



Republic of the Philippines
SOUTHERN LUZON STATE UNIVERSITY
Lucban, Quezon



REQUEST FOR QUOTATION

RENOVATION AND IMPROVEMENT OF COMFORT ROOMS AND WATERLINE SYSTEM – SLSU POLILLO (PMO)

Purchase Request No. 2026-08-2046
Approved Budget for the Contract: ₱ 900,000.00

The Southern Luzon State University through the Bids and Awards Committee invites interested firms/supplier to submit quotation for the procurement of **Renovation and Improvement of Comfort Rooms and Waterline System – SLSU Polillo (PMO)** to apply the sum of **Nine Hundred Thousand Pesos Only (₱900,000.00)** inclusive of VAT, being the **Approved Budget for the Contract (ABC)**, details as follows:

Qty.	Unit	ITEM/S DESCRIPTION
1	lot	Renovation and Improvement of Comfort Rooms and Waterline System

1. The quotation shall be submitted on or before _____ to:

(a) Procurement Office/BAC Office
Southern Luzon State University
2nd Flr. Hermano Puli Building, Quezon Ave.,
Brgy. Kulapi, Lucban, Quezon

OR

(b) Thru email: slsuprocedurement@slsu.edu.ph

2. Requirements for Infrastructure Projects should be submitted such as;

*PhilGEPS Registration

*ITR / Tax Clearance (for 500k Above)

*SEC / DTI Permit

*PCAB License

*Mayor's / Business Permit

*List of Personnel

*Omnibus Sworn Statement and ID

*SPA (for authorized representative)

3. The SLSU reserves the right to reject any or all quotations and/or proposals and waive any formalities/ informalities therein and to accept such bids it may consider as most advantageous to the agency and to the government. Southern Luzon State University SLSU neither assumes any obligation for whatsoever losses that may be incurred in the preparation of bids, nor does it guarantee that an award will be made.

MARIDEL C. ZABELLA, JD
Director, Procurement Office
Southern Luzon State University
Lucban, Quezon
Tel. No.: (042)540-6519

Republic of the Philippines
SOUTHERN LUZON STATE UNIVERSITY
Project Management Office
Lucban , Quezon

PROJECT TITLE Renovationand Improvement of comfort rooms and waterline system
PROJECT LOCATIONS: SLSU Polillo Campus, Polillo, Quezon
OWNER : Southern Luzon State University
ABC : P 900,000.00
PROJECT DURATION : 60 Calendar Days

INFRA 

SUMMARY

ITEM	DESCRIPTION	COST OF MATERIALS	COST OF LABOR AND EQUIPMENT	TOTAL
I	General Works	-----		
II	Earthworks	-----		
iii	Reinforced Concrete Works			
IV	Masonry Works			
V	Form Works and Scaffolding			
VI	Steel Truss and Roofing Works			
VII	Electrical Works			
VIII	Plumbing and Sanitary Works			
IX	Doors and Windows			
X	General Finishes			
		TOTAL ESTIMATED DIRECT COST		P
		OVERHEAD, CONTINGENCIES & MISC.(OCM)		P
		CONTRACTOR'S PROFIT		P
		VALUE ADDED TAX (VAT)		P
		TOTAL PROJECT COST		P

TOTAL PROJECT COST IN WORDS: _____

CONTRACTOR/BIDDER: _____



Republic of the Philippines
SOUTHERN LUZON STATE UNIVERSITY
Project Management Office
Lucban , Quezon

PROJECT TITLE Renovationand Improvement of comfort rooms and waterline system

PROJECT LOCATIONS: SLSU Polillo Campus, Polillo, Quezon

OWNER : Southern Luzon State University

MODE OF IMPLEMENTATION : by Contract

PROJECT DURATION : 60 Calendar Days

BILL OF MATERIALS

I. General Works (General Requirements)				
Quantity	Unit	Description	Unit Cost	Total Cost
1	lot	Mobilization/Demobilization		
1	lot	Project Identification & Signs, Tarpaulin		
1	lot	Demolition of exisitng structure		
1	lot	Cleaning, Hauling and Disposal		
1	lot	Safety & Health Program		

Sub - Total P

II. Earthworks (Volume: 10 cubic meters)				
Quantity	Unit	Description	Unit Cost	Total Cost
	cu.m.	backfill		
	cu.m.	Gravel bedding		
	cu.m.	Excavation		

Sub - Total P

III. Reinforced Concrete Works (Volume: 6.10 cubic meters)				
Quantity	Unit	Description	Unit Cost	Total Cost
	bags	Portland Cement		
	cu.m.	Sand S1		
	cu.m.	Gravel 3/4		
	pcs	16mm dia RSB x 6m		
	pcs	10mm dia RSB x 6m		
	roll	G.I. Tie Wire #16		
1	lot	Consumables		

Sub - Total P

IV. Masonry Works (Area: 35.80 square meters)				
Quantity	Unit	Description	Unit Cost	Total Cost
	pcs	CHB 4"		
	bags	Portland Cement		
	cu.m.	Sand		
	pcs	10 mm dia RSB x 6m		
	roll	G.I. Tie Wire #16		
1	lot	Consumables		

Sub - Total P

V. Form Works and Scaffolding Works				
Quantity	Unit	Description	Unit Cost	Total Cost
	pcs	2x3 Cocolumber		
	pcs	1/2x4x8 Phenolic Board		
	kg	Assorted Nail		



1	lot	Consumables		
---	-----	-------------	--	--

Sub - Total P

VI. Steel Truss and Roofing Works (Area: 16.10 Square meters)

Quantity	Unit	Description	Direct Cost	Amount
	m	Pre-painted Ribbed Type Roofing, Sheet 1.1m width, 0.5mm thk		
	pcs	C-Purlins 100x50x20x1.5mm thk, 6m		
	pcs	0.5mm thk x 24" Spanish Stainless Gutter		
	pcs	Channel Bar 2"x5"x6.0mm thk		
	gal	Epoxy Primer gray with Catalyst		
	gal	Lacquer Thinner		
	pcs	Stainless Steel Spanish end Flashing, 24" x 0.5mm thk		
	m	Double Insulation Foam 10mm thk, 50m		
	pcs	Facia Board 8' x 1' x 12mm thk		
	box	Welding Rod, 2.5kg		
1	lot	Consumables (Nails, Screws, Drill Bits, Grinding Disks, Diamond Disks,Cutting Disks & Etc.)		

SUB-TOTAL

VII. Electrical Works

Quantity	Unit	Description	Unit Cost	Total Cost
	pcs	Utility box		
	pcs	Junction box		
	pcs	PVC Molding		
	set	1gang switch pole, complete set, recessed mounted 16A, 230V		
	set	2gang switch pole, complete set, recessed mounted 16A, 230V		
	pcs	LED Light round panel recessed mounted, 12W		
	set	4"Ø Receptacle with LED bulb, 12W		
	m	THHN Wire 2.0 sq.mm		
1.00	lot	Consumables		

Sub - Total P

VIII. Plumbing and Sanitary Works

Quantity	Unit	Description	Unit Cost	Total Cost
Sewer & vent Piping System				
	pcs	4"Ø PVC Pipe		
	pcs	4"Ø PVC Clean Out		
	pcs	4"Ø PVC Elbow 90°		
	pcs	4"Ø x 3"Ø PVC Wye		
	pcs	4"Ø x 2"Ø PVC Wye		
	pcs	3"Ø PVC Pipe		
	pcs	3"Ø PVC Clean Out		
	pcs	3"Ø PVC P-trap		
	pcs	3"Ø PVC Elbow 90°		
	pcs	3"Ø PVC Elbow 45°		
	pcs	3"Ø x 3"Ø PVC Wye		
	pcs	3"Ø x 2"Ø PVC Wye		
	pcs	2"Ø PVC Pipe		
	pcs	2"Ø PVC Elbow 90°		
	pcs	2"Ø PVC Elbow 45°		
Water Supply Piping System				
	pcs	PPR Pipe 1/2" Ø		

	pcs	PPR Tee 1/2" Ø		
	pcs	PPR Coupling 1/2" Ø		
	pcs	PPR Elbow 1/2" Ø		
	pcs	PPR Threaded Elbow 1/2" Ø		
	pcs	PPR Gate Valve 1/2" Ø		
	pcs	PPR ball Valve 1/2" Ø		
	pcs	Cement Solvent 400cc		
Plumbing fixtures and accessories				
	pcs.	Heavy Duty Stainless Steel Faucet		
	set	Lavatory Basin Type with faucet		
	set	Urinal		
	set	Water closet with bidet		
	pcs.	Floor Drain		
Construction of Septic Tank				
		Size: 1.50M. x 3.70M x 1.80M. Deep		
	bags	Portland Cement		
	cu.m	Crushed Gravel (G1)		
	cu.m	Sand		
	pcs.	4" thk. CHB		
	pcs.	Ø12mm x 6M Deformed Bars		
	kgs.	No. 16 Tie Wire		
	pcs.	¼" thk. Ordinary Plywood		
	pcs.	2" x 3" x 8' Cocolumber		
	kgs.	Assorted CW Nail		
	set	complete pvc fittings for septic tank		
1.00	lot	Consumables		

Sub - Total P

IX. Doors and Windows

Quantity	Unit	Description	Unit Cost	Total Cost
4.00	set	PVC Door height: 2.10m, width: 0.60m with complete Accessories		
1.00	set	Awning Window in Powder Coated Aluminum, Glass Thickness: 6.0mm with complete accessories		
2.00	set	Awning Window in Powder Coated Aluminum, Glass Thickness: 6.0mm with complete accessories		
1.00	lot	Aluminum Partition with complete accessories		
1.00	lot	Consumables		

Sub - Total P

X. General Finishes

Quantity	Unit	Description	Unit Cost	Total Cost
Painting Works (Area: 36 square meters)				
	gal	Semi Gloss Paint (Interior)		
	gal	Elastomeric Paint (Exterior)		
	gal	Flat Latex White (Primer)		
	gal	Concrete Putty (Exterior Walls)		
	gal	Penetrating Sealer (Exterior Walls)		
	bags	Skim Coat, 20kg		
	ft	Sand Paper		
Tile Works (Area: 85.7 square meters)				
	pcs	30x60cm Ceramic Tiles (non-skid Floor Tiles)		
	pcs	30x60cm Ceramic Tiles (Glaze wall tiles)		
	kgs	Tile Grout		

	bags	Cement		
	bags	Tile Adhesive		
	cu.m	Sand		
Ceiling Works (Area: 10 square meters)				
	pcs	PVC Ceiling Panel 2.95m x 0.20m		
	pcs	Double Metal Furring		
	pcs	Wall Angles 1x1x8'		
	pcs	Metal Carrying Channel		
	box	Blind Rivet		
1	lot	Consumables		

Sub - Total P



Republic of the Philippines
Southern Luzon State University
Project Management Office
Lucban, Quezon

PROJECT TITLE: Renovation and Improvement of comfort rooms and waterline system
PROJECT LOCATION: SLSU Polillo Campus, Polillo, Quezon
OWNER: Southern Luzon State University
PROJECT DURATION: 60 Calendar Days
SUBJECT: Specification of materials and finishes

SPECIFICATION OF MATERIALS AND FINISHES

GENERAL

- All applicable provisions of the different divisions of the Specifications for each work shall apply for all items cited in this schedule.
- Discrepancy arising from this section of the Contract Documents must be brought to the attention of the Owner or representative Architect/Engineer whose decision shall be final.
- Materials deemed necessary to complete the works but not specifically mentioned in the Specification, Working, Drawing, or in the Contract Document shall be supplied and installed or applied in a workmanlike manner at prescribe or appropriate locations following the Standard Practice of Civil Engineering, National Building Code of the Philippines and Construction Procedures.
- All items with specified approved specification shall be strictly followed.
- The Contractor shall coordinate the work with the Project Management office to expedite the implementation of the project, most specially, during the milestones of the project.
- The Contractor shall supply all finishing accessories and furnishing fixtures as may be approved by the owner or representative and shall be installed by the Contractor whenever required by the Owner or Representative.
- All works must be done within the timeline calendar days given.
- A $\pm 15\%$ variance in the estimated quantities based on the agency's official estimate shall be considered for critical materials, especially reinforced concrete, masonry works and truss and roofing works.

INTERPRETATION OF CONTRACT

- a. In case of conflict between the provisions of the Agreement or of any Contract Document, or between the provisions of one of the Contract Documents and the provisions of another Contract Document, or in case of discrepancy, defective description, error or omission in the Contract, the following rules shall be followed:

Rule 1: The Agreement and the Contract Documents shall be taken as mutually explanatory of one another. The various provisions of the Contract shall be interpreted together, attributing to the 5 doubtful ones that sense which may result from all of them taken jointly.

Republic of the Philippines
Southern Luzon State University
Project Management Office
Lucban, Quezon

Rule 2: The provisions of the Civil Code of the Philippines on the interpretation of contracts and of the Rules of Court on the Interpretation of Documents shall be applied.

Rule 3: Where the conflict between or among the provisions of the Agreement and/or the Contract Documents cannot be resolved by Rules 1 and 2, it shall be understood that:

- a. the Detailed Drawings shall prevail over the General Drawings;
- b. words and figures shall prevail over the Drawings;
- c. words shall prevail over figures in Contract Documents;
- d. written dimensions shall prevail over measured dimensions.

Rule 4: Where the conflict cannot be resolved by applying Rule 3 or where Rule 3 does not apply, the conflict shall be resolved by giving precedence to the Agreement or to provisions of a Contract Document higher in order of priority among the various documents which comprise the Contract. The order of priority among these documents shall be as follows:

- c. Agreement as modified by Notice of Award of Contract, if such be the case, and the Contractor's conformity thereto;
- f. Instruction to Bidders and any amendment thereto;
- g. Addenda to Bid Documents;
- h. Specifications;
- i. Drawings;
- j. Special Conditions of Contract;
- k. General Conditions of Contract;
- l. Other Contract Documents; and
- m. Other documents forming part of the Contract attached thereto or incorporated therein by reference.

Where the order of precedence is modified in the Agreement, such modified order of precedence shall be followed; however, the mere listing of Contract Documents in the Agreement or any Contract Document shall not be interpreted as establishing an order of precedence among them.

Rule 5: Where there is discrepancy, defective description, error or omission in any Contract Document, the Contract Documents shall be interpreted as being complementary to each other. Thus, what is called for in one Contract Document, although not mentioned in another Contract Document where it should have been mentioned, shall be deemed to be called for by the Contract.

Rule 6: The apparent silence of the Drawings, Specifications or any other Contract Document as to any detail, or the lack of detailed description concerning any part of the work, shall be understood to mean that good and accepted construction practice in accordance with the usage or custom of the place shall be followed.

Rule 7: Rules 1 to 6 shall yield to specific rules of interpretation in this document or in the Contract.

- b. The Owner shall resolve the conflict, or interpret or explain such discrepancy, defective description, error or omission.

Republic of the Philippines
Southern Luzon State University
Project Management Office
Lucban, Quezon

- c. The interpretation of or explanation by the Owner shall be issued in the form of instructions to the Contractor. Where the Owner fails to issue the instruction in writing, the execution of that part of work affected by the interpretation or explanation without a timely objection or protest of the Owner shall be deemed to have been executed in accordance with the Owner's explanation or interpretation.
- d. In all cases where a device, item or part of equipment is referred to in the singular number, it is intended that such reference shall apply to as many such devices, items, or parts as are required to complete the work.

I. GENERAL REQUIREMENTS

Mobilization/Demobilization

- Mobilization shall include all activities and associated costs for transportation of Contractor's personnel, equipment, and operating supplies to the site; establishment of temporary field offices, and other necessary general facilities for the Contractor's operations at the site; premiums paid for performance and payment bonds, including co-insurance and re-insurance agreements as applicable.
- Demobilization shall include all activities and costs for transportation of personnel, equipment, and supplies not required or included in the contract from the site; including the disassembly, removal and the site cleanup of temporary offices and other facilities assembled on the site specifically for this contract.

Project Billboards

- The one (1) Project Billboards shall be strategically placed within the site vicinity; (As provided on the General Guidelines and Legal Mandates of the Commission on Audit to promote good governance through transparency and accountability, notifications to the public and other forms of announcement and/or publicity for or otherwise relating to the Projects/Programs/Activities (PPA) shall be made at the least possible cost.) Hence, for infrastructure projects, one (1) tarpaulin signboards must be suitably framed for outdoor display at the project location, and shall be posted as the award has been made. The design and format of the tarpaulin as shown below shall have the following specifications, as per RA 9184 Requirements:

Tarpaulin:	White
Resolution:	70 dpi
Font Size:	Main Information – 3"
	Sub Information – 1"
Font Color:	Black
Contents:	CONSTRUCTION OF (Name of Project and Location)
	CONTRACTOR :
	DATE STARTED :
	CONTRACT COMPLETION DATE :
	CONTACT COST :
	IMPLEMENTING OFFICE/ CONTACT NO. :
	SOURCES OF FUND :

Republic of the Philippines
Southern Luzon State University
Project Management Office
Lucban, Quezon

Demolition of Existing structure

- Existing Structure specified in the plans or instructed by representative Architect/Engineer shall be demolished.

Clearing and Hauling

- All the debris and material shall be placed where the SLSU Project engineer instructed.

II. EARTHWORKS

- **Earth fill/Backfill** – excavation shall be backfilled and filling materials shall be made in layers not to exceed 15 centimeters and thoroughly tamped before the next fill is placed.
- **Gravel Bedding** –All gravel bedding shall be tamped by a plate compactor or any tampering equipment to make it compact.
- **Demolition of Old Structure** – All existing Structure within the site of construction shall be demolished and all the debris and material shall be placed where the SLSU Project engineer instructed.
- **Compaction and Grading** – All Exterior grades and compaction shall be formed in accordance with the drawings and specifications.
- **Excavation** – The Contractor shall make all necessary excavation for foundations, footing tie beam to establish grades indicated in the drawings and plans.
 1. Implementing an adequate method of excavation, and adhering to safe work sequences and proper standards of workmanship in connection therewith.
 2. Providing adequate protection of all excavation from collapse and subsidence of adjacent ground and properties.
 3. The safety and integrity of the adjacent properties of the permanent works.
 4. All concrete works shall have a minimum of 4" or 100mm thick of gravel bedding or as planned.
- This Specification is to be read in conjunction with the Conditions of Contract, scope of work and Drawings. Where Works are ordered to be performed by the Contractor, but are not specified in the Specification, the Contractor, must carry them out with full diligence and expedience as are expected for Works of that nature.
- As prior to the construction of the project, necessary clearing and grading shall be done by the contractor.
- **Trimming and Pruning of Trees** – Trimming and pruning of branches of Trees that directly affected the building construction shall be made effectively including hauling of unsuitable materials.
- All trees affected shall be removed approved by the owner or representative Architect/Engineer.

III. REINFORCED CONCRETE WORKS

- Cement shall conform to Portland Cement ASTM C150
- Concrete aggregates shall conform to ASTM C33 except the aggregates failing to meet these specifications but which have produced concrete to adequate strength and durability may be used to the approval of the Civil Engineer.
- Water used in mixing concrete shall be clean and free from injurious amounts of oil, acids, alkalis, salts, organic materials or other substances deleterious to concrete or steel. In addition, the mixing water for pre stressed concrete shall not contain deleterious amounts of chloride ion.
- Reinforcing bars shall conform to ASTM A615

Republic of the Philippines
Southern Luzon State University
Project Management Office
Lucban, Quezon

- Reinforcing bars shall be stored in such a manner to prevent and lessen rusting and deterioration or intrusion of foreign matter.
- Admixtures to be used in concrete shall be subject to prior approval by the Structural Engineer.
- Cement and aggregates shall be stored in such a manner as to prevent their deterioration or the intrusion of foreign matter.

Mixing of concrete

- All concrete shall be mixed until there is uniform distribution of the materials and shall be discharged completely before the mixer is recharged.

Conveying of concrete

- Concrete shall be conveyed from the mixer to the place of final deposit by methods that will prevent the separation or loss of materials

Depositing of concrete

- Concrete shall be deposited as nearly as practicable in its final position to avoid segregation due to re handling or flowing.

Curing

- Concrete shall be maintained in a moist condition for at least 7 days after placing.

IV. MASONRY WORKS

- Unless otherwise specified, the vertical reinforcement shall be 10mm dia at 600mm o.c for all thickness and horizontal reinforcements for CHB shall be 10mm at every 3 layer of CHB. Lap splices shall be 300 long (Minimum).
- CHB of good quality shall be used to ensure strength of walls
- Plastering of walls shall not be less than 15mm and not to exceed 32mm. must be smooth finished.

V. FORMWORKS AND SCAFFOLDING WORKS

- **Scope of Work**

This section covers the design, supply, fabrication, erection, maintenance, and removal of all formworks and scaffolding required for concrete and related structural works.

Formwork Materials

- **Plywood/Form Panels:** Marine plywood or phenolic board, minimum 12mm thick, smooth finish
- **Lumber:** Sound, straight, and free from defects
- **Steel Forms:** True to shape, mortar-tight, and properly braced

Installation

- Formwork shall support all loads including wet concrete, workers, equipment, and vibration
- Designed to prevent excessive deflection, leakage, or misalignment
- Forms shall be aligned, level, and plumb
- Joints shall be tight to prevent grout leakage
- Adequate bracing and shoring must be installed
- All formworks shall be formed, that columns and beams, and all other structure that needs form work, with quality to ensure smooth concrete pours.
- Ensure strength and safety in supports and scaffolding.

Republic of the Philippines
Southern Luzon State University
Project Management Office
Lucban, Quezon

- Variation in alignment: ± 5 mm
- Variation in dimensions: ± 10 mm
- Surface irregularities shall comply with finish requirements

Removal of Forms

- Forms shall not be removed until concrete has gained sufficient strength:
 - Vertical forms: 24–48 hours
 - Slabs: 21-28 days
 - Beams and soffits: 28 days
- Removal shall not damage concrete surfaces

VI. STEEL TRUSS AND ROOFING WORKS

- Fabrication of steel trusses, installation of roof frame, pre-painted Ribbed type roof, cap flashing, gutter and other roof accessories.
- Painting of steel trusses and framing.
- Weld all shop assembled connections continuous without undercut and or distortion of handrails
- Grind and or dress exposed welds smooth and flush to corner or fillet without weakening connection.
- Lightly sand and blend with fine grit paper all light scratches prior to finishing.
- Splices and expansion joints shall utilize internal splice connectors with set screws to allow for expansion over ambient temperature change.

VII. ELECTRICAL WORKS

- All works shall be in accordance with the governing codes and regulations of the latest edition of the Philippine Electrical Code, with the rules and regulations of the National and Local Authorities concerned in enforcement of electrical laws and ordinance and with the rules and regulation of the utility companies concerned.
- Contractor shall furnish all labor, equipment and materials as may be approved by the owner or his/her representative and shall perform all operations with electrical system shown in the drawings, their test and inspection complete in accordance with specifications and drawings and subject to terms and conditions of the contract and materials not specifically mentioned to bring the electrical system to operating condition and ready for use by the owner.
- Electrical materials shall be as specified in the electrical drawing details as shown in the plans and bill of quantities.
- Custom built Main Distribution Panel Board (MDLP & MDPP) shall be NEMA-1 enclosure in semi-flushed wall mounted. All panels shall be finished in light gray enamel (ANSI # 61) over a rust inhibitor.
- All lighting and Power Panels shall be NEMA-1 enclosure with three-phase main circuit breaker, 3 poles and/or single phase 2 poles circuit breaker in the branch circuits as detailed in drawing. Use only one (1) brand of circuit breaker. Preferred brand of circuit breakers is Schneider Electric, ABB, Fuji, G.E. or their equivalent in quality.
- All wires and cables shall comply with the requirements of the Underwriter's Laboratories, The ASTM and IPCEA as they apply in the particular.
- Wires and cables for lighting, power and auxiliary systems shall be nylon, jacketed, plastic insulated for 600 volts working pressure, type THHN/THWN unless otherwise noted. Type TW, colored white for grounding. Feeder cable shall be type THW-2.

Republic of the Philippines
Southern Luzon State University
Project Management Office
Lucban, Quezon

- For lighting system, no wire smaller than 3.5 mm² THHN/THWN shall be used for homerun circuit. Branch tap to lighting fixture/outlet and switch wire can be 2.0mm² THHN/THWN.
- For power system, no wire smaller than 3.5 mm² THHN shall be used. Smallest size of grounding wire 2.0mm² TW.
- All feeder cables/wires shall be color coded and as manufactured by the Phelps Dodge, Duraflex, or approved equal. A substitute of color coding can be by properly identifying phase wire with colored tape at each end. 1 mark of red tape for line A, 2 marks of yellow tape for line B and 3 marks of blue or black for line C. Color coding of wires are as follows:

1.1 Line A – Red	Ground wire – White
1.2 Line B – Yellow	Line C – Blue or Black
1.3 Control wire #01 – Yellow	Control wire #02 – Blue

- Metallic conduits for interior and exterior systems shall be a standard weight, mild, steel, hot dip galvanized with an interior coating as manufactured by Matsushita, Sumitomo, McGill or their approved equal. uPVC nonmetallic conduits embedded in concrete slabs, concrete wall and partitions shall be high-impact type, schedule 40 by Emerald or approved equal.
- No conduits shall be used in any system smaller than 20mm diameter, electric trade size, Location and sizes of pull boxes shall be cleared to the Engineer prior to fabrication and installation.
- All materials and equipment to be installed shall be of approved quality and should be presented to the Owner for approval prior to installation.
- Other items not mentioned in the specifications but are included in the installation shall be subjected to be pre-approved by the owner.

VII. PLUMBING WORKS

- All plumbing works included herein shall be executed according to the provisions of the National Plumbing Code, National Building Code and the Rules and Regulations of the City/Province.
- Use PPR Pipes and fittings of approved size and quality for water lines.
- Use PVC pipes and fittings (Neltex or approved equivalent) for sanitary and sewer lines.
- The drawings are not intended to show every pipe, fittings, valves and appliances. All such item whether specifically mentioned or not, or indicated on the drawings shall be finished and installed if necessary, to complete the system in accordance with the best practice of the Plumbing Trade and to the satisfaction of the Owner/Representative.
- All materials to be used shall be new and shall conform to the Reference Code and Standards. Use of materials shall further be governed by other requirements, imposed on other section of these specifications. Materials shall be subject to test necessary for their fitness if so required.
- The Contractor shall furnish all materials, labor and equipment necessary for the installation of all water lines, and sewer lines.
- All materials and equipment to be installed shall be of approved quality and should be presented to Southern Luzon State University/Representative Architect/Engineer for approval prior to installation.
- All works shall be done under direct supervision of a Licensed Master Plumber.

IX DOORS & WINDOWS

- This item shall consist of furnishing door and window materials, labor, tools and equipment required in undertaking the proper installation as shown on the approved plans and in accordance with this specification.

DOORS

- Frames and panel members shall be fabricated from the extruded aluminum sections true to details with clean, straight, sharply define profiles and free from defects impairing strength, durability and appearance.
- Screws, nuts, washers, bolts, rivets and other miscellaneous fastening devices shall be made of non-corrosive materials such as aluminum and stainless steel.
- Hardware for fixing and locking devices shall be closely matched to the extruded aluminum section and adaptable to the type and method of opening.

Construction Requirements

- For all assembly and fabrication works, the cut ends shall be true to line and accurately jointed, free of burrs and rough edges.
- Main frames shall consist of head, still and jamb stiles specifically designed and machined to inner fit and joined at corners with self-threading screws.
- Door panels shall be accurately joined at the corners assembled and fixed rigidly to ensure weather tightness.
- Aluminum glass doors and main frame shall be installed in a prepared opening to be set plumb, square, level and true to details.
- Sliding type door panel shall be equipped with concealed roller overhead tracks with bottom guide.
- Double action type door panel shall be equipped with heavy duty hinges that will control the door leaf in a close or open position.

WINDOWS

- Window panel shall be connected at corners with miter joint fixed rigidly to ensure weather tightness.
- Sliding panels shall be suspended with concealed roller overhead tracks with bottom guide pitch outward and slotted for complete drainage.
- The sliding panels shall be provided with interior handles.
- ~~The locking devices shall be spring loaded extruded latch that automatically engages special frame hips.~~
- Awning window type shall be provided with two hinges fabricated from extruded aluminum alloy. They shall open on stay arms having adjustable sliding friction shoes to control window panel operations.
- Locking device shall be one arm action handle for manual operations complete with strike plate for awning windows.
- ~~All aluminum parts shall be protected adequately to ensure against damage during transit and construction phase.~~

IX. FINISHING WORKS

Painting Works

- Consist of furnishing all items, articles, materials, tools, equipment, labor, scaffolding, ladder, methods and other incidentals necessary and required for the satisfactory completion of the work.

Republic of the Philippines
Southern Luzon State University
Project Management Office
Lucban, Quezon

- It covers complete painting and finishing of wood, plasters, concrete, metal or other surfaces exterior or interior of building.
- Painting includes painting of steel trusses, purlins, metal barriers, metal frames for polycarbonate sidings and rubberized painting of flooring of existing covered court, roof paintings of existing roofing, and painting of all existing concrete structures.

Materials

- All paint shall be recommended by the manufacturer for the use intended and shall be delivered to the jobsite in original containers with seal unbroken and labels intact.
- Except for ready mixed materials in original containers all mixing shall be done in the jobsite. No materials are to be reduced, change, or mixed except as specified by manufacturer of said materials.

Surface Preparation

- All surface to receive paint should be cleaned and in proper condition. All knot holes, pitch pockets or sappy portions shall be shellacked or sealed with knot sealer.
- Nail holes, cracks or defects shall be carefully puttied after the first coat with putty matching color of the stain or paint.
- Masonry or plaster shall be completely dried before any sealer or paint applied.
- After primer sealer coat is dried, all visible suction spots shall be toughed up before the succeeding coats are applied.

Paint Application

- Paints when applied by brush shall be non-fluid, thick enough to lay down on adequate film of wet paint. Brush marks shall flaw out after application of paint.
- Paints prepared for application by roller must be similar to brushing paint. It must be non-sticky when thinned to spraying viscosity to break up easily into droplets.

Workmanship

- All works shall be performed by experienced and skilled craftsmen to assure finished work of first-class quality, appearance and durability.
- All paints, and other coatings shall be mixed and applied strictly in accordance with manufacturers printed instructions.

Ceiling

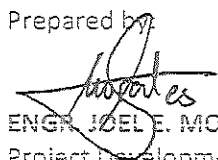
- Construction of ceiling in metal framing at classroom, comfort room, and around the perimeter.
- All works shall be done in high quality to ensure quality finish.
- Materials to be use shall be kept such in a manner to as to prevent their deterioration or the intrusion of foreign matter.
- Spacing of screws shall be kept under maximum distances

Tile Works

- All works shall be done with high quality.
- Cleaning and proper preparation of slab shall be done to ensure well bonding of mortar and no air pockets trapped under.
- Sloping of tiles towards floor drain shall be kept under minimum.

Republic of the Philippines
Southern Luzon State University
Project Management Office
Lucban, Quezon

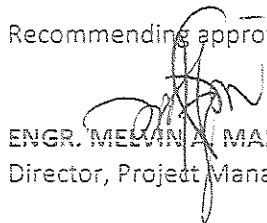
Prepared by:


ENGR. JOEL E. MORALES
Project Development Officer I

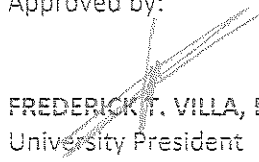
Reviewed by:


ENGR. MARK KEVIN A. MAKIPAGAY
Project Development Officer II

Recommending approval:


ENGR. MELVIN A. MAKIPAGAY
Director, Project Management Office

Approved by:


FREDERICK T. VILLA, DT
University President

Republic of the Philippines
Southern Luzon State University
Project Management Office
Lucban, Quezon

PROJECT TITLE: Renovation and Improvement of comfort rooms and waterline system
PROJECT LOCATION: SLSU Polillo Campus, Polillo, Quezon
OWNER: Southern Luzon State University
PROJECT DURATION: 60 Calendar Days
SUBJECT: Scope of Works

SCOPE OF WORKS

I. GENERAL REQUIREMENTS

- Mobilization and Demobilization
- Project Identifications
- Safety & Health Program
- Demolition of existing structure (Existing counter top, removal of existing tiles of female cr, removal of floor tiles on the director's comfort room). Drilling/coring of hole for the plumbing of director's office cr.
- Site clearing and hauling

II. EARTHWORKS

- Compacting and grading
- Excavation and Backfilling in the area.
- Excavation of required depth of foundation.

III. REINFORCED CONCRETE WORKS

- Concreting of all structural elements as plan, following NSCP standard.

IV. MASONRY WORKS

- Laying of the Concrete Hollow Blocks with even textures and well-defined edges, all masonry works shall provide with the 10mm diameter reinforcing steel bars.
- Masonry finishes shall be smooth plaster finish unless otherwise specified.
- Plastering of both faces of walls as per standard and minimum thickness as required.
- Closing of opening in the female comfort room.
- ~~Finish shall be smooth.~~

V. FORMWORKS AND SCAFFOLDING

- The work includes the Construction and installation of formworks and scaffolding, Fabrication of column forms and erection of the forms and scaffolding and Dismantling/stripping of form works.

VI. STEEL TRUSS AND ROOFING WORKS

- Weld all shop assembled connections continuous without undercut and or distortion of truss
- Grind and or dress exposed welds smooth and flush to corner or fillet without weakening connection.
- Splices and expansion joints shall utilize internal splice connectors with set screws to allow for expansion over ambient temperature change.

Republic of the Philippines
Southern Luzon State University
Project Management Office
Lucban, Quezon

- Roofing materials to be installed shall be brand new and must conform with specifications according to plans or approved equivalent by the supervising engineer.
- Supply and installation of all roofing materials as plan.
- Supply and installation of steel fence.

VII. ELECTRICAL WORKS

- Supply and Installation of electrical fixtures.
- Supply and Installation of electrical wire and cable.
- Supply and Installation of electrical pipe line.
- Power supply for the building shall be connected to the existing power supply.
- All materials and equipment to be installed shall be approved quality and should be presented to Southern Luzon State University/Representative Engineer for approval prior to installation.
- All materials shall be new and shall conform to the reference Code and Standard. Use of materials shall further be governed by other requirements, imposed on the specification. Materials shall be subjected to tests, if necessary, for their fitness if so required.

VIII. PLUMBING WORKS

- All plumbing works included herein shall be executed according to the provision of the National Plumbing Code of the Philippines, national Building Code and the Rules and Regulation of the City/Province.
- Supply and installation of sanitary and plumbing fixtures.
- Supply and installation of Sewer pipe line and water drain.
- Construction of new septic tank and tapping of outfall to existing drainage system.
- All materials and equipment to be installed shall be approved quality and should be presented to Southern Luzon State University/Representative Engineer for approval prior to installation.
- All materials shall be new and shall conform to the reference Code and Standard. Use of materials shall further be governed by other requirements, imposed on the specification. Materials shall be subjected to test, if necessary, for their fitness if so required.

IX. DOORS AND WINDOWS

- Supply and Installation of doors specified in the plan.
- Supply and Installation of windows specified in the plan.

X. GENERAL FINISHES

Paint Works

- Prepare walls for painting using skim coats, etc., or equivalent
- Painting of Interior and Exterior walls, and ceiling
- Waterproofing of flooring on director's office cr.

Ceiling Works

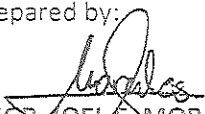
- Supply and installation of ceiling in metal framing at the comfort room extension

Tile Works

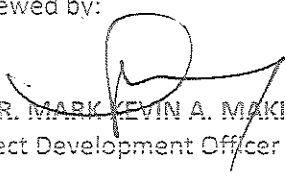
Republic of the Philippines
Southern Luzon State University
Project Management Office
Lucban, Quezon

- Supply and installation of 30x60cm (non-skid) ceramic tiles of on Floor area of comfort room extension including existing cr (female cr) and director's office CR.
- Supply and installation of 30x60cm (glaze wall tiles) ceramic tiles on all inner walls of comfort room extension including existing cr (female cr) and director's office CR.

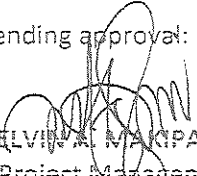
Prepared by:


ENGR. JOEL E. MORALES
Project Development Officer I

Reviewed by:


ENGR. MARK KEVIN A. MAKIPAGAY
Project Development Officer II

Recommending approval:


ENGR. MELVIN A. MAKIPAGAY
Director, Project Management Office

Approved by:


FREDERICK T. VILLA, DT
University President

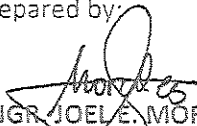
Republic of the Philippines
Southern Luzon State University
Project Management Office
Lucban, Quezon

PROJECT TITLE: Renovation and Improvement of comfort rooms and waterline system
PROJECT LOCATION: SLSU Polillo Campus, Polillo, Quezon
OWNER: Southern Luzon State University
PROJECT DURATION: 60 Calendar Days
SUBJECT: Minimum Technical Personnel and Equipment

MINIMUM TECHNICAL PERSONNEL AND EQUIPMENT

QUANTITY	MINIMUM TECHNICAL PERSONNEL
1	Foreman
2	Skilled Worker
2	Laborers

QUANTITY	MINIMUM EQUIPMENT
1 unit	Bagger mixer
1 unit	Cut – Off Machine
1 unit	Welding Machine
1 unit	Jack Hammer

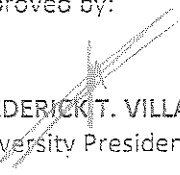
Prepared by:

ENGR. JOELLE MORALES
Project Development Officer I

Reviewed by:

ENGR. MARK KEVIN A. MAKIPAGAY
Project Development Officer II

Recommending approval:

ENGR. MELVIN A. MAKIPAGAY
Director, Project Management Office

Approved by:

FREDERICK T. VILLA, DT
University President

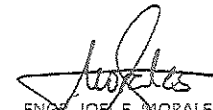
Republic of the Philippines
SOUTHERN LUZON STATE UNIVERSITY
Project Management Office
Lucban, Quezon

PROJECT TITLE : Renovation and improvement of comfort rooms and waterline system
PROJECT LOCATION: SLSU-Polillo Campus, Polillo, Quezon
OWNER : Southern Luzon State University
MODE OF IMPLEMENTATION : by Contract
PROJECT DURATION : 60 Calendar Days

PERT-CPM/GANTT CHART

ITEM	TASK NAME	DURATION		TIMELINE											
				5	10	15	20	25	30	35	40	45	50	55	60
I.	GENERAL REQUIREMENTS														
	Safety and Health Certificate	0	day												
	Mobilization/ Demobilization	60	days												
	Site Clearing and Hauling	60	days												
	Demolition of Existing Structure	10													
II.	EARTH WORKS														
	Excavation	5	days												
	Backfilling	5	days												
	Compacting and Grading	5													
III.	REINFORCED CONCRETE WORKS														
	Foundation	5	days												
	Footing Tie Beam	5	days												
	Columns	5	days												
	Slab on Grade	5													
	Beams	5	days												
IV.	MASONRY WORKS														
	CHB Laying	5	days												
	Plastering	10	days												
V.	FORMWORKS														
	Wall Footing	5	days												
	Columns	5	days												
	Beams	5	days												
VI.	STEEL TRUSS AND ROOFING WORKS														
	Fabrication and Installation of roof frame	10	days												
	Installation of Roof	5	days												
	Fabrication and installation of steel fence	5	days												
VII.	ELECTRICAL WORKS														
	Rough-ins	5	days												
	Installation of wires and electrical fixtures	5	days												
VIII.	PLUMBING WORKS														
	Rough-ins	5	days												
	Installation of Plumbing fixtures	5	days												
IX.	GENERAL FINISHES														
	Doors and Windows	5	days												
X.	GENERAL FINISHES														
	Paint Works	10	days												
	Ceiling Works	5	days												
	Tile Works	5	days												

Prepared by :


ENGR. JOELLE E. MORALES
Project Development Officer I

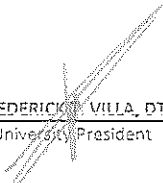
Prepared by :

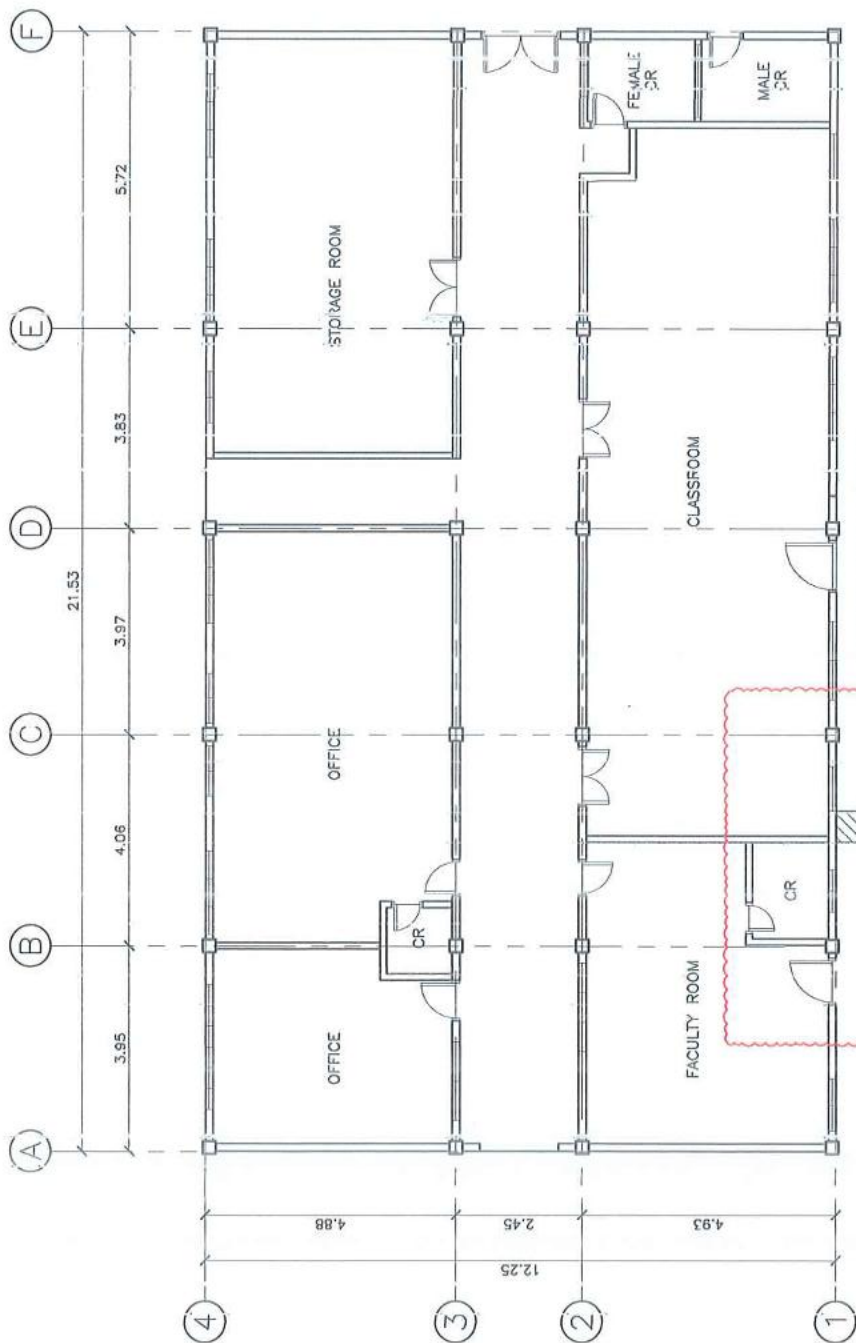

ENGR. MARK KEVIN A. MAKIPAGAY
Project Development Officer II

Recommending Approval :


ENGR. MELVIN A. MAKIPAGAY
Director, Project Management Office

Approved by :


FREDERICK M. VILLA, DT
University President



1 STOREY BUILDING
FLOOR PLAN
SCALE: 1:100



CIVIL ENGINEER: [Signature]
PROJECT TITLE: RENOVATION AND IMPROVEMENT OF COMFORT ROOMS AND WATERLINE SYSTEM
400 EHS 3 PL POLLOID CAMPUS PROJECT, IL, 60204

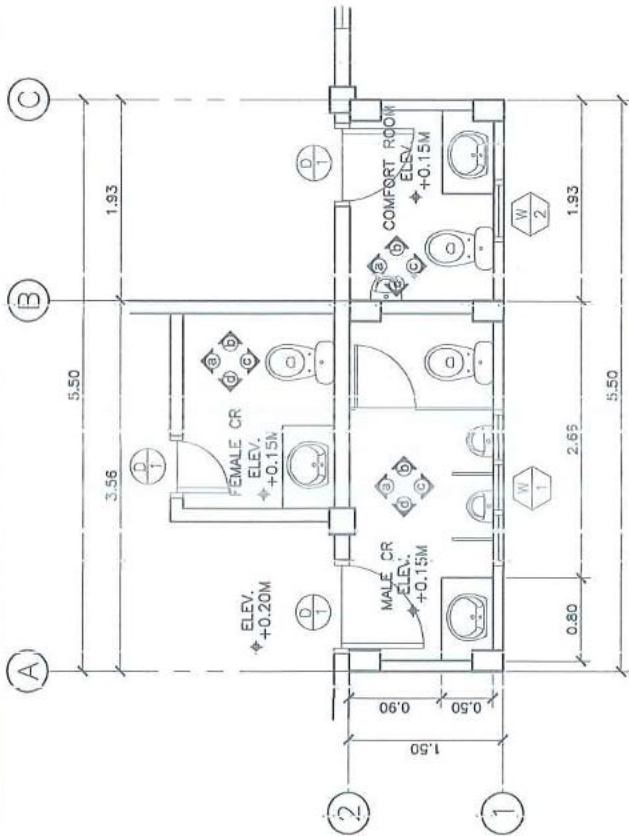
PLANNED BY: [Signature]
ENGR. DEL. NO. 000000
PROJECT NO. 000000
DATE: 00/00/00

REVIEWED BY: [Signature]
ENGR. MARKERMAN, MARKPAGAY
PROJECT NO. 000000
DATE: 00/00/00

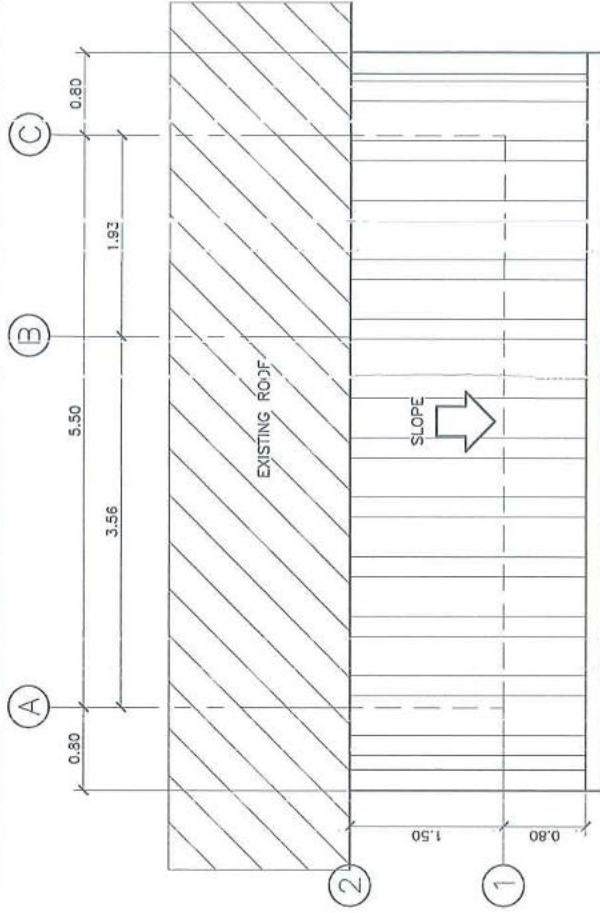
RECOMMENDING APPROVAL: [Signature]
ENGR. MELVIN A. MARKPAGAY
DIRECTOR, PROJECT MANAGEMENT OFFICE

APPROVED BY: [Signature]
FREDERICK T. VILLA, DT
UNIVERSITY PROJECT MT

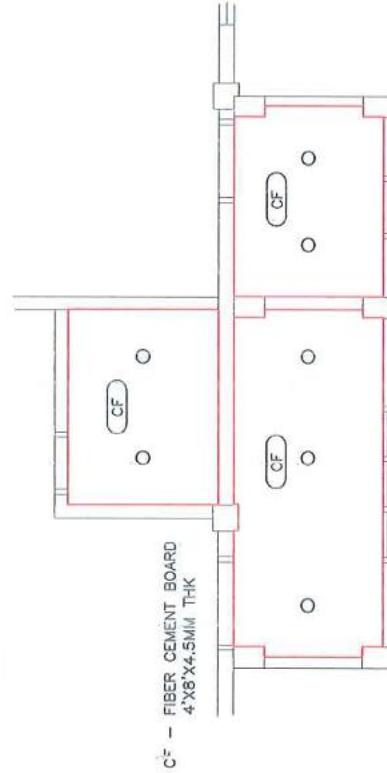
SHEET CONTENT: [Blank]
SHEET #



COMFORT ROOM EXTENSION
FLOOR PLAN
SCALE: 1:50M

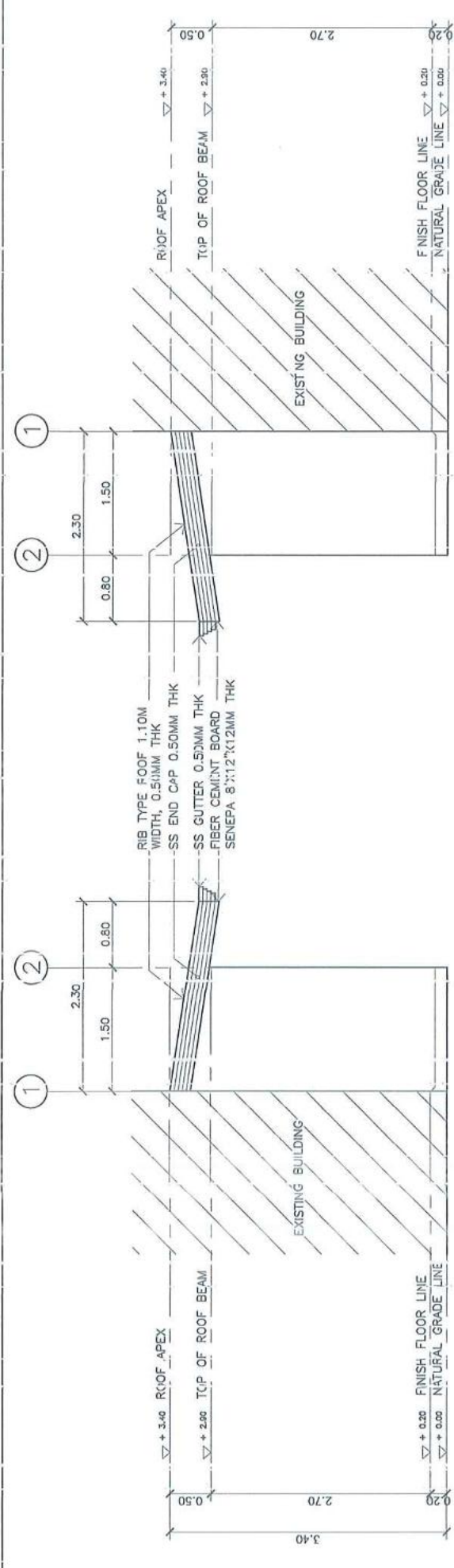


COMFORT ROOM EXTENSION
ROOF PLAN
SCALE: 1:50M



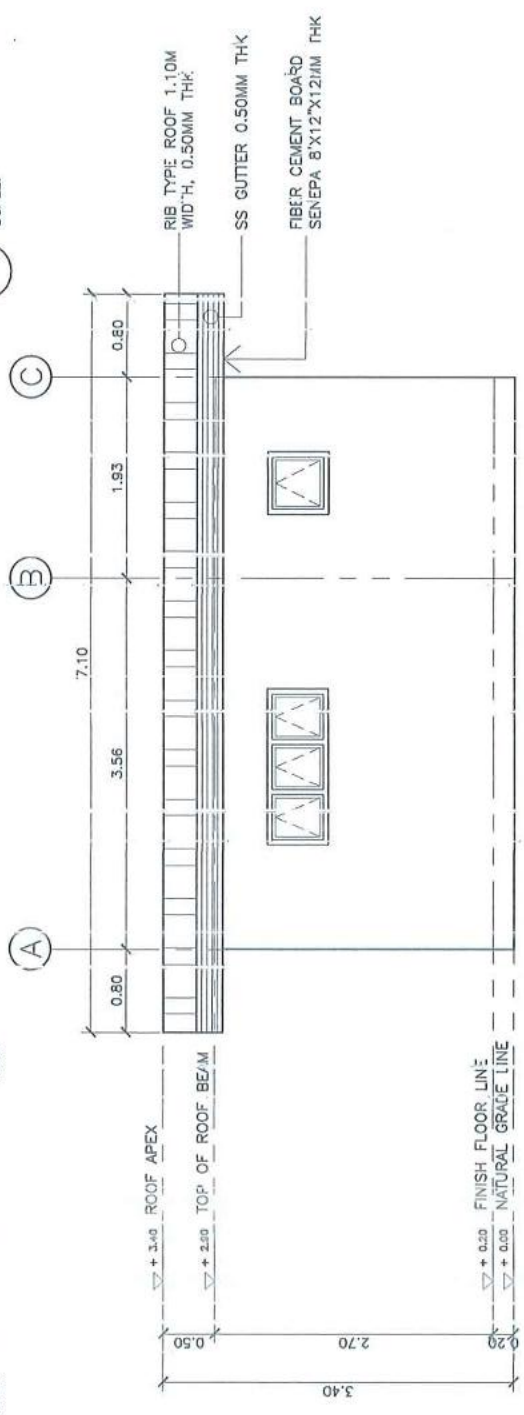
COMFORT ROOM EXTENSION
REFLECTED CEILING PLAN
SCALE: 1:50M

CIVIL ENGINEER:	PROJECT TITLE:	REVISIONS:	PLANNED BY:	REVIEWED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	SHEET CONTENT:	SHEET #	



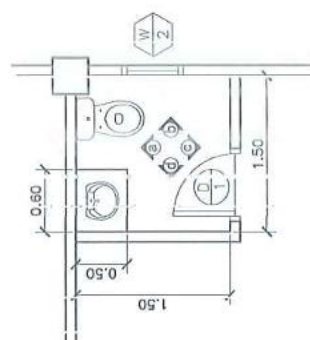
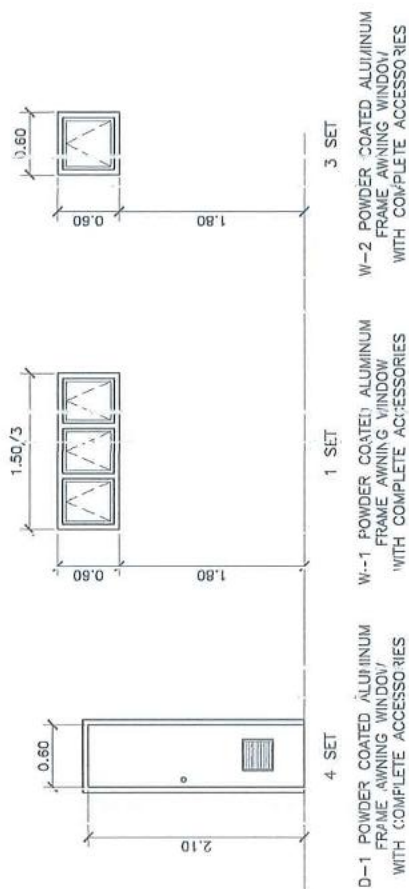
COMFORT ROOM EXTENSION
LEFT SIDE ELEVATION
SCALE: 1:50M

COMFORT ROOM EXTENSION
RIGHT SIDE ELEVATION
SCALE: 1:50M



COMFORT ROOM EXTENSION
REAR SIDE ELEVATION
SCALE: 1:50M

	CIVIL ENGINEER:	PROJECT TITLE:	REVISIONS:	RECOMMENDING APPROVAL:	APPROVED BY:	SHEET CONTENT:	SHEET #
	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.	RENOVATION AND IMPROVEMENT OF COMFORT ROOMS AND WATERLINE SYSTEM 1420 5th St. P.O. Box 12345, Lagos, Nigeria	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.	1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.



FLOOR PLAN

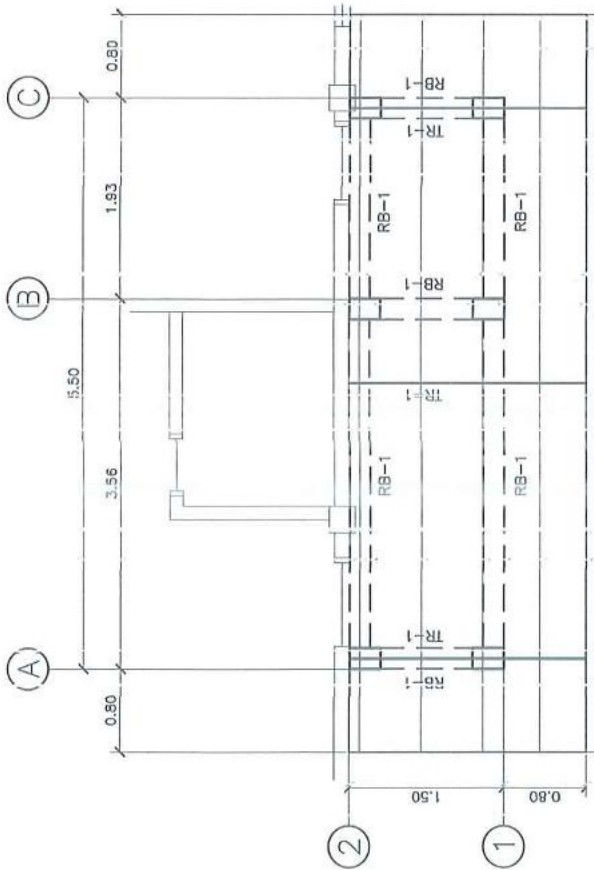
DIRECTOR'S OFFICE CR

1:50M

DOORS AND WINDOWS SCHEDULE:

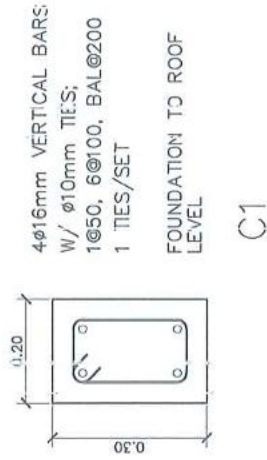
1:50M

	CIVIL ENGINEER:	PROJECT TITLE:	PLANNED BY:	REVIEWED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	SHEET CONTENT:
	DATE: _____ TIME: _____ DRAWN: _____ CHECKED: _____ IN CHARGE: _____	RENOVATION AND IMPROVEMENT OF COMFORT ROOMS AND WATERLINE SYSTEM	ENGR. JOEL E. RIVALES PROJECT MANAGER DATE: _____ TIME: _____	 ENGR. MICHAEL J. RIVAS PROJECT MANAGER DATE: _____ TIME: _____	 ENGR. MICHAEL J. RIVAS PROJECT MANAGER DATE: _____ TIME: _____	 ENGR. MICHAEL J. RIVAS PROJECT MANAGER DATE: _____ TIME: _____	FREDERICK T. VILLA, CT PROJECT MANAGER DATE: _____ TIME: _____



COMFORT ROOM EXTENSION
ROOF FRAMING PLAN
 SCALE: 1:50M

COLUMN SCHEDULE
 ($f'_c = 3,000$ psi, $f_y = 40,000$ psi)

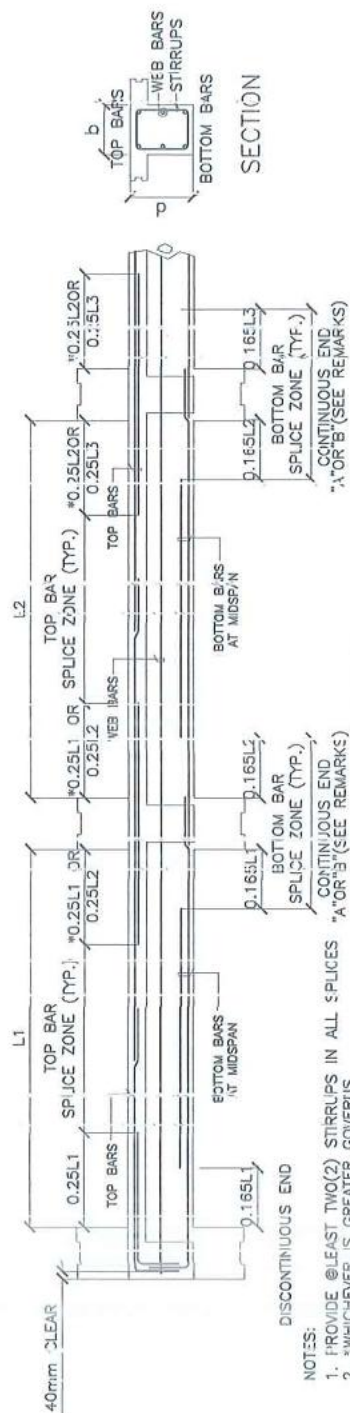


FOOTING SCHEDULE ($f_y = 40,000$ psi)

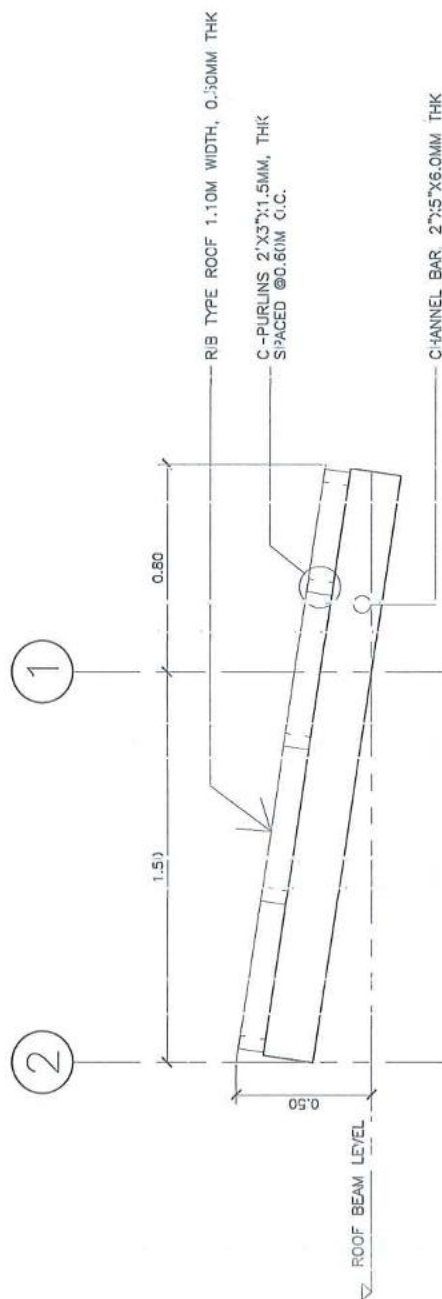
MARK	T (mm)	W (mm)	L (mm)	H (mm)	f'_c (psi)	BAR X SHORTER BAR	BAR Y LONGER BAR	REMARKS
F-1	200	1500	1000	1000	3000	5 - #16	7 - #16	COMBINED

	CIVIL ENGINEER:	PROJECT TITLE:	REVIEWED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	SHEET CONTENT:	SHEET #
	RENOVATION AND IMPROVEMENT OF COMFORT ROOMS AND WATERLINE SYSTEM 400 SWS 2 ST POLLED CAMPUS, COLLIER, ILLINOIS	ENGR. JOEL F. MARPLES PROJECT 1 DATE: 01/11/2023	ENGR. MELVIN A. MAGAGAY PROJECT 2 DATE: 01/11/2023	ENGR. MELVIN A. MAGAGAY PROJECT 2 DATE: 01/11/2023	ENGR. MELVIN A. MAGAGAY PROJECT 2 DATE: 01/11/2023	FREDE... PROJECT 2 DATE: 01/11/2023	FREDE... PROJECT 2 DATE: 01/11/2023

MARK	SECTION		REBAR dia. (mm)	DISCONT		MIDSPAN		CONT. "A"		CONT. "B"		WEB BAR EF	f'c (psi)	STIRRUPS SPACING	REMARKS
	b (mm)	d (mm)		TB	BB	TB	BB	TB	BB	TB	BB				
RB-1	200	300	ø16	2	2	2	2	2	2	2	2		3000	1ø10;1ø50,6ø100,3ø200	



TYPICAL BEAM DETAIL



COMFORT ROOM EXTENSION
TRUSS DETAIL (TR-1)
SCALE: 1:20M

	CIVIL ENGINEER	PROJECT TITLE:	PLANNED BY:	REVIEWED BY:	RECOMMENDING APPROVAL	APPROVED BY:	SHEET #
	ENG. 1-2 ENG. 1-3 ENG. 1-4 ENG. 1-5 ENG. 1-6 ENG. 1-7 ENG. 1-8 ENG. 1-9 ENG. 1-10 ENG. 1-11 ENG. 1-12 ENG. 1-13 ENG. 1-14 ENG. 1-15 ENG. 1-16 ENG. 1-17 ENG. 1-18 ENG. 1-19 ENG. 1-20 ENG. 1-21 ENG. 1-22 ENG. 1-23 ENG. 1-24 ENG. 1-25 ENG. 1-26 ENG. 1-27 ENG. 1-28 ENG. 1-29 ENG. 1-30 ENG. 1-31 ENG. 1-32 ENG. 1-33 ENG. 1-34 ENG. 1-35 ENG. 1-36 ENG. 1-37 ENG. 1-38 ENG. 1-39 ENG. 1-40 ENG. 1-41 ENG. 1-42 ENG. 1-43 ENG. 1-44 ENG. 1-45 ENG. 1-46 ENG. 1-47 ENG. 1-48 ENG. 1-49 ENG. 1-50 ENG. 1-51 ENG. 1-52 ENG. 1-53 ENG. 1-54 ENG. 1-55 ENG. 1-56 ENG. 1-57 ENG. 1-58 ENG. 1-59 ENG. 1-60 ENG. 1-61 ENG. 1-62 ENG. 1-63 ENG. 1-64 ENG. 1-65 ENG. 1-66 ENG. 1-67 ENG. 1-68 ENG. 1-69 ENG. 1-70 ENG. 1-71 ENG. 1-72 ENG. 1-73 ENG. 1-74 ENG. 1-75 ENG. 1-76 ENG. 1-77 ENG. 1-78 ENG. 1-79 ENG. 1-80 ENG. 1-81 ENG. 1-82 ENG. 1-83 ENG. 1-84 ENG. 1-85 ENG. 1-86 ENG. 1-87 ENG. 1-88 ENG. 1-89 ENG. 1-90 ENG. 1-91 ENG. 1-92 ENG. 1-93 ENG. 1-94 ENG. 1-95 ENG. 1-96 ENG. 1-97 ENG. 1-98 ENG. 1-99 ENG. 1-100 ENG. 1-101 ENG. 1-102 ENG. 1-103 ENG. 1-104 ENG. 1-105 ENG. 1-106 ENG. 1-107 ENG. 1-108 ENG. 1-109 ENG. 1-110 ENG. 1-111 ENG. 1-112 ENG. 1-113 ENG. 1-114 ENG. 1-115 ENG. 1-116 ENG. 1-117 ENG. 1-118 ENG. 1-119 ENG. 1-120 ENG. 1-121 ENG. 1-122 ENG. 1-123 ENG. 1-124 ENG. 1-125 ENG. 1-126 ENG. 1-127 ENG. 1-128 ENG. 1-129 ENG. 1-130 ENG. 1-131 ENG. 1-132 ENG. 1-133 ENG. 1-134 ENG. 1-135 ENG. 1-136 ENG. 1-137 ENG. 1-138 ENG. 1-139 ENG. 1-140 ENG. 1-141 ENG. 1-142 ENG. 1-143 ENG. 1-144 ENG. 1-145 ENG. 1-146 ENG. 1-147 ENG. 1-148 ENG. 1-149 ENG. 1-150 ENG. 1-151 ENG. 1-152 ENG. 1-153 ENG. 1-154 ENG. 1-155 ENG. 1-156 ENG. 1-157 ENG. 1-158 ENG. 1-159 ENG. 1-160 ENG. 1-161 ENG. 1-162 ENG. 1-163 ENG. 1-164 ENG. 1-165 ENG. 1-166 ENG. 1-167 ENG. 1-168 ENG. 1-169 ENG. 1-170 ENG. 1-171 ENG. 1-172 ENG. 1-173 ENG. 1-174 ENG. 1-175 ENG. 1-176 ENG. 1-177 ENG. 1-178 ENG. 1-179 ENG. 1-180 ENG. 1-181 ENG. 1-182 ENG. 1-183 ENG. 1-184 ENG. 1-185 ENG. 1-186 ENG. 1-187 ENG. 1-188 ENG. 1-189 ENG. 1-190 ENG. 1-191 ENG. 1-192 ENG. 1-193 ENG. 1-194 ENG. 1-195 ENG. 1-196 ENG. 1-197 ENG. 1-198 ENG. 1-199 ENG. 1-200 ENG. 1-201 ENG. 1-202 ENG. 1-203 ENG. 1-204 ENG. 1-205 ENG. 1-206 ENG. 1-207 ENG. 1-208 ENG. 1-209 ENG. 1-210 ENG. 1-211 ENG. 1-212 ENG. 1-213 ENG. 1-214 ENG. 1-215 ENG. 1-216 ENG. 1-217 ENG. 1-218 ENG. 1-219 ENG. 1-220 ENG. 1-221 ENG. 1-222 ENG. 1-223 ENG. 1-224 ENG. 1-225 ENG. 1-226 ENG. 1-227 ENG. 1-228 ENG. 1-229 ENG. 1-230 ENG. 1-231 ENG. 1-232 ENG. 1-233 ENG. 1-234 ENG. 1-235 ENG. 1-236 ENG. 1-237 ENG. 1-238 ENG. 1-239 ENG. 1-240 ENG. 1-241 ENG. 1-242 ENG. 1-243 ENG. 1-244 ENG. 1-245 ENG. 1-246 ENG. 1-247 ENG. 1-248 ENG. 1-249 ENG. 1-250 ENG. 1-251 ENG. 1-252 ENG. 1-253 ENG. 1-254 ENG. 1-255 ENG. 1-256 ENG. 1-257 ENG. 1-258 ENG. 1-259 ENG. 1-260 ENG. 1-261 ENG. 1-262 ENG. 1-263 ENG. 1-264 ENG. 1-265 ENG. 1-266 ENG. 1-267 ENG. 1-268 ENG. 1-269 ENG. 1-270 ENG. 1-271 ENG. 1-272 ENG. 1-273 ENG. 1-274 ENG. 1-275 ENG. 1-276 ENG. 1-277 ENG. 1-278 ENG. 1-279 ENG. 1-280 ENG. 1-281 ENG. 1-282 ENG. 1-283 ENG. 1-284 ENG. 1-285 ENG. 1-286 ENG. 1-287 ENG. 1-288 ENG. 1-289 ENG. 1-290 ENG. 1-291 ENG. 1-292 ENG. 1-293 ENG. 1-294 ENG. 1-295 ENG. 1-296 ENG. 1-297 ENG. 1-298 ENG. 1-299 ENG. 1-300 ENG. 1-301 ENG. 1-302 ENG. 1-303 ENG. 1-304 ENG. 1-305 ENG. 1-306 ENG. 1-307 ENG. 1-308 ENG. 1-309 ENG. 1-310 ENG. 1-311 ENG. 1-312 ENG. 1-313 ENG. 1-314 ENG. 1-315 ENG. 1-316 ENG. 1-317 ENG. 1-318 ENG. 1-319 ENG. 1-320 ENG. 1-321 ENG. 1-322 ENG. 1-323 ENG. 1-324 ENG. 1-325 ENG. 1-326 ENG. 1-327 ENG. 1-328 ENG. 1-329 ENG. 1-330 ENG. 1-331 ENG. 1-332 ENG. 1-333 ENG. 1-334 ENG. 1-335 ENG. 1-336 ENG. 1-337 ENG. 1-338 ENG. 1-339 ENG. 1-340 ENG.						

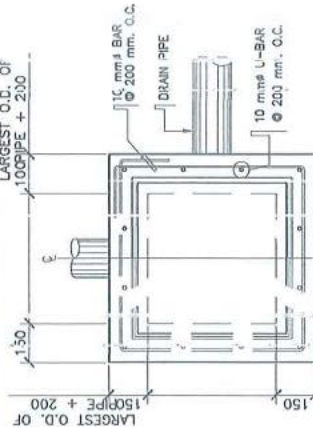
GENERAL NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
2. ALL PLUMBING WORKS SHALL BE DESIGNED IN ACCORDANCE WITH THE LATEST ISSUE OF NATIONAL PLUMBING CODE OF THE PHILIPPINES
3. IT IS NOT INTENDED THAT THE DRAWINGS SHALL SHOW EVERY PIPE FITTINGS, VALVES AND APPLIANCE. ALL SUCH ITEMS WHETHER SPECIFICALLY MENTIONED OR NOT, OR INDICATED ON THE DRAWINGS SHALL BE FURNISHED AND INSTALLED IF NECESSARY TO COMPLETE THE SYSTEM TO THE SATISFACTION OF THE CLIENT.

SYMBOLS:

—	SANTAR' LINE	KSK	KITCHEN SINK
—	DRAINAGE LINE	GV	GATE VALVE
—	VENTING SYSTEM	FCO	FLOOR CLEANOUT
—	GATE VALVE	LAV	LAVATORY
—		WC	WATER CLOSET
—		FD	FLOOR DRAIN
—		U	URINAL
—		F	FAUCET

INSIDE CATCH BASIN = 300mm X 300mm
OUTSIDE CATCH BASIN = 500mm X 500mm
LARGEST O.D. OF
100PIPE + 200

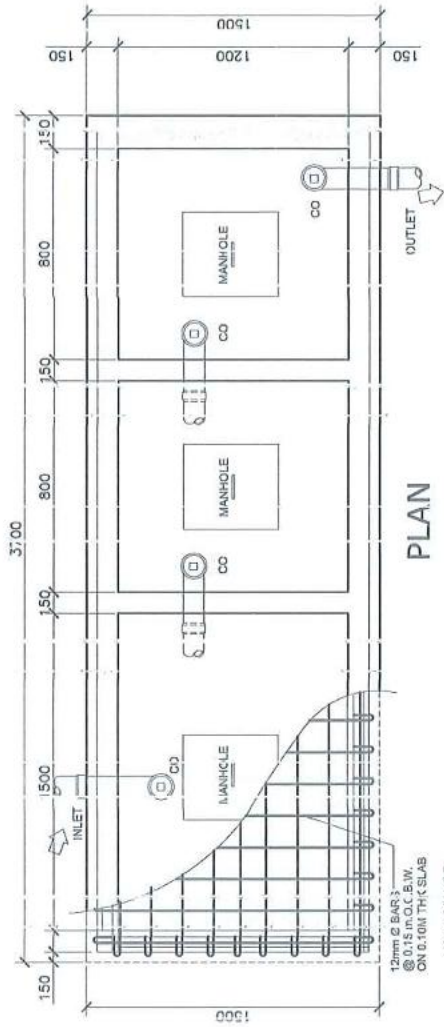


PLAN

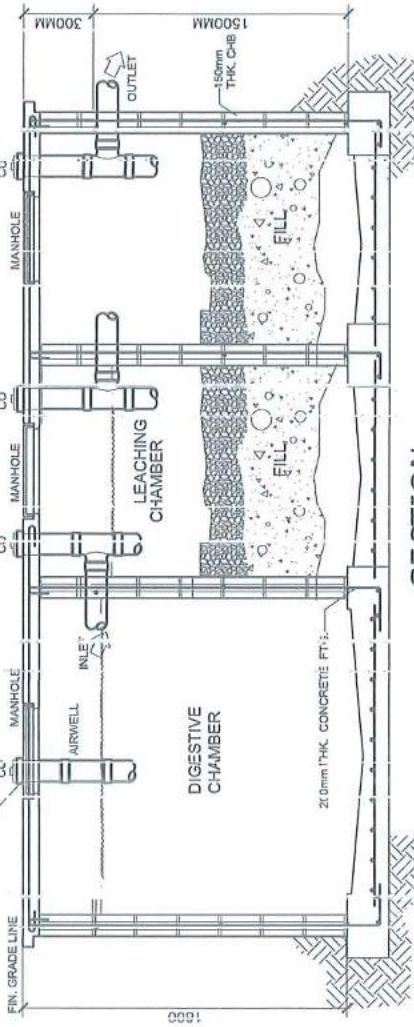
LARGEST O.D. OF
100PIPE + 200



SECTION



PLAN



SECTION



CIVIL ENGINEER

PROJECT TITLE:

RENOVATION AND IMPROVEMENT OF COMFORT
ROOMS AND WATERLINE SYSTEM

PLANNED BY:

ENGR. MELVIN WAKIPAGAY

REVIEWED BY:

ENGR. MELVIN WAKIPAGAY

RECOMMENDING APPROVAL

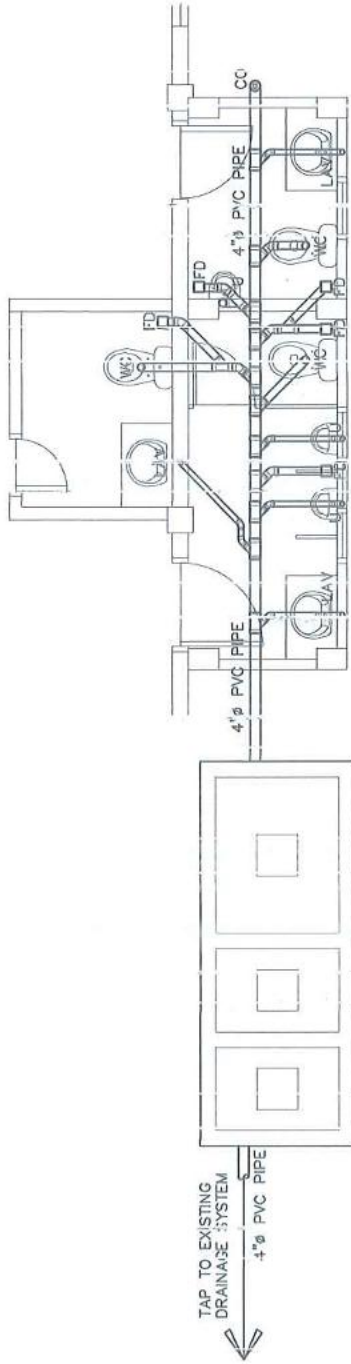
ENGR. MELVIN WAKIPAGAY

APPROVED BY:

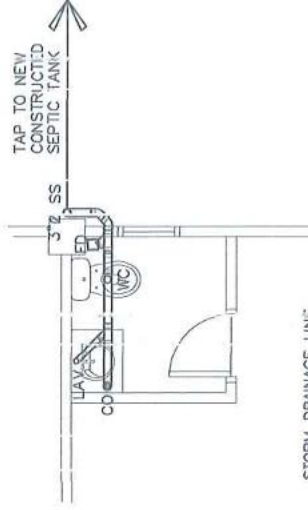
FREDERICK T. VILLA, CT

SHEET CONTENT:

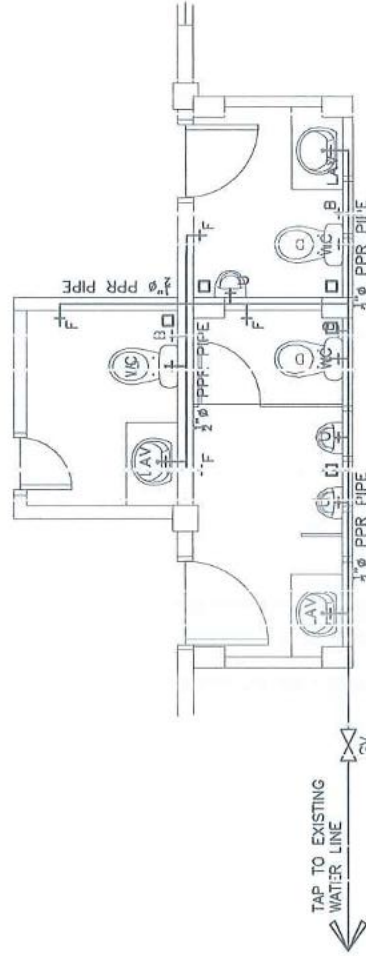
SHEET #



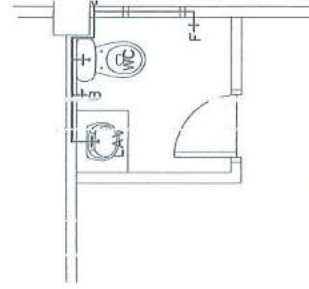
DRAINAGE LINE
COMFORT ROOM EXTENSION
SCALE: 1:50M



STORM DRAINAGE LINE
DIRECTOR'S OFFICE CR
SCALE: 1:50M



CLEAN WATER LINE
COMFORT ROOM EXTENSION
SCALE: 1:50M



CLEAN WATER LINE
DIRECTOR'S OFFICE CR
SCALE: 1:50M



CIVIL ENGINEER
PROJECT TITLE:
RENOVATION AND IMPROVEMENT OF COMFORT
ROOMS AND WATERLINE SYSTEM
400 EUS 2 & 3, POLLS CAMPUS BUILD. BUCOR

PLANNED BY:
ENGR. MELVIN A. MAKIPAGAY
PROJECT DEVELOPMENT OFFICE II
SHEET 1 OF 1
DATE: 10/10/2023
PAGE 10 OF 11

REVIEWED BY:
ENGR. MELVIN A. MAKIPAGAY
PROJECT DEVELOPMENT OFFICE II
SHEET 1 OF 1
DATE: 10/10/2023
PAGE 10 OF 11

RECOMMENDING APPROVAL:
ENGR. MELVIN A. MAKIPAGAY
DIRECTOR, PROJECT MANAGEMENT OFFICE

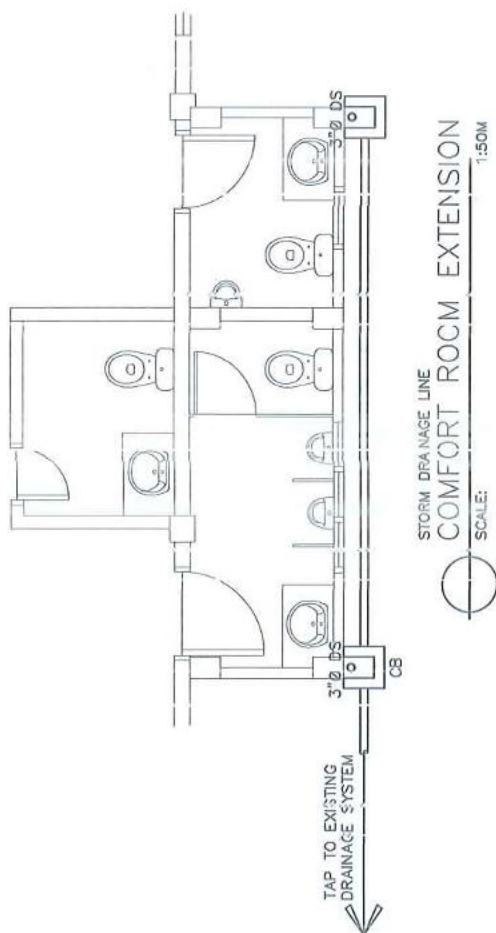
APPROVED BY:
FREDERICK T. VILLA, CT
CITY PRESIDENT

SHEET #

- a. LIGHT SWITCHES
1400 MM ABOVE FLOOR FINISH
- b. CONVENIENCE OUTLET
300 MM ABOVE FLOOR FINISH

RECEPTACLE WITH LED BULB 12W,
SURFACE MOUNTED

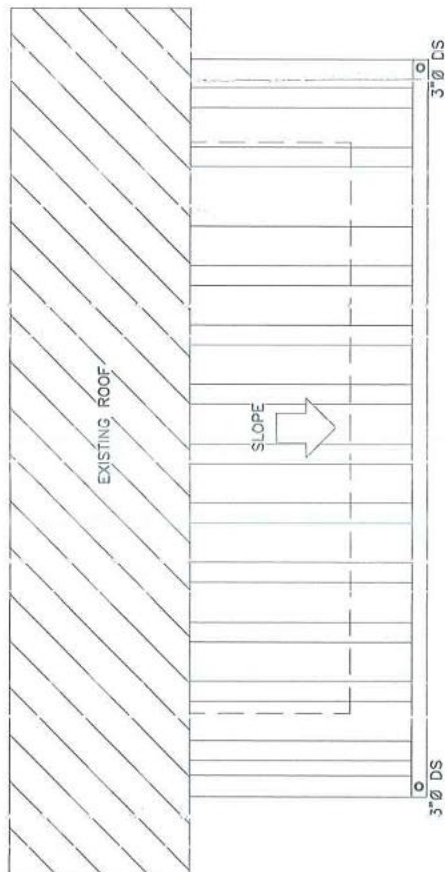
LED ROUND PANEL LIGHT 3 COLOR, 12"W
RECESSED MOUNTED
LIGHT SWITCHES, SUBSCRIPT LETTER INDICATES
THAT LIGHT SWITCH CONTROLS A PARTICULAR
LIGHT FIXTURE



STORM DRAINAGE LINE

COMFORT ROCM EXTENSION

SCALE:



STORM DRAINAGE LINE

COMFORT ROOM EXTENSION

SCALE:

LIGHTING LAYOUT

COMFORT ROOM EXTENSION

SCALE:



NOTE:
1. PROVIDE PVC MOLDING FROM ELECTRICAL POWER SOURCE TO LIGHTING OF DIRECTOR'S OFFICE CR
2. ELECTRICAL WIRE MUST NO" EXPOSE

TAP TO EXISTING ELECTRICAL SUPPLY

LIGHTING LAYOUT

DIRECTOR'S OFFICE CR

SCALE



CIVIL ENGINEER-

PROJECT TIME:

RENOVATION AND IMPROVEMENT OF COMFORT
ROOMS AND WATERLINE SYSTEM

PLANNED BY:

INGER ACEL B. MORALES

REVIEWED

RECOMMENDING ADO

DATE

THE UNIVERSITY OF

CHIEF CLERK.

10

FREDERICK T. VILLA ET

APPENDICE 5 SU SOLLO CALORE E ULLU DUEZON