



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

## BILL OF QUANTITIES

CONSTRUCTION OF FACULTY HOUSING ABC: ₱ 7,936,125.80 COLLEGE/UNIT/CAMPUS: MAIN CAMPUS			Bill of Quantities		
Item No.	Description	Unit	Quantity	Unit Price (Pesos)	Amount (Pesos)
I	EARTHWORKS (Pesos _____ _____ and _____ centavos)				
II	CONCRETE WORKS (Pesos _____ _____ and _____ centavos)				
III	MASONRY WORKS (Pesos _____ _____ and _____ centavos)				
IV	TILE WORKS (Pesos _____ _____ and _____ centavos)				
V	CARPENTRY WORKS (Pesos _____ _____ and _____ centavos)				
VI	TRUSSES AND ROOFING WORKS (Pesos _____ _____ and _____ centavos)				
VII	MISCELLANEOUS WORKS (Pesos _____ _____ and _____ centavos)				

VIII	ELECTRICAL WORKS (Pesos _____ _____ _____ and _____ centavos)				
IX	PLUMBING WORKS (Pesos _____ _____ _____ and _____ centavos)				
X	PAINTING WORKS (Pesos _____ _____ _____ and _____ centavos)				
<b>GRAND TOTAL</b> _____					
<b>Write grand total in words</b> _____ _____ _____					

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

SCOPE OF WORK:

**A. CONSTRUCTION OF FACULTY HOUSING (FOUR UNITS DUPLEX)**

GENERAL NOTES:

1. The project should be finished in 120 calendar days.
2. Actual site inspection is a must.

**B. Technical Description**

**I. Earthworks**

- A. Site Preparation/Temporary enclosure/ Mobilization/ Demobilization/ Office/ Bunkhouse/ Billboard/etc.
- B. Clearing, Excavation and Backfilling
  1. This work includes excavation for all columns/wall footings, tie beam and septic tank.
  2. The area should be cleared/cleaned before and after the construction work at least six meters away from the building line. Unusable used formworks, excessive soil fill and all other unwanted debris of construction works should be disposed properly.
- C. Additional fill and soil poisoning
  1. Provide additional fill.
  2. The entire area for the proposed building should be treated with termite proofing.
  3. Gravel fill = 0.05m. fill.

**II. Concrete Works**

- A. Cast-in-place concrete
  1. Concrete works include footings, columns, stiffener columns, wall footing, slabs, beams, stairs, concrete counters, ledge/canopy, perimeter walk and all other concrete components needed to complete the structure.
    - Provide lintel beams for the opening of doors and windows.
    - Provide concrete pathwalk with 4" CHB zocalo around the perimeter of the building. (Width =1.0m.; Thickness = 0.10m.
  2. Strength of concrete to be adopted shall be **3,000 psi**.
  3. Concrete works should be plain cement finished.
  4. Provide necessary tools and equipment needed for concrete works.
- B. Steel Reinforcement
  1. Use deformed bar grade 33.
  2. Provide necessary tools and equipment needed for steel works.
  3. See plan for details and extent of work.

**III. Masonry Works**

1. Installation of CHB reinforced with 10mmØ deformed bar spaced at 0.60m on center every three layers.
  - a. CHB 5" for the perimeter/exterior walls and septic tank.
  - b. CHB 4" for interior/partition walls.
2. Masonry works should be plastered plain cement.

**IV. Tile Works**

Supply and installation of the following:

1. Ceramic colored tiles (locally made) 0.40m. x 0.40m. for the concrete counters and whole floor area of the building. Tiles must be accented with dark colors.
2. For comfort room:
  - a. 12" x 12" unglazed ceramic colored tiles for flooring.
  - b. 12" x 12" glazed tiles for the entire wall (from floor to ceiling)
3. Use tile adhesive for tiling.
4. Consult the end user for color preference of tiles.

**V. Carpentry Works**

1. Provide necessary form lumber and scaffolding needed for the completion of the project.
2. Provide ceiling works.
  - a. Use cement board 3/16" thick for ceiling board.
  - b. Use metal furring as ceiling runner and ceiling joist at 0.40m. on center both ways.
  - c. Provide decorative wooden molding to all ceiling perimeter and corners.
  - d. Provide 3/16" x 1" flat bar coated with primer and paint for ceiling hanger every 1.20m. both ways.

- e. Use pre-painted spandrel for the whole area of eaves.
- f. Provide pre-painted spandrel with hole as ceiling ventilation for every 1 meter and all corners of the eaves.

## VI. Rafters and Roofing Works

### A. Rafters:

1. See plans for sizes of tubular and other details for the installation of steel rafters.
  - All tubular should be 2.0 thick.
2. This work also includes painting of two (2) coats of epoxy primer and two (2) coats of QDE black.
3. Provide necessary tools and equipment.
4. All joints connections should be fully welded.
5. Use galvanized CEE purlins 16, 2" x 4" at 0.60m. on center.
6. Provide ¼" x 2" angle bar for purlins connector or cleats.
7. Provide 4-16mm Ø anchor bolts with nut and washer for each support.

### B. Roofing

1. Adopt gauge 26 (0.5mm.) rib type pre-painted roof sheet.
2. Adopt gauge 26 (0.5mm.) prefabricated and stainless gutter.
3. Adopt gauge 26 (0.5mm.) prefabricated and stainless flushing.
4. Adopt gauge 26 (0.5mm.) prefabricated and pre-painted fascia cover.
5. Adopt gauge 26 (0.5mm.) prefabricated stainless flushing.
6. All attachments for roofing sheet shall be 2 & ½" teck screw for metal.
7. Provide water sealant for all attachments (water sealant should be provided for both inside and outside surface of tck screw head).

## VII. Miscellaneous Works

Supply and installation of the following:

### 1. Doors

- 8.0 sets D-1 Pre-painted steel door with view window, complete with heavy duty accessories
- 8.0 sets D-2 Pre-painted steel door, complete with heavy duty accessories
- 16.0 sets D-3 Flush door with 2" x 5" KD jamb, complete with all accessories
- 8.0 sets D-4 PVC, complete with all accessories

### 2. Windows

- 24.0 sets W-1 Aluminum sliding window with ¼" thick clear glass on powder coated finish aluminum frame; complete with all accessories; with 12mm. square bar grills
- 16.0 sets W-2 Aluminum awning window with ¼" thick clear glass on powder coated finish aluminum frame; complete with all accessories; with 12mm. square bar grills
- 8.0 sets W-3 Aluminum sliding window with ¼" thick clear glass on powder coated finish aluminum frame; complete with all accessories; with 12mm. square bar grills
- 8.0 sets W-4 Aluminum awning and fixed window with ¼" thick clear glass on powder coated finish aluminum frame; complete with all accessories; with 12mm. square bar grills

## VIII. Electrical Works

1. Supply and installation of feeder line and secondary post including all its accessories (Bolt-on type Nema Standard should be used)
  - Installation of MDP, ACP, LP and all other panel boards on the plan and their circuit breakers.
2. Supply and installation of wiring/ conductors and PVC conduit/ junction box/ utility box from main/sub-main panel to convenience outlet/ lighting outlet/ ACU outlet
  - a. THWN stranded wire (Phelp dodge or approved equivalent)
  - b. PVC conduit orange pipe with sizes as indicated on the plan
  - c. Utility and junction boxes should be PVC and deep type.
3. Supply and installation of electrical fixtures/ switches/ outlets/ and other electrical devices:
  - a. Switches (Bticino, National or its equivalent)
  - b. Convenience and weather proof outlets, special outlets (Bticino, National or its equivalent)
  - c. Outlets for ACU, Emergency light, exhaust fan (Bticino, National or its equivalent)
  - d. LED light 7W (24 sets)
  - e. Pin light with 5W LED bulb (64 sets)

4. Construction of service entrance post.
5. Tap to the source.
6. Include testing and commissioning.
7. Consult inspectors and plan for details and extent of works.

## IX. Plumbing Works

### A. Water Supply Line

1. Adopt PPR pipes and fittings for water line ( ½" Ø).
2. Tapping to source is included.
3. No pipe should be embedded without testing it to leak.

### B. Sewer Line

1. Adopt PVC heavy duty orange pipes and fitting (Sanimold type with O-ring or its equivalent) for ventilation and the whole sewer line system including the septic vault fittings
  - Use 4" Ø for water closet and main line
  - Use 3" Ø for downspout
  - Use 2" Ø for lavatory and ventilation

**Note: Maintain a 2% slope on all CR floorings towards the drain.**

### C. Fixtures

Provide the following for the comfort rooms:

1. BRASS floor drains (16pcs)
2. Colored tank type water closet
3. Wall hung type lavatory.
4. Stainless kitchen sink (deep type) with heavy duty goose neck faucet (8 units)
5. American standard made faucets (24 pcs)
6. Brass Roof Drain Dome Type (16 pcs)

### D. Septic tank

1. Construction of new septic tank with pipes extending to the nearest disposal area. See plan for details.

### E. Catch basin

1. Provide catch basin with PVC pipes. See plans for sizes.

## X. Painting works

The whole building should be painted (both exterior and interior) including doors.

### A. Wood

1. Apply one coat of 1st enamel white paint. Allow to dry overnight.
2. Repair minor surface imperfections with suitable putty. Let dry then sand.
3. Apply at least two (2) coats of QDE in the desired color. Allow an overnight intercoating interval.

### B. Metal

1. Apply epoxy primer by brush or spray. Allow to dry for 24 hours. Apply suitable putty in imperfections.
2. Apply at least two (2) coats of QDE in the desired color.

### C. Concrete

1. Treat the surface with concrete neutralizer. Mix one part with 16 parts water by volume.
2. Apply skim coat as primer. Repair minor surface imperfections with a suitable putty. Let dry, then sand.
3. Apply at least two coats of colored dirt resistant semi gloss latex paint (factory mixed).

**Note: Color paint will depend upon the preference of the end-user. Paints and its accessories should be chosen or approved equivalent.**

- C. 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.