

Republic of the Philippines

CAVITE STATE UNIVERSITY

Don Severino delas Alas Campus Indang, Cavite

BILL OF QUANTITIES

IMPROVEMENT OF UNIVERSITY MALL ABC: ₱7,000,000.00 COLLEGE/UNIT/CAMPUS: MAIN CAMPUS			Bill of Quantities		
Item No.	Description	Unit	Quantity	Unit Price (Pesos)	Amount (Pesos)
I	MOBILIZATION/DEMOBILIZATION (Pesos				
	and centavos)				
II	CONCRETE WORKS (Pesos				
	and centavos)				
Ш	MASONRY WORKS (Pesos and centavos)				
IV	MISCELLANEOUS WORKS (Pesos and centavos)				
V	STEEL TRUSSES AND ROOFING WORKS (Pesos and centavos)				
VI	CEILING INSTALLATION (Pesos and centavos)				
VII	TILE WORKS (Pesos and centavos)				

VIII	PAINTING WORKS (Pesos					
	and	_ centavos)				
IX	ELECTRICAL WORKS (Pesos and					
Х	PLUMBING WORKS (Pesosand					
	GRAND TOTAL					_
Write grand total in words						-
Submitted by:			Date:			
Jonstru	ction Company/Contractor	·	 		 	

CAVITE STATE UNIVERSITY

SCOPE OF WORK:

A. IMPROVEMENT OF UNIVERSITY MALL

GENERAL NOTES:

- The project should be finished in 180 calendar days.
 Actual site inspection is a must. Verify the actual condition of the site.
- 3. All areas affected by the renovation/ repair works shall be restored/ retouched plain cement finished.
- 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.

B. Technical Description

Mobilization/Demobilization

Provide the following:

- Billboard
- Bunkhouse with office
- Temporary comfort rooms
- Site temporary enclosure may be blue sack or any suitable materials that may enclose the workplace.

Concrete Works II.

- 1. Demolition of wall and concrete structure. All areas affected by the renovation/ repair works shall be restored/ retouched plain cement finished.
 - a. The work involves the demolition of the following:
 - Along Grid D at Grid 5-6
 - Along Grid K at Grid 3-4
 - Opening of Display Counter along Grid L at Grid 3-4
 - Along Grid L at Grid 5-6
 - Door for OBA's CR
 - Existing counter at food court within Grid E-H and Grid 21-6

Note: The walls and concrete to be demolished can be used as filing materials for the preparation of base for the OBA's Printing/Storage Area. Excess materials will be hauled by PPS Personnel.

2. Excavation

- a. The work involves the following:
 - Footing for OBA Storage and Printing Office
 - WF-1 and walkway wall footing
- b. See plan for details.
- 3. Termite proofing
 - a. Termite proofing works shall be done by an accredited termite proofing company.
 - b. All areas infected by termite must be treated by termite proofing including ceiling.
 - Included in the termite proofing are the electrical rooms including its electrical roughing in.
 - d. The colony of termite within the area must be removed.
 - e. All excavated soil for the new foundation must be treated by termite proofing.
 - Consult the inspectors for more details and extent of work.
- 4. Concrete
 - a. Cast-In-Place concrete
 - Foundation
 - Footing for OBA Storage and Printing Office
 - WF-1 and walkway wall footing
 - Tie beam within Grid D-H and Grid 61-81
 - Tie Beam within Meat and Vegetable Shop
 - Columns and stiffeners
 - 6 sets of columns and 8 sets of stiffeners within Grid D-H and Grid 61-81
 - 12 sets of column with Grid J-N and Grid 61-81
 - 4 sets of stiffeners with in the vegetable and meat shop
 - Lintel Beam
 - with in Grid D-H and Grid 61-81
 - with in Grid J-N and Grid 61-81
 - Along Grid 5 at Grid D-E
 - With in vegetable and meat shop
 - Slab on Fill and Concrete counter

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- Concrete slab in prepared base with in Grid J-N and Grid 61-81
- Concrete slab counter at the food court with fabricated sink, souvenir display counter, OBA Kitchen with fabricated sink, vegetable and meat shop, Printing Room
- See plans for details and extent of work.
- Strength of concrete to be adopted shall be 3,500 psi.
- Concrete work should be plain cement finish.
- Provide necessary tools and equipment needed for concrete works.
- b. Steel reinforcement
 - Use deformed bar grade 40.
 - Provide necessary tools and equipment needed for steel works.
 - See plans for details and extent of work.

Masonry Works

- A. CHB laying
- 1. Installation of CHB reinforced with 10 mm Ø deformed bar spaced at 0.60 m. on center for both horizontal and vertical bar reinforcement every three layers.
 - a. CHB 4" for partition walls.
- 2. Masonry works should be plastered plain cement.3. For CHB installation:
- - a. Counter/Partition with-in Grid D-H and Grid 61-81
 - b. Counter/Partition with-in Grid J-N and Grid 61-81
 - c. Counter Walls at the food court including in the kitchen
 - d. Counter/Partition wall for the vegetable and meat shop
 - e. Counter for OBA's Business Center
 - f. Partition wall for OBA's CR
 - g. Counter/Partition wall with in Grid D-H and Grid 21-3
- 4. Plastering on both sides of the stock room located at right side of the building
- 5. See plans for details and extent of work.
- 6. Included in the scope is providing formworks and tools for the completion of works

IV. Miscellaneous Works

- A. Dismantling of Doors and Glass Partition
 - Removing of the following glass partitions and doors
 - First floor
 - Along Grid D at Grid 4-5 and Grid 6-61
 - Along Grid 3 at Grid L-M
 - Along Grid 4 at Grid J-M
 - Along Grid 5 at Grid J-K
 - Remove and replace of Doors at Electrical, Plumbing and Men/Women's
 - Grills Along Grid 61 at Grid L-M
 - Second Floor
 - Along Grid B at Grid 3-4
 - Along Grid 3 at Grid B-C
 - Remove and replace of Doors at Electrical, Plumbing and Men/Women's
 - Third Floor
 - Along Grid 4 at Grid A-C
 - Along Grid 5 at Grid A-C
 - Roof Deck
 - Exit Door at Roof Deck
 - 2. All glass partitions, grills and doors mentioned will be removed carefully and will be repaired and reinstalled again
 - Use necessary tool and equipment for this works
- B. Installation of Doors, Windows and Grills
 - a. Supply and installation of doors, windows and grills
 - 1. Doors
 - 1 set D-2 1.60 m. x 2.10 m Double Swing Frameless Glass Door , 2 0.50 m. x 2.10 m., 2 - 0.80 m. x 0.85 m., 2- 0.80 m. x 0.85 m, 1/2" thick Green Glass with Powder Coated Aluminum Frame and complete accessories (Along Grid A at Grid 4-5, first floor)
 - 2 sets D-5 1.40 m. x 2.10 m Double Swing Frameless Glass Door, 2 0.70 m. x 0.40 1/2" thick Fixed Glass with powder Coated Aluminum Frame complete
 - accessories (Doors at OBA Storage Room and along Grid N at Grid 61 62) 15 sets D7 0.80 m. x 2.10 m. Colored Steel Panel Door with Door Jamb, Door Lock, Door Closer, Hinges and accessories (All doors at

Electrical/Plumbing Room and Men's/Women's Comfort Room for Ground and Second Floor and all doors in the Food Court's kitchen and in the water tank/reservoir at the ground floor)

1 set D-8 0.70 m. x 2.10 m. Colored Steel Panel Door with Door Jamb, Door

Lock, Door Closer, Hinges and accessories (Door in the OBA's Kitchen) 1 set D-9 0.90 m. x 2.10 m. Colored Steel Panel Door with Door Jamb, Door Lock, Door Closer, Hinges and accessories (Door in third floor roof deck exit)

- 1 set D-10 0.60 m. x 2.10 m. Colored Aluminum Door with 4 Panel Frosted Glass Door, Jamb, Door Lock, Hinges, Door Closer and Complete Accessories (OBA'S CR)
- 1 lot D-11 Laminated Phenolic Compact board for Doors and Partition for Business Center's Fitting Room)

2. Windows

- 10 sets W-1 3.75m x 1.20m. 6 Panel Color Coated Sliding Aluminum Window with 1/2' Thick Colored Glass, Lock, Double Screen and Complete Accessories
- 2 sets W-2 2.88m x 1.20 m. 4 Panel Color Coated Sliding Aluminum Window with 1/2" Thick Color Glass Lock, Double Screen and Complete Accessories
- 1 set W-3 1.80m x 1.20m.4 Panel Color Coated Sliding Aluminum Window with 1/2" Thick Color Glass, Lock. Double Screen and Complete Accessories
- 1 set W-4 3.82m x 1.20m. 4-Panel Fixed Colored Frameless Glass with 2-1.32 m. x 0.60 m 2-Panel Colored Coated Sliding Windows, 4 - 0.95 M. x M. 1/2" thick Glass with Coated Alum. Frame Complete with All Accessories
- 1 set W-5 2.75 m x 1.20m. 3-Panel Fixed Colored Frameless Glass with 1.32 m. x 0.60 m 2-Panel Colored Coated Sliding Windows, 3- 0.91. x 0.40 M. 1/2" thick Glass with Coated Alum. Frame Complete with All Accessories
- 1 set W-7 1.20 m x 1.20 m. 2 panel Color Coated Sliding Aluminum Window with 1/2" Thick Color Glass, lock and 2 - 0.6 m. x 0.40m. fixed Glass and Accessories

3. Grills

- 4 sets G-1, 3.60 m. x 2.85m. 12 mm. dia. Steel Roll-up Grilled Door Complete with Locks and Accessories
- 1 set G-2, 1.70 m. x 1.20m. 12 mm. dia. Steel Roll-up Grilled Door Complete with Locks and Accessories
- 1 set G-3, 2.70 m. x 1.20m. 12 mm. dia. Steel Roll-up Grilled Door Complete with Locks and Accessories
- 1 set Provide Fire Exit on the Second Floor North Side (See Existing Fire
- b. Repair, Replacement of lock/accessories, Rehabilitation and Re-installation of Dismantled Glass Partition and Doors;
 - 1 set D-11.60 m. x 2.10 m Double Swing Frameless Glass Door , 2 1.00 m. x 2.10 m., 2 - 1.00 m. x 0.85 m. and 2- 0.80 m. x 0.85 m, 1/2" thick Green Glass with Powder Coated Aluminum Frame and complete accessories
 - 3 sets D-2 1.60 m. x 2.10 m Double Swing Frameless Glass Door , 2 0.50 m. x 2.10 m., 2 - 0.80 m. x 0.85 m. and 2- 0.80 m. x 0.85 m, 1/2" thick Green Glass with Powder Coated Aluminum Frame and complete accessories
 - from Grid E at Grid 4-5 to Grid E at Grid 4-5, first floor
 from Grid D at Grid 6-61 to Grid H at Grid 6-61, first floor
 from Grid 4 at Grid B-C to Grid C at Grid 4-5, third floor
 set D-3 1.70 m. x 2.10 m Double Swing Frameless Glass Door, 2 0.85 m. x 0.85 m. 1/2" thick Fixed Glass with powder Coated Aluminum Frame and complete accessories (from Grid 5 at Grid B-C, third Floor to Grid H at Grid 3-31, first floor)
 - 1 set D-4 1.00 m. x 2.10 m Frameless Glass Door , 1 1.00 m. x 0.40 m., 2 -0.80 m. x 2.10 m. and 2 - 0.80 m x 0.40 m.; 1/2" thick Fixed Glass with Powder Coated Aluminum Frame and complete accessories (from grid Grd 5 at Grid J-K to Grid L at Grid 4 - 5, first floor)
 - 2 sets D-6 1.00 m. x 2.10 m Frameless Glass Door , 1 1.00 m. x 0.40 m.1/2" Fixed Glass with Powder Coated Aluminum Frame and complete thick accessories
 - Door at OBA Printing Room

Door at OBA Meat and Vegetable Shop

1 set D-12 1.60 m. x 2.10 m Double Swing Frameless Glass Door , 2 - 1.00 m. x 2.10 m., 2 - 1.00 m. x 0.40 m. and 2- 0.80 m. x 0.40 m, 1/2" thick Green Glass with Powder Coated Aluminum Frame and complete accessories (From Grid 5 at Grid A-B Third floor to Grid 62 at Grid L-M, Ground Floor)

 1 lot D-13 Repair of Doors and Partition for Common Comfort rooms at the ground floor and Second floor. Provide locks, hinges and other accessories for the completion of doors and partitions. Provide also same material for windows

1 set W-6 4- 0.90 m x 2.10 m. and 4- 0.90 m. x 0.40 m., 1/2" thick Green Glass with Powder Coated Aluminum Frame and complete accessories (From Grid 4 at Grid A-B Third floor to Grid 62 at Grid N-M, Ground Floor)

Note: Use Necessary Tools and Equipment for the installation/re-installation/repair of the materials/units indicated in the scope

V. Steel Trusses and Roofing Works

A. Trusses:

- This works include Fabrication of trusses of OBA's Printing/Storage Area and Fabrication of Canopy for Extended Food Court Roofing
- 2. See plans for sizes of bar and other details for the installation of steel trusses.
- 3. This work also includes painting of two (2) coats of epoxy primer.
- 4. Provide necessary tools and equipment.
- 5. All joint connections should be fully welded.
- 6. Use indicated sizes of steel bars/sheet for trusses, gusset plates, cross bracing, sag rod, purlins and base plate
- 7. Use indicated sizes of tubular for Canopy Frame. Provide braces on top of the canopy frame every 1 meter.

B. Roofing

- Adopt gauge 26 (0.5 mm.) rib type pre-painted roof sheet including addition sheet for stock room
- 2. Adopt gauge 26 x 18 (0.5 mm.) pre-fabricated and pre-painted ridge roll.
- 3. All attachment for roofing sheet and ridge roll shall be 2 1/2" teckscrew for metal.
- 4. Provide water sealant for all attachment (water sealant should be provided for both inside and outside surface of teckscrew head).
- 5. Also included are repair of existing roofing and canopy including re application of roofing sealant
- 6. Provide additional gutter for canopy along Grid H and Grid J to prevent rain water to enter inside building
- 7. Use Aluminum Composite Panel Finish for the Extended Food Court and OBA Storage/Printing's Canopy

VI. Ceiling Works

Provide new ceiling in Grid D-H/Grid 61-81, in Grid J-H/Grid 61-81 and in Grid M-N/Grid 5-61 at the ground floor. Also included is the repair of the second floor ceiling.

- 1. Use 1/4" x 4" x 8" marine plywood for the ground and second floor ceiling.
- 2. Use metal furring as ceiling runner and ceiling joist at 0.40 m. on center both ways.
- 3. Provide decorative wooden molding to all ceiling perimeter and corners.
- 4. Provide 3/16" x 1" flat bar coated with primer and paint for ceiling hanger every 1.20 m. both ways.
- 5. Use pre-painted spandrel 4" for the whole area of eaves.
- 6. Provide ceiling ventilation for every 3 meters and all corners of the eaves.
- 7. See Plan for the details and consult the project inspector/end user for the design.

VII. Tile Works

- A. Chipping /Removing/Clearing/Hauling of Dilapidated Tiles/Bricks
 - Included in the chipping/removing/clearing/hauling are the following areas:
 - 1. All tiles on the ground floor except tiles on COOP office, Seven Eleven Rented Unit and unit between Grid N-R and Grid 6-61
 - 2. All bricks on the perimeter pathway of the building
 - 3. All deteriorated tile on the second and third floor including stair tiles of the building (replacement of at least 200 tiles)
 - Use necessary tools needed on this work not to damage the existing tiles not included in the chipping.
 - The area should be cleared and cleaned before and after the construction work at least six meters away from the building line.
- B. Tile Installation
 - Supply and Installation of the following:

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- 1. 0.10 m. x 0.20 m. Concrete Red Bricks along the perimeter path/walkway and sealed in between by concrete assorted washed out pebbles on corners . See plan for details.
- 0.60 m. x 0.60 m. Granite Colored Tiles for the hallway of the building's ground floor ground floor comfort room's flooring. meat/vegetable shop, and including all electrical/plumbing room. Tiles must be accented with dark colored tiles. Ask for the end user and inspector for the design.
- 3. 0.30 m. x 0.60 m. Granite Colored Tiles for the Food Court, Kitchen, Business Affair office, Printing, OBA stockroom, Business Center including OBA's comfort room's perimeter wall with tiles from floor to ceiling
- 4. 0.30 m. x 0.30 m. Ceramic Stair Tiles with groove for the Replacement of Damage Stair Tiles.
- 5. 0.40 m. x 0.40 m. Ceramic Tiles for replacement of damage tiles at second floor and third floor including new tiles for food court kitchen's counter with in Grid 8-81
- 6. 0.20 m. x 0.20 m. Ceramic tiles for all ground floor comfort room's perimeter wall from floor to ceiling.(Repair Works)

Repair of all Clay Wall Brick Cladding Tiles installed in all building's columns

- 8. Installation of Clay Wall Brick Cladding Tiles on exterior columns of OBA Printing Office, OBA Storage Room and Food Court Extension
- Installation of granite slab on all counters in the ground floor included in the OBA's Kitchen
- Use adhesive tiles cement for installation of tiles
- Application of tile grout for new and all existing tiles (for the entire tiles flooring of the building)
- Consult the end user for the color preference of tiles

VIII. Painting Works

- A. Scraping and Cleaning Works
 - 1. Included in the scraping and cleaning are the following areas:
 - a. Rooftop Flooring
 - b. Ceilings
 - c. All Interior and Exterior Walls
 - Remove all chalky surface, loose paint, dirt and other contaminants by wire brushing or by using paint remover.
 - 3. The area should be cleared and cleaned before and after the construction work at least six meters away from the building line.
 - 4. Unusable used formworks and all unwanted debris of construction works should be disposed properly
- B. Painting. The whole building should be painted (both exterior & interior)
 - 1. Wood (Ceiling, Cabinets, and Wood Partition)
 - a. Apply flat wall enamel by brush or spray. Allow to dry for 24 hours. Apply suitable putty on imperfections, then, sand.
 - b. Apply at least two coats of Quick Dry Enamel in the desired color.
 - Concrete (Cement Plaster Walls, Concrete Ceiling, Rooftop Flooring and Partition)
 - a. Treat the surface with concrete neutralizer. Mix one part with 16 parts water by
 - b. Apply Latex flat as primer. Repair minor surface imperfections with a suitable putty. Let dry, then sand.
 - Apply at least two coats of colored dirt resisting elastomeric paint (factory mixed) for walls, ceiling and other concrete surface
 - Apply at least four coat of colored dirt resisting elastomeric paint (factory mixed) for rooftop flooring
 - 3. Metal (Steel Railing and Grills and Steel Gates)
 - a. Apply zinc chromate primer by brush or spray. Allow to dry 24 hours. Apply suitable putty on imperfection. Sand to smooth finish
 - Apply two coats of Quick dry Enamel in the desired color.
 - Bricks and Pebbles
 - a. Apply at least two coat of clear gloss emulsion on tile bricks

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

IX. **Electrical Works**

- Supply and Installation of the following panel board and circuit breakers:
 a. 1 set of FCP
 b. 1 set of STL

b. 1 set of STLP 1

c. 1 set of STLP 2 1 set of HPCP2 1 set of STLP 3 1 set of STLP 4 1 set of STLP 8 1 set of LPP1 d. k. 1 set of LPP2 1 set of STLP 3 Ι. m. 1 set of STLP 3 1 set of OBAP ň. 1 set of HPCP1 n. 1 set of MDP

Note: Bolt on type, Nema Standard should be used. No panel board will be removed on the second floor and third floor except on the second floor main Electrical Room. All Panel boards on the ground will be replaced except on the COOP. Seven Eleven and University Food Plaza rented units.

2. Supply and Installation of Conductors, PVC/G.I Conduits and Junction/Utility box including its fittings.

a. Utility and junction boxes should be PVC and deep type

- b. All existing wiring in the second floor & third floor will be reconnected in the new circuit breaker on second floor electrical room
- c. All electrical roughing in/conduits must be embedded in the wall except on the ceiling where the conduit is exposed and properly aligned.

d. Adopt the necessary wiring sizes and color as indicated in the plan.

- See plan and consult the project inspector for the extent of work..
- Supply and Installation of Electrical Fixtures/Switches/Outlets and Other Electrical Devices:

 - a. 20 AT(2 P, 10kAIC) CB w/ Housing (1 set)
 b. 40 AT(2 P, 10kAIC) CB w/ Housing (3 sets)
 c. 50 AT(2 P, 10kAIC) CB w/ Housing (7 sets)

 - d. 2-T8 LED fluorescent lamp w/ diffuser (135 sets)

 - e. Convenience Double Outlet 4 pinned hole (77 sets)
 f. Convenience Double Outlet 6 pinned hole (5 sets)
 - Emergency Light including Bracket (22 sets)
 - h. One Gang Switch (20 sets)

 - Two gang Switch (13 sets)
 Electrical KWH meter, 3 Phase, 230 V, 200 A, 60Hzs with ST7 rectangular meter base (1 set)

Three way switch (2 sets)

- 4. Use functionable electrical sub meter removed from the old stall to the new stall on the ground floor.
- 5. All defective outlets, electric sub meter, lights and switches in the second floor and third floor will be replaced using the materials removed in the ground floor. Aircon units and Exhaust Fans are not included.
- See plan for details and extent of works.
- Tap to the source.
- 9. Include load test, phase sequence test and commissioning

NOTE: Electrical testing and guarantee, electrical supervision and final electrical inspection report should be signed and sealed by Professional Electrical Engineer with notary public.

X. **Plumbing Works**

- A. Water Supply Line
 - This work involves repair/rehabilitation/improvement of the water supply line free 1. from leak.
 - 2. From Main Supply Line To Cistern Tank
 - Relocation/Transfer of water supply Control Valve from Food Court Kitchen to the Cistern Tank Room
 - Use 2" Sleeve type Coupling Connector on main water supply line going to cistern tank between old and new pipe
 - Use 2" Brass Float Vertical Valve for cistern tank. Fabrication of steel braces is included

See plan for details

- 3. Dismantling of all existing PVC water Supply Line and replacing exposed pipe by G.I pipe schedule 40 and all Embedded Pipe by PPR Pipe.
- Re-install all existing water meters as identified by the end user .
- 5. Tapping to the source is included.
- 6. No pipe should be embedded without testing it to leak.
- Replace all Lavatory faucets, fittings and angle valves by heavy duty HCG brand or its equivalent. Use Lavatory Tapping Type Faucet 8. All existing Lavatory will be restored and cleaned.

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- 9. All water closets will be replaced at the Ground Floor's CR
- 10. Use PPR pipes and fitting for all new piping connections from secondary gate valves to stalls/rooms.
- 11. Rehabilitate all damage 1-1/2" G.I. pipes and fitting from the cistern tank to the roof top storage tank.
- 12. See plan for details.
- Sewer Line
 - 1. All sewer lines in the second floor's CR will be Repair/Remove/Unclog/Re-installs.
 - 2. All sewer lines in the ground floor will be replaced and to be connected to the
 - existing 8" PVC Sewer Pipe.

 3. All 8" PVC Sewer Pipe will be unclogged. Replace the damaged pipe. All pipes outside the building will be excavated/ declogged/replaced down to the existing septic tank and will be excavated to realign and declog. All structure damage during the excavation will be restored.

 - For Sizes of the Sewer Line:
 a. Use 4" Ø for drainage and down spout.
 - b. Use 2" Ø for lavatory and Floor Drain. Provide P-Trap for both lavatory and floor
 - 5. Declog all the sewer pipes from roof type sewer canal. Provide 22 sets of overflow 2" Ø pipe on the rooftop. See plan for details.
 - Rehabilitate all Catch Basin. Declog if needed.
- C. Fixtures
 - Supply and installation of the following:
 - 1. Lavatory Tapping Faucet, Fittings Sets and Control Valve (11 sets)- HCG Brand or Its equivalent
 - Urinals Set with control valve and accessories (4 sets) HCG Brand or its equivalent
 - 3. Water Closet with complete accessories including bidet (5 sets). Use materials same as in the Administration Building CR's Water Closet
 - 4. All Water Closet Fittings, Bidet and Angle Valve will be replaced at Second Floor's CR. (4 sets). Use HCG or Its Equivalents
 - 5. Heavy Duty Faucet (5 sets) Use HCG Brand or Its equivalent.
 - 6. Single Kitchen Sink Deep Type complete with faucet and Accessories (1 set) at meat and vegetable shop
 - Provide Brass Floor Drain. See plan for details.
 - 8. No fixture will be installed without the approval of the end user and the inspector.
 - 9. Provide P-trap fittings and accessories for Fabricated Sink for kitchen.
 - 10. Provide Float Water Tank Level Controller Sensor with Automatic control relay board to be connected to the existing water pump and storage tank.
- 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.