- Chipping and removal of floor and wall tiles
- All dismantled ceiling boards and ceiling joists will be subjected to inventory and inspection by the project inspector/end-user before disposal
- All dismantled plumbing and electrical fixtures will be subjected to inventory and inspection by the project inspector/end-user before disposal.

B. Fourth Floor (Hallway)
1. This work includes dismantling of the following:
   - Ceiling including ceiling joist
   - Lighting fixtures, wiring devices and electrical materials
   - Wiring Devices
   - All dismantled ceiling boards and ceiling joists will be subjected to inventory and inspection by the project inspector/end-user before disposal.
   - All dismantled electrical fixtures will be subjected to inventory and inspection by the project inspector/end-user before disposal.

II. Carpentry Works

1. Ground Floor
   a. Function Hall
      - Installation of acoustic ceiling
        - Apply manufacturer's guide to installation of acoustic ceiling
        - Use 2' x 4' acoustic ceiling board
   b. Comfort Rooms and Kitchen (Function Hall)
      - Installation of fiber cement ceiling board
        - Use 25mm x 25mm x 0.60mm thick wall angle
        - U0.60mm x 19mm x 50mm x 0.60mm thick J-furring as ceiling joist, parallel to the longest sides of the room spaced at 400mm middle on center
        - Use 1mm x 12mm x 38mm x 1.0mm thick C-channel as ceiling joist, parallel to the shortest sides of the room spaced at 400mm middle on center
        - Use 0.55mm x 12mm x 38mm x 0.55mm thick C-channel for ceiling hanger every 800mm middle on center
        - Use ¼" thick x 1.20m x 2.40m fiber cement board for ceiling boards
        - Installation of 1" x 2" KD cornices
      - 2 sets of (D-1) 1.0m x 2.10m Steel door with 50mm x 100mm double rabbet steel door jamb with lever-type lockset, hinges and other installation accessories
2. Ground to Fourth Floor
   a. Guest Rooms
      - Installation of 1000mm x 2100mm panel door (main door) with 50mm x 150mm KD door jamb, lockset and hinges. (D-1)
      - Replacement of damaged ceiling board, ceiling joist and cornices at the following rooms:
        - 106
        - 110
        - 112
        - 203
        - 205
        - 206
        - 208
        - 210
        - 212
        - 305
        - 311
      - Bathrooms
        - Installation of 600mm x 2100mm flush door with 50mm x 100mm KD door jamb, lockset and hinges. (D-3)
        - Installation of fiber cement ceiling board
          - Use 25mm x 25mm x .60mm thick wall angle
          - Use 1" concrete nail for fastening wall angle at concrete
          - Use .60mmx 19mm x 50mm x .60mm thk. J-furring as ceiling joist, parallel to the longer sides of the room spaced at 40mm middle on center
          - Use 1mm x 12mm x 38mm x 1.0mm thk. C-channel as ceiling joist, parallel to the shorter sides of the room spaced at 400mm middle on center
          - Use .55mm x 12mm x 38mm x .55mm thk. C-channel for ceiling

hanger every 800mm middle on center
- Use 1/4" thick x 1.20m x 2.40m fiber cement board for ceiling boards
- Installation of 1" x 2" KD cornices on all ceiling perimeter and corners

- Installation of (D-6) 700mm x 2100mm flush door with 50mm x 100mm KD door jamb (leading to balcony), lockset and hinges at the following rooms:
  - 201
  - 203
  - 204
  - 205
  - 301
  - 303
  - 306
  - 313
  - 409

3. Fourth Floor
   a. Hallway
      - Installation of ceiling
        - Use 25mm x 25mm x .60mm thick wall angle
        - Use 1" concrete nail for fastening wall angle at concrete
        - Use .60mmx 19mm x 50mm x .60mm thk. J-furring as ceiling joist, parallel to the longer sides of the room spaced at 40mm middle on center
        - Use 1mm x 12mm x 38mm x 1.0mm thk. C-channel as ceiling joist, parallel to the shorter sides of the room spaced at 400mm middle on center
        - Use 0.55mm x 12mm x 38mm x 0.55mm thick C-channel for ceiling hanger every 800mm middle on center
        - Use 1/4" thick. x 1.20m x 2.40m fiber cement board for ceiling boards
        - Installation of 1" x 2" KD cornices on all ceiling perimeter and corners

III. Masonry and Tile Works

1. Ground Floor
   a. Comfort Rooms (Function Hall)
      - Tile Works
        - Installation of floor and wall tiles
          - Use 600mm x 600mm ceramic tiles (homogenous) flor flooring and 600mm x 600mm ceramic (polished/glazed) tiles for walls
          - Consult project inspector/ end-user for tile design and color preference.
          - Tiles will be subjected to inspection and approval before installation by the project inspector/ end-user of the project.
          - Provide 3-5mm tile spacing for floor tiles and 2-3mm tile spacing for wall tiles
        - Apply tile grout
          - Use suitable color for grouting.
          - Clean residue prior to accomplishment of the project.
2. Ground Floor to Fourth Floor
   a. Bathrooms
      - Masonry Works
        - Waterproofing of the existing floor slab and concrete ceiling of comfort rooms. Use a suitable waterproofing agent. Elastomeric paint is highly discouraged.
        - Provide mortar topping to level the flooring.
      - Tile Works
        - Installation of floor and wall tiles
          - Use 600mm x 600mm ceramic tiles (homogeneous) for flooring and 600mm x 600mm ceramic (polished/glazed) for walls
          - Consult project inspector/end-user for tile design, color and reference
          - Tiles will be subjected to inspection and approval before installation by the project inspector/end user of the project
          - Provide 3-5mm tile spacing for floor tiles and 2-3mm tile spacing for wall tiles
        - Apply tile grout
          - Use suitable color for grouting
          - Clean residue prior to accomplishment of the project

IV. Plumbing Works

1. Roughing-in

a. This work will include the following:
   - Installation of new sewer and water supply pipeline as needed
   - Waterproofing of all sewer and water supply pipeline
   - Replacement of all water supply fittings
b. Installation of new plumbing fixtures:
   - Installation of new water closet and lavatory including bidet, toilet accessories and water supply fittings
c. Tap to existing source

V. Electrical Works

1. Roughing-in
   a. This work will include the following:
      - Replacement of existing lighting power supply line (re-wiring)
2. Installation of new lighting fixtures
   a. Function Hall
      - 16 sets of 24 Watts Recessed-type LED Panel Light, daylight, for each hall
   b. Comfort Rooms (Function Hall)
      - 4 sets of 9-11 Watts LED downlight/pinlight, daylight, for each comfort room
   c. Bathrooms
      - 1 set of 9-11 Watts LED Downlight/Pinlight, daylight, for each bathroom
   d. Hallway
      - 16 sets of 24 Watts Recessed-type LED Panel Light, daylight
   e. Installation of new wiring devices
   f. Tap to the existing source.

VI. Painting Works

1. Site Clearing and Preparation
   a. Interior and Exterior Wall, Concrete Beams, Columns and Canopies
      - Remove all loose, scaling, flaking, and peeling off paint by wire brushing, scraping, or rough sanding.
      - When necessary, use varnish but make sure that residue is completely washed off from the surface to prevent adverse reactions with succeeding coats. Let it dry.
      - Sand smooth painted surfaces for improved intercoat adhesion.
      - For chalking old latex paint, apply one (1) coat of chalk blocker. Let dry overnight.
      - In case of mildew infestation, treat affected areas with a fungicidal wash solution or household bleach mixed with water (1:3, respectively). Let the treatment stay overnight before wiping off residue with damp cloth. Let it dry.
   b. Ceiling
      - For repainting:
        - Remove all loose, scaling, flaking, and peeling off paint by wire brushing, scraping, or rough sanding.
        - When necessary, use varnish but make sure that residue is completely washed off from the surface to prevent adverse reactions with succeeding coats. Let it dry.
        - Sand smooth painted surfaces for improved intercoat adhesion.
        - In case of mildew infestation, treat affected areas with a fungicidal wash solution or household bleach mixed with water (1:3, respectively). Let the treatment overnight before wiping off residue with damp cloth. Let it dry.
      - For new painting:
        - Affix drywall boards following specific standard installation guidelines by the board manufacturer.
        - Sand rough surfaces until smooth, then dirt off before painting.
        - Surface to be painted should be clean and dry, free from dust, dirt and other foreign matter
   c. Doors and Cornices
      - For repainting:
        - Scrape off all loose, scaling, flaking, and peeling paint as necessary. Make sure the surface is clean, dry, and good weather persists prior to painting. Prime with flatwall enamel before recoating.
      - For new painting:
        - Surface to be painted should be clean and dry, free from dust, dirt, and other

foreign matter. Hammer all nails deep enough to apply putty. Sand rough wood until smooth and then dust off before painting.

d. Roofing
   - For prepainted galvanized iron sheets, scuff sand surface using sandpaper and wipe the surface with a clean rag before applying paint. Spot prime if necessary.
   - For corroded G.I. surface, remove rust by wire brushing and use metal etching solution. Let it stay for 10-15 minutes. Be sure to wash off the surface thoroughly with water or paint thinner and let dry. Apply primer a few hours after application of B-71 and before rust sets in.

2. Painting Application
   a. Interior and Exterior Wall, Concrete Beams, Columns and Canopies
      - Apply at least 3 coats of elastomeric waterproofing paint
   b. Ceiling
      - For repainting:
        - Primer: Flat latex
        - Putty: Masonry putty
        - 2nd & 3rd coat: Semi-gloss latex
      - For new painting:
        - Primer: Flat latex
        - Putty:Masonry putty
        - 2nd & 3rd coat: Semi-gloss latex
   c. Doors and Cornices
      - 1st coat: Flatwall enamel
      - Putty: Glazing putty
      - 2nd & 3rd coat: Quick drying enamel (any desired color)
   d. Roofing
      - For G.I. sheets with paint in good condition, clean surface of dirt and dust by washing and apply two coats of gloss acrylic water-based roof paint, Baguio green

Note: Color of paint will depend upon the preference of the END-USER. Paint and its accessories should be BOYSEN or approved equal.

C. Contractor of the said project must provide an as-built plan of the project at the end of the contract as a requirement for the release of their final billing.

D. For color/types of any fixtures or materials to be used on site, consult the end-user and the inspector for approval. Consult the plan and the scope of work for the extent of tasks of the contract. If possible, let the end-user sign your sample as proof of approval. **Note: In the event that discrepancies on plans and scope of work occur, generally, the scope of work prevails.**

E. Resident site engineer is a must for the projects to be undertaken by the contractor of the university. In cases where there are electrical works, it is required that an electrical engineer or a master electrician be a part of the contractor's team to supervise all electrical works. Likewise, master plumbers must supervise plumbing works. It can be considered when only one person is the master plumber and master electrician at the same time as long as his major duty is supervision of both fields. Safety engineer is a must as per DOLE requirement. **Note: All key personnel should be included in the list of personnel for submission.**

F. In cases of participation in two or more projects, the set of workers and foreman shall be different per project, however, the set of engineers and equipment may be reused**.**

G. Construction safety and health program as well as construction schedule (PERT/CPM/S-Curve) shall be provided by the winning bidder.

H. See plans/consult the end-user and project inspector for details and extent of work. The silence of specifications, plans, special provisions and supplementary specifications as to any detail, or the apparent omission therein of detailed description or definition of the quality of materials and workmanship shall be regarded to mean that only materials and workmanship of first class quality are to be used or employed.