



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

BILL OF QUANTITIES

CONSTRUCTION OF THREE-STOREY MAIN BUILDING FOR NCRDEC ABC: ₱24,955,702.04 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	MISCELLANEOUS WORKS (Pesos _____ _____ and _____ centavos)				
VII	ELECTRICAL WORKS (Pesos _____ _____ and _____ centavos)				

VIII	FIRE PROTECTION WORKS (Pesos _____ _____ and _____ centavos)				
IX	PLUMBING 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. CONSTRUCTION OF THREE-STOREY MAIN BUILDING FOR NCRDEC

GENERAL NOTES:

1. The project should be finished for 270 calendar days.
2. Actual site inspection is a must..
3. 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.

B. Technical Description

I. Earthworks

A. Mobilization

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.

B. Excavation/ Backfilling/ Clearing

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

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. thick

II. Concrete Works

A. Cast-in-place concrete

1. Concrete works include columns, footings, stiffener columns, slab, beams, stairs, roof beams, gutter, lavatory counters, ledge/canopy, elevator and all other concrete components needed to complete the structure.
 - Provide lintel beams for the opening of windows and doors.
2. Strength of concrete to be adopted shall be **3,500 psi**.
3. Concrete works should be plain cement finish,
4. 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 Works

1. Installation of CHB reinforced with 10 mm Ø deformed bar spaced at 0.60 m. on center every three layers.
 - a. CHB 6" 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. Granite tiles 24" X 24" for the whole area of the building. Tiles must be accented with dark colors. Use unglazed granite tiles for lobby and ramp.
2. Use granite tiles with groove for stairs.
3. Install the following for the comfort rooms:
 - a. 24" X 24" unglazed granite tiles for flooring
 - b. 12" X 24" glazed granite tiles for the entire wall (floor to ceiling)
 - c. Use granite slab for the lavatory concrete counter including 0.6m of its wall.
4. Consult the end-user for the color preference of tiles.

V. Carpentry Works

1. Provide the necessary form lumber and scaffolding needed for the completion of the project.
2. Provide ceiling works for all comfort rooms.
 - a. Use fiber cement boards for ceiling boards.

- 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.

VI. Miscellaneous Works

Supply and installation of the following:

1. Doors
 - a. 2 sets of D-1 Double swing glass door with powder coated aluminum frame, complete with heavy duty accessories
 - b. 11 sets of D-2 pre-painted steel door, complete with all accessories
 - c. 4 sets D-3 Double swing glass door with powder coated aluminum frame, complete with heavy duty accessories
 - d. 9 sets of D-4 Aluminum door (TP/Buss Body) complete with all accessories
2. Windows
 - a. 5 sets W-1 Aluminum fixed window with 1/4" thick green glass in powder coated finish aluminum frame; complete with all accessories
 - b. 2 sets W-2 Aluminum fixed window with 1/4" thick green glass in powder coated finish aluminum frame; complete with all accessories
 - c. 2 sets of W-3 Aluminum fixed window with awning; 1/4" thick green glass in powder coated finish aluminum frame; complete with all accessories
 - d. 5 sets of W-4 Aluminum fixed window with 1/4" thick green glass in powder coated finish aluminum frame; complete with all accessories
 - e. 1 set W-5 Aluminum fixed window with 1/4" thick green glass in powder coated finish aluminum frame; complete with all accessories
 - f. 10 sets W-6 Aluminum fixed window with 1/4" thick green glass in powder coated finish aluminum frame; complete with all accessories
 - g. 3 sets W-7 Aluminum fixed window with awning; 1/4" thick green glass in powder coated finish aluminum frame; complete with all accessories
 - h. 2 sets W-8 Aluminum fixed window with awning; 1/4" thick green glass in powder coated finish aluminum frame; complete with all accessories
 - i. 3 sets W-9 Aluminum fixed window with 1/4" thick green glass in powder coated finish aluminum frame; complete with all accessories
 - j. 25 sets W-10 Aluminum fixed window with sliding; 1/4" thick green glass in powder coated finish aluminum frame; complete with all accessories
 - k. 18 sets W-11 Aluminum awning window with 1/4" thick green glass in powder coated finish aluminum frame; complete with all accessories
 - l. 3 sets W-12 Aluminum fixed window with awning; 1/4" thick green glass in powder coated finish aluminum frame; complete with all accessories
3. Stainless railing (Stairs, hallway/ terrace, ramp, and grab rail for PWD CR)
Provide 1.5mm thick (304) stainless tubing for railings. Use 2" and 1" tubing.
4. Signage
 - a. Provide a signage made of stainless steel mirror finish 1/16" thick, 9" high, and 6" wide, in proportion
 - b. Use Times New Roman font compressed, with 2 & 1/2" stainless build-up sidings and stainless screws on back
 - c. "NATIONAL COFFEE RESEARCH DEVELOPMENT AND EXTENSION CENTER"
5. Tubular Claddings
Provide 1.5mm thick galvanized tubular bar for claddings. Use 2" X 3" and 2" X 6" tubular bars.
6. Water Proofing
Provide 3 coats of water proofing for the whole deck and comfort rooms.

VII. Electrical Works

1. Supply and installation of feeder line and secondary post including all of its accessories. 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 conduits/ junction box/ utility box from main/ sub-main panel boards to convenience outlet/ light outlet/ ACU outlet.
 - THWN stranded wire, use Phelps Dodge or approved equal
 - PVC conduit orange pipe with sizes as indicated in the plan
 - Utility and junction boxes should be PVC and deep type
3. Supply and installation of electrical fixtures/ switches/ outlets and other electrical devices

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- a. Switches (Bticino, National or its equivalent)
- b. Convenience outlets (Bticino, National or its equivalent)
- c. Outlets for ACU, Emergency light, and exhaust fan (Bticino, National or its equivalent)
- d. 2-18W (4') LED fluorescent lamp with diffuser (182 sets)
- e. 12W pin light LED bulb (56 sets)
- f. 12W LED bulb wall lamp (11 sets)
- g. Manual transfer switch with housing (1 unit)
4. Supply and installation of the following:
 - a. Three units transformer 50 kVA (brand new) including all its accessories (shall be certified by the supplier that the transformers to be installed are brand new).
 - b. One unit 45' electrical concrete post and its accessories
 - c. Three-line high tension wire (power cable 15KB) with messenger wire from existing lines to the new transformer.
 - d. Construction of service entrance post is included.
 - e. Include testing and commissioning.
 - f. Consult inspectors for details and extent of work.
5. Supply and installation of the following:
 - a. KWH digital meter as per design
 - b. Generator set and Automatic Transfer Switch with MCCB and housing
6. Include tapping to the source, testing and commissioning.
7. Consult the project inspectors for details and extent of work.

VIII. Fire Protection Works

1. Supply and installation of the following:
 - a. Smoke detector (38 units)
 - b. Dry stand pipe 3" Ø with siamese fittings
 - c. Fire hose, (50m.) with cabinet (3 units)
 - d. Sprinkler system: pendant type sprinkler (171 units)
 - e. Fire alarm control panel (1 set)
 - f. Fire alarm bell with control (3 sets)
 - g. Fire pump 30.0HP (1 unit)
 - h. Jockey pump 5.0HP (1 unit)
 - i. Water pump 2.5 HP (1 unit)
2. Include testing and commissioning.
3. Consult the project inspectors for details and extent of work

IX. Plumbing Works

A. Water Supply Line

1. Adopt PPR pipes and fittings for water line (2", 1" and ½")
 - a. 2" Ø PPR pipe from main line to building
 - b. Provide gate valve for every comfort room
2. Supply and installation of one-unit stainless tank, capsule type with partition thickness = 2.0 mm, ; length = 2.54 m. ; height = 2.34 m. ; diameter = 2.20 m.
3. Tapping to the source is included.
4. 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 septic vault fittings.
 - a. Use 4" Ø for main line and water closet.
 - b. Use 2" Ø for lavatory and ventilation
2. Provide 4" Ø PVC pipe for downspout.
3. Provide one unit septic tank with pipes extending to the nearest disposal area
4. Provide one unit cistern tank. (Size: 3.0m. X 3.0m. X 3.0m.)
5. Provide catch basin with concrete reinforced pipes. See plan for sizes.

C. Fixture

1. Provide the following for the comfort rooms:
 - a. Brass floor drain (15 pcs)
 - b. Colored tank type water closet, counter top type lavatory. Note: All fixtures must be HCG, American Std., or approved equivalent complete with all accessories.
 - c. Brass roof drain dome type (19 pcs)
 - d. American standard made faucets (plain bibb) for every cubicle.

- 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. 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.