



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

## BILL OF QUANTITIES

CONSTRUCTION OF COVERED COURT WITH STAGE AT CvSU CARMONA CAMPUS ABC: ₱ 11,971,611.35 COLLEGE/UNIT/CAMPUS: CARMONA 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/TILE WORKS (Pesos _____ _____ and _____ centavos)				
IV.	TRUSSES AND ROOFING WORKS (Pesos _____ _____ and _____ centavos)				
V.	CARPENTRY WORKS (Pesos _____ _____ and _____ centavos)				
VI.	MISCELLANEOUS WORKS (Pesos _____ _____ and _____ centavos)				
VII.	PLUMBING WORKS (Pesos _____ _____)				

	_____ and _____ centavos)				
VIII.	ELECTRICAL WORKS (Pesos _____ _____ _____ and _____ centavos)				
IX.	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: \_\_\_\_\_

**CAVITE STATE UNIVERSITY**

SCOPE OF WORK:

**A. CONSTRUCTION OF COVERED COURT WITH STAGE @ CARMONA CAMPUS**

GENERAL NOTES:

1. The project should be finished for 180 calendar days.
2. Actual site inspection is a must.
3. The area should be cleared before and after the construction works at least six meters away from the building line. Unusable used formworks and all other unwanted debris of construction works should be disposed properly.

## **B. Technical Description**

### **I. Earthworks**

#### **A. Mobilization**

1. Provide the following:
  - Billboard
  - Bankhouse with Office
  - Temporary Comfort Rooms
  - Site enclosure

#### **B. Excavation / backfilling /clearing**

1. This work includes excavation for all column/wall footings, tie beam and septic tank.

#### **C. Additional fill**

1. Provide additional fill for the whole area.
2. Gravel fill = 0.05 m. thick

### **II. Concrete Works**

#### **A. Cast-in-place concrete**

1. Concrete works include columns, footings, stiffener columns, wall footing, slab, lintel beam and all other concrete components needed to complete the structure.
  - Provide lintel beams for all wall partitions and opening of windows and doors.
  - Provide stiffener every three meters for all wall partitions.
2. Strength of concrete to be adopted shall be 3,500 psi
3. Concrete works should be plain cement finished.
4. Provide 5" CHB zocalo around the perimeter of the floor slab.  
(27.40 m. x 47.50 m. x 0.15 m.)
5. Provide necessary tools and equipment needed for concrete works.

#### **B. Steel reinforcement**

1. Use deformed bar grade 40.
2. Provide necessary tools and equipment needed for steel works.
3. See plan for details and extent of work.

### **III. Masonry and Tile Works**

#### **A. CHB laying**

1. Installation of CHB reinforced with 10 mm Ø deformed bar spaced at 0.60 m. on center every three layers.
  - CHB 5" for all masonry works.
2. Masonry works should be plastered plain cement .

#### **B. Tile Works**

For the comfort room:

- a. Ceramic colored tiles 12" x 12" for flooring
- b. 12" x 12" glazed ceramic tiles for the entire wall (from floor to ceiling)
- c. Consult the end user for color preference of tiles.

### **IV. Trusses and Roofing Works**

Fabrication/supply & installation of steel trusses and roofing

#### **A. Trusses:**

1. See plans for sizes of bar and other details for the installation of steel trusses.
2. This work also includes painting of two (2) coats of epoxy primer and two (2) coats of quick dry enamel black.
3. Provide necessary tools and equipment.
4. All joint connections should be fully welded.
5. Use CEE purlins 2" x 6" x 2.0 mm. thk. @ 0.60 m. on center.
6. Provide metal louver and lateral frame.
7. Provide roofing for comfort room of stage

- - Used 2" x 4 " tubular for rafter and 2' x 4" for purlins.
- 8. Provide 12 mm Ø with nut and washer for sag rod.
- 9. Provide 16 mm Ø plain bar with standard turnbuckle for horizontal cross bracing
- 10. Provide 6-20 mm x 800 mm. anchor bolts with nut and washer for each support.

**B. Roofing:**

1. Adopt gauge 26 (0.6 mm) rib type pre-painted long span roofing sheet.
2. Adopt gauge 26 (0.6 mm) stainless gutter.
3. Adopt gauge 26 (0.6 mm) pre-painted fascia cover.
4. Provide 2-CEE purlins 2" x 6" x 2.0 mm. thk. as fascia board.
5. All attachment for roofing sheet shall be 2 1/2" teckscrew for metal.
6. Supply and installation of 1" insulation (double) with plastic hexagonal netting for the whole area of roofing.
7. Provide water sealant for all attachment (water sealant should be provided for both inside and outside surface of teckscrew head).

**V. Carpentry Works**

1. Provide necessary form lumber and scaffolding needed for the completion of the project.
2. Provide ceiling for the comfort room of stage.

**VI. Miscellaneous Works**

Supply and installation of the following:

1. 4 - sets of steel door, powder coated finished complete with all accessories.
2. 2 - sets of aluminum sliding window complete with all accessories, 1/4" thk. colored glass on colored powder coated finish aluminum framing. (0.60 m. x 1.20 m.)
3. 20 - units of steel bleacher, complete with all accessories.

**VII. Plumbing Works**

**A. Water Supply Line**

1. Adopt PPR pipes (PN 20) and fittings for water line.
  - a) 1" and 1/2" Ø for water line
  - b) Provide gate valve for every comfort room.
2. Tapping to the 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 fittings (Sanimold type with O-ring or its equivalent) for ventilation, downspout and the whole sewer line system including the septic vault fittings.
  - a) Use 4" Ø for the main line and water closet.
  - b) Use 2" Ø for lavatory and ventilation.
2. Provide 4" pvc pipe for downspout.
3. Provide one unit septic tank with pipes extending to the nearest disposal area.

**C. Fixtures**

1. Provide the following for the comfort rooms:
  - a) Brass floor drain (4 pcs.)
  - b) Colored tank type water closet, counter top type and urinal
 

**Note:** All fixtures must be HCG, American Std, or approved equivalent complete with all accessories.
  - c) American standard made faucets (plain bibb) for every cubicle.

**VIII. Electrical Works**

1. Installation of feeder line including all its accessories.
  - Installation of MDP, LP, LPP and all other panel boards on the plan and their circuit Bolt-on type Nema Standard should be used. Tap to the source including testing.
  - 1 set of MDP Panel board 12 branches, 2P
    - Main : 1-100AT/ 100AF/230V, 2P
    - 2-60AT, 2-40AT, 2-30AT, 2-20, 4-15

2. Installation of wiring/conductors and G.I. conduits/junction box from main/sub-main panel boards.
  - THWN stranded wire, phelp dodge or approved equal.
  - Conduit G.I. pipe with sizes as indicated on the plan.
  - Junction boxes should be G.I. & deep type.
3. Installation of electrical fixtures and other electrical devices.
4. Supply and Installation of the following:
  - 12 sets of LHD high power LED's 96W, 100-240V aluminum alloy heat sink.
  - 12 sets of high bay IP 65 aluminum gear box with metwl halide lamps aluminum dome 16" with bulb (400W)
  - 12 sets of LED wall lamp (7W)
  - 12 sets of LED spot light (12W)
5. Provide painted metal housing for MDP and LP.

#### **IX. Painting Works (PAINTING OF THE WHOLE BUILDING)**

##### **METAL**

1. Apply epoxy primer by brush or spray. Allow to dry for 24 hours.
2. Apply two coats of Quick Dry Enamel in the desired color.

##### **CONCRETE**

1. Treat the surface with concrete neutralizer. Mix one part with 16 parts water by volume.
2. Repair minor surface imperfections with a suitable putty. Let dry, sand then, spot coat with top coat color.
3. Apply at least three coats of factory mixed colored dirt resisting paint by brush or spray.

**Note: Color of paint will depend upon the preference of the end-user. Paints and its accessories to be used shall be Boysen brand or approved equal.**

- C. See plans for details and extent of work. The silence of specification, plans, special provisions and supplementary specifications as to any detail, or the apparent omission therein of a 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.