



Republic of the Philippines
SOUTHERN LUZON STATE UNIVERSITY
Lucban, Quezon

REQUEST FOR QUOTATION

PROPOSED CONSTRUCTION OF TUNNEL TYPE GREENHOUSE FOR HYDROPONICS (TIAONG)

Purchase Request No. 2024-01-0333
Approved Budget for the Contract: ₱ 500,000.00

The Southern Luzon State University through the Bids and Awards Committee invites interested firms/supplier to submit quotation for the procurement for **Proposed Construction of Tunnel Type Greenhouse for Hydroponics (Tiaong)** to apply the sum of **Five Hundred Thousand Pesos Only (₱ 500,000.00)** inclusive of VAT, being the **Approved Budget for the Contract (ABC)**, details as follows:

Qty.	Unit	ITEM/S DESCRIPTION
1	lot	Proposed Construction of Tunnel type Greenhouse for Hydroponics
		*see attached document/s

1. The quotation must be submitted (can also be send thru email at the contact details listed below) or to the Office of the Procurement Office/Bids and Awards Committee, Southern Luzon State University, 2nd Flr. Hermano Puli Building, and shall be received by the Committee.

E-mail : slsuprocedurement2021@gmail.com

2. 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
Head, Procurement Office
Southern Luzon State University
Lucban, Quezon
Tel. No.: (042)540-6519

Republic of the Philippines
SOUTHERN LUZON STATE UNIVERSITY
Planning and Development Office
Lucban , Quezon

PROJECT TITLE : Proposed Construction of Tunnel type Greenhouse for Hydroponics

PROJECT LOCATION : SLSU - Tiaong, Quezon Campus

OWNER : Southern Luzon State University

MODE OF IMPLEMENTATION : By Contract

ABC : Php 500,000.00

PROJECT DURATION : 30 CD

PROJECT BRIEF DESCRIPTION : Proposed Construction of Tunnel type Greenhouse

SUMMARY

ITEM	DESCRIPTION	COST OF MATERIALS	COST OF LABOR AND EQUIPMENT	TOTAL
I	General Requirements			
II	Concrete Works			
III	Masonry Works			
IV	Steel & Framing Works			
V	Shading and Irrigation works			
		TOTAL ESTIMATED DIRECT COST		Php
INDIRECT COST		<i>OVERHEAD, CONTINGENCIES & MISC.(OCM)</i>		<i>Php</i>
		<i>CONTRACTOR'S PROFIT</i>		<i>Php</i>
		<i>VALUE ADDED TAX (VAT)</i>		<i>Php</i>
		TOTAL PROJECT COST		Php

TOTAL PROJECT COST IN WORDS :

CONTRACTOR / BIDDER :



BILL OF MATERIALS

I. General Requirements

Quantity	Unit	Description	Unit Cost	Total Cost
1	lot	Mobilization / Demobilization		
1	lot	Site Clearing		
1	lot	Excavation		
Sub - Total			Php	

II. Concrete Works

Quantity	Unit	Description	Unit Cost	Total Cost
	bags	Portland Cement		
	cu.m.	S1 Sand		
	cu.m.	Gravel 3/4		
	pcs	16mm dia x 6m RSB		
	pcs	10mm dia x 6m RSB		
	lot	Consumables		
Sub - Total			Php	

III. Masonry Works

Quantity	Unit	Description	Unit Cost	Total Cost
	pcs	4" CHB		
	bags	Portland Cement		
	cu.m.	Sand S1		
	cu.m.	Gravel 3/4		
	lot	Consumables		
Sub - Total			Php	


IV. Steel & Framing Works

Quantity	Unit	Description	Unit Cost	Total Cost
	pcs	GI Pipe (2" dia x 6.0m) sch 20		
	pcs	GI Pipe (1 1/4" dia x 6.0m) sch 20		
	pcs	GI Pipe (1" dia x 6.0m) sch 20		
	pcs	GI Pipe (3/4" dia x 6.0m) sch 20		
	sq.m.	P.E. Plastic 200 Micron (Roofing)		
	sets	Doors at Ante Room		
	pcs	Aluminum C Profile 3m		
	pcs	Wiggle Wire 2m		
	lot	Assorted Bolts and Nuts		
	lot	Welding Rod		
	sq.m.	Insect net Mesh 24		
	lot	tekscrew 1"		
	m	GI Wire #8		
	pcs	Spring Clip 1" x 3/4"		
	lot	Consumables		
Sub - Total			Php	



V. Shading & Irrigation Works

Quantity	Unit	Description	Unit Cost	Total Cost
	sq.m.	Silver Shade Net 40% Shade		
	lot	Shade net Accessories		
	sq.m.	Weed Eliminator		
	unit	Controller / Timer		
	pcs	2 1/2" x 4" x 8' PVC Tube		
	pcs	4" x 3m PVC Pipe		
	pcs	PVC Elbow 4"		
	pcs	PVC Tee 4"		
	pcs	PVC Cap 4"		
	pcs	Ball valve 1 1/4"		
	roll	PE Pipe 40mm x 30m and accessories		
	pcs	Hydroponic Pots		
	set	EC/PH Meter		
	set	Submersible Pump 1hp		
	lot	Plumbing pipes and fittings		
	lot	UV plastic & black mat flooring		
	lot	Consumables		
Sub - Total			Php	

Grand Total Php

PROJECT TITLE: Construction of Tunnel Type Greenhouse (Hydroponics)
PROJECT LOCATION: SLSU – Tiaong, Quezon Campus
OWNER: Southern Luzon State University
PROJECT DURATION: 30 Calendar days

SCOPE OF WORKS

I. GENERAL REQUIREMENTS

- Mobilization / Demobilization

II. SITE CONSTRUCTION

- Excavation – The Contractor shall make all necessary excavation for foundations, footing tie beam to establish grades indicated in the drawings and plans.
- Clearing and Grubbing of the perimeter area.
- Hauling out of Debris.

III. MASONRY WORKS

- The Masonry works include the laying of 2 layers of 4" Concrete Hollow blocks above and below ground level along the perimeter of the greenhouse.
- The masonry finishes shall be smooth plaster finish.
- Concrete Water Tank for Hydroponics : 1.2M x 1.2M x 1.5 complete with EC/PG Meter, Submersible 1HP Pump & Controller Timer.

IV. STEEL AND ROOF FRAMING WORKS

- All Structural support of the greenhouse as indicated in the drawing will be pre fabricated In the supplier's warehouse and will be delivered on site ready for installation. (there will be no cutting and welding on site of the construction)
- GI Pipes support will be primer painted
- Provide Screen doors with aluminum Frames, for Ante Room, 1 Swing door and Sliding door complete with accessories.

V. SHADING AND IRRIGATION WORKS

- For all sides of the greenhouse use Insect Proof net at 24 mesh imported from Taiwan, Retractable Shading System use Silver shade net 40% shade net complete with plastic locking system.
- Roofing Specs to be PE Plastic UV Clear 200 micron.
- Contractor to provide all accessories for hydroponic farming, like hydroponics pots, and fittings and other materials indicated in the drawings and needed for hydroponics farming.

VI. GREENHOUSE FLOORING

- Make sure that the soil is well compacted and treated with weed eliminator before laying Black Mat Flooring with UV Resistant.
- For Ante Room it will be concrete finish with foot bath.

VII. ELECTRICAL WORKS

- Supply and Installation of 1/2hp Water pump, Controller/Timer, EC/PH meter, 1hp Submersible pump, Circuit Breaker and the like necessary to run the hydroponics farming.
- Electrical Supply and wirings will be provided by SLSU.

VIII. PLUMBING WORKS

- Supply and Installation of waterline pipes and fittings tapping to the water source will provided by the Southern Luzon State University.

Prepared by:



IMELDA B. VILLAFLOR
Assistant Planning Engr.

Recommending approval:



ENGR. MELVIN A. MAKIPAGAY
Dir.-Planning and Development
(INFRASTRUCTURE)

Approved by:



DR. NILO H. DATOR
OIC University President

GENERAL WORKS

1. Supply, fabrication, installation and construction of materials.
2. Supply of skilled manpower and equipment to finish the works.
3. The contractor is responsible for the contractor-owned tools and equipment at all times.
4. The contractor is responsible for the scaffolding and necessary tools need in the project.
5. All works must execute strictly in accordance with current practices.
6. All works to be completed is in accordance with the design and specification.
7. The contractor is responsible for disposal/transfers of waste/demolished materials into the proper location.
8. The contractor is responsible for all testing of materials (*concrete sample and rebar strength test*).
9. The contractor shall submit a sample materials; it is subject to evaluation against owner specification or standard specification.
10. Some materials are subjected for testing and approval prior to installation.
11. The contractor should implement this project. The University strictly adhere with the policies And mandates of Gender and Development (GAD-CHED Memo No.1 series 2015).
12. The contractor is responsible to secure building permit for the construction of the project and obtain occupancy permit after completing the project as part of turn over to the University (SLSU)
13. Responsible to include and submit the PERT-CPM of the whole Construction Project as part of the bid document that will serve as banish accomplishment.
14. Cleaning of the area.
15. SLSU shall provide the monitoring engineer for the supervision of the project.
16. All works to be completed within 30 calendar days.

Prepared by:



IMELDA B. VILLAFLO
Assistant Planning Engr.

Recommending approval:



ENGR. MELVIN A. MAKIPAGAY
Dir.-Planning and Development
(INFRASTRUCTURE)

Approved by:



DR. NILO H. DATOR
OIC University President

PROJECT TITLE: Construction of Tunnel Type Greenhouse (Hydroponics)
PROJECT LOCATION: SLSU – Tiaong, Quezon Campus
OWNER: Southern Luzon State University
PROJECT DURATION: 30 Calendar days

SPECIFICATION OF MATERIALS

I. GENERAL REQUIREMENTS

- Mobilization and Demobilization

II. SITE CONSTRUCTION

- All excavation shall carry out to the required lengths, breadths, depths, inclinations and curvatures as required for the construction of the permanent works, in whatever materials that maybe found.
- The Contractor shall be solely responsible for:
 - Implementing an adequate method of excavation, and adhering to safe work sequences and proper standards of workmanship in connection therewith.
 - Providing adequate protection of all excavation from collapse and subsidence of adjacent ground and properties.
 - The safety and integrity of the adjacent properties of the permanent works.
 - Chipping of Concrete walls
 - Hauling out of debris.

III. 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 we have produced concrete to adequate strength and durability may be used to the approval of 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 the pre stressed concrete shall not contain deleterious amounts of chloride ion.
- Reinforcing bars shall conform to ASTM A615.
- 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.
- Concrete cylinder samples for strength tests of each class of concrete shall be taken in min of 3 concrete samples. The cylinder samples for strength test shall be taken cured and tested in accordance with the ASTM C172, ASTM C31 and ASTM C39.
- Acceptance of Concrete

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Lucban, Quezon

- Concrete poured will be considered satisfactory if the average of all set of these consecutive strength test results equal or exceeds the required f_c' and not individual strength test falls below the required f_c' by more than 400 psi.
- Core test and load test
- If Individual tests of laboratory cured cylinder samples produced strength more than 400 psi below f_c' core test and or load tests maybe restored subject to the approval by the Civil Engineer.
- Mixing of Concrete
- All concrete shall be mixed until there is uniform distribution of the materials and shall be discharges completely before the mixer is recharged.
- Conveying of concrete
- Concrete shall be conveyed from the mixer to the place of the 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 the 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 800mm O.C. for all thickness and horizontal reinforcements for CHB shall be 10mm dia. at every 3 layers of CHB.
- Plaster materials, specified on a volume basis, shall be measured accurately in an approved containers that will insure the specified proportion.
- All surfaces to receive plaster shall be cleaned of all projection, dust, loose particles, grease bond breakers and other foreign matters.
- Plaster shall not be applied directly to concrete of masonry surfaces that have been painted of previously plastered.
- Plaster work shall be finished level, plumb, square and true to line within a tolerance of 3mm (1/8") in 3.00m with out waves, cracks, blisters, pits, crazing & other imperfections.
- All patching of plastered surfaces and plaster work abutting or adjoining any other finish work, shall be done in a neat and workmanlike manner.
- Laster drops or spatter shall be removed from all surfaces. Exposed plastered surfaces shall be left in a clean unblemished condition ready to receive paint or other finish.

V. STEEL WORKS & TRUSSES WORKS

- Use GI Pipe 2" diameter for Greenhouse post
- Use GI Pipe 1" diameter for greenhouse arc truss
- Use GI Pipe 3/4" diameter for greenhouse purlins
- Metal connections must be welded, screwed or bolted as indicated

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Lucban, Quezon

- Steel frames shall be custom built size and details as indicated on the plans or shop drawing.
- Use Welding rods appropriate for the steel classification being used

Prepared by:



IMELDA B. VILLAFLOR
Assistant Planning Engr.

Recommending approval:

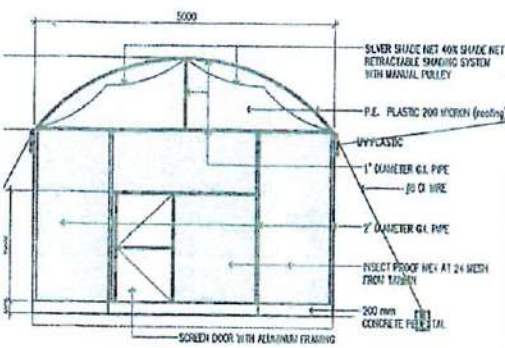


ENGR. MELVIN A. MAKIPAGAY
Dir.-Planning and Development
(INFRASTRUCTURE)

Approved by:

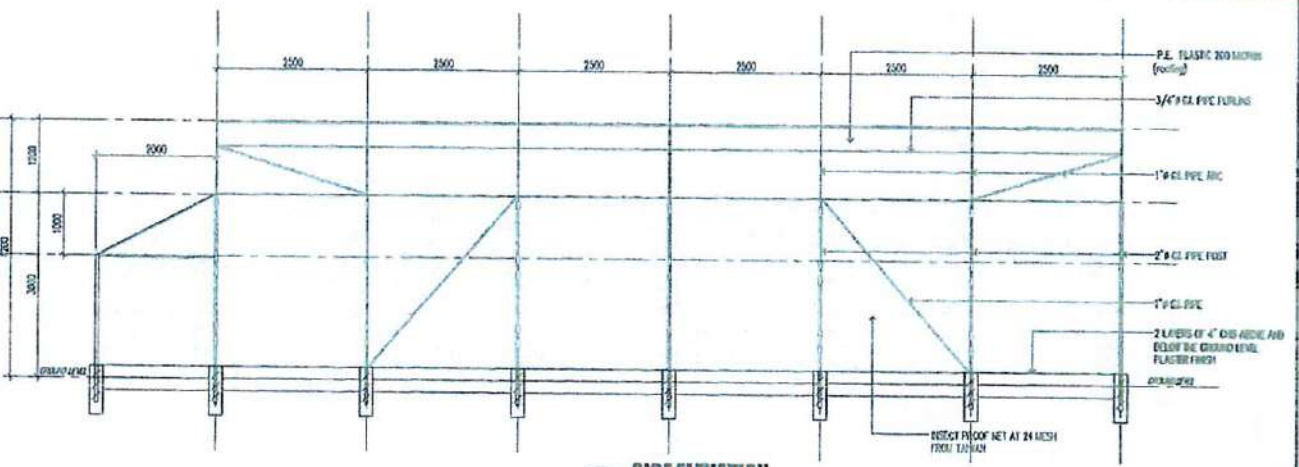


DR. NILO H. DATOR
OIC University President

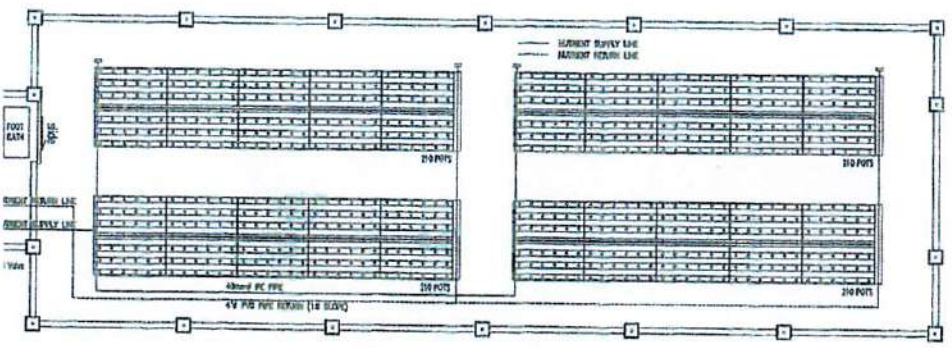


PLASTIC CURTAIN

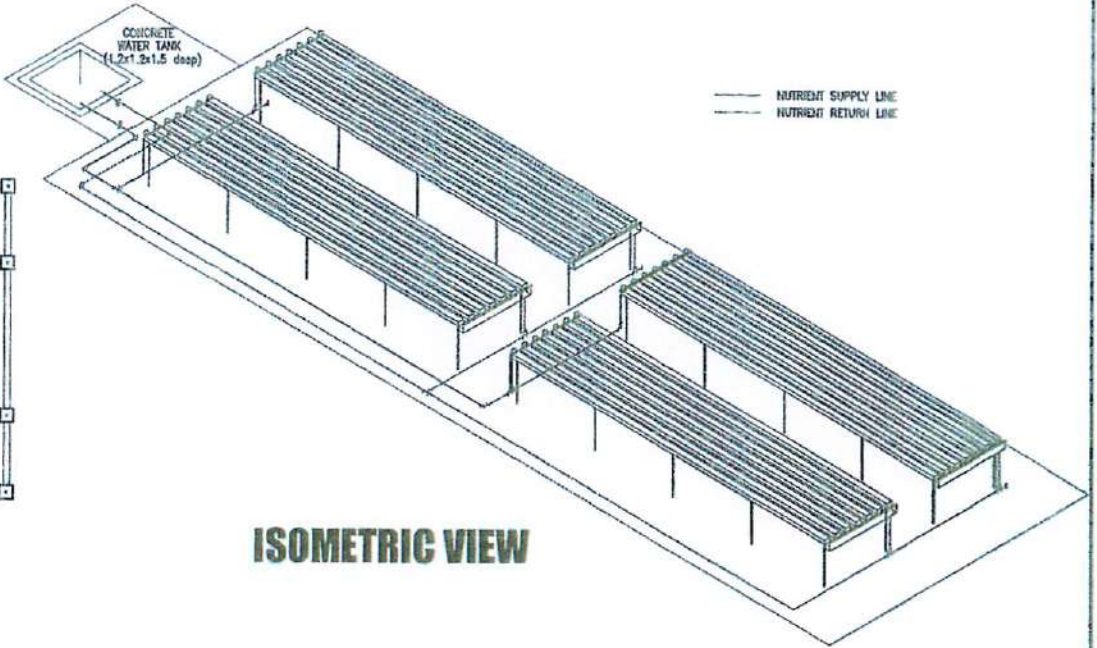
1 FRONT ELEVATION
A-2 SCALE 1:30



2 SIDE ELEVATION
A-2 SCALE 1:30

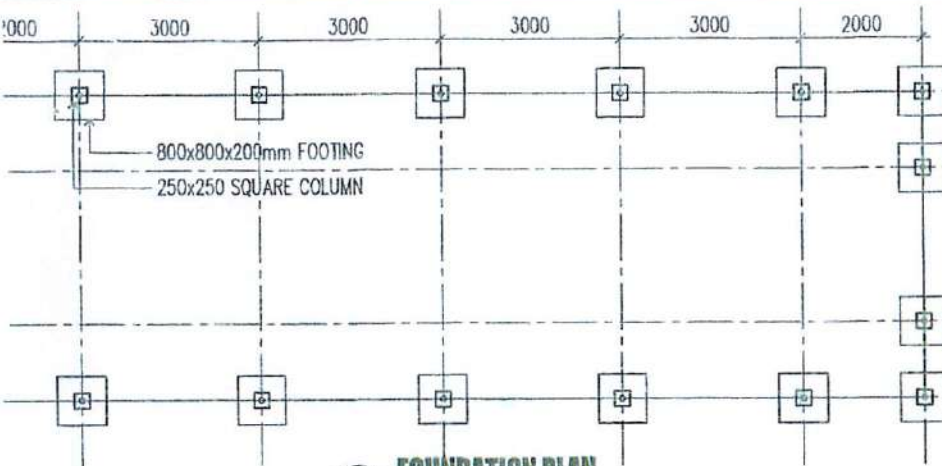


3 FLOOR PLAN AND PLUMBING LAYOUT
A-3 SCALE 1:30

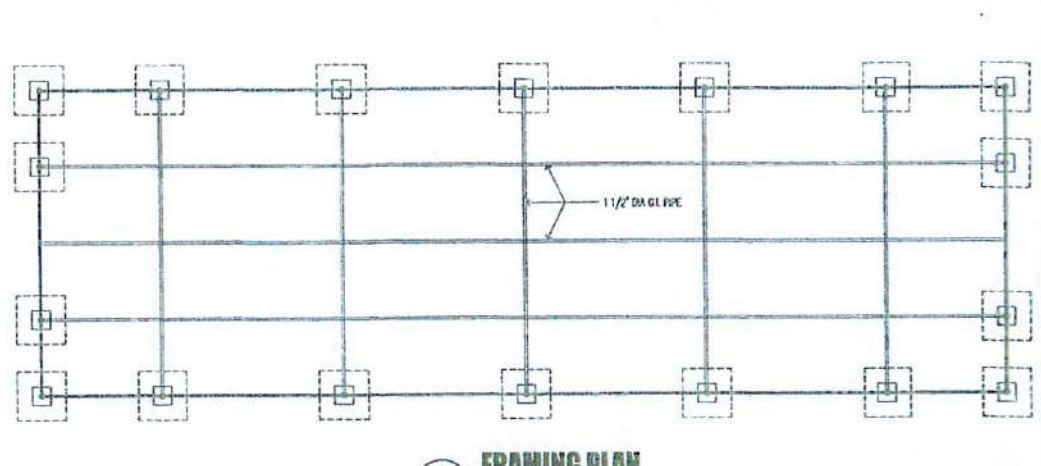


ISOMETRIC VIEW

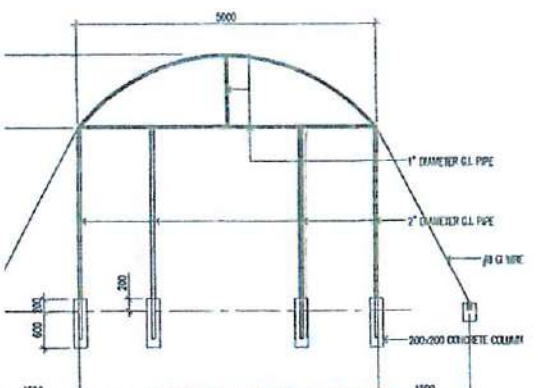
STRUCTURAL ENGINEER	PROJECT TITLE	DESIGNED BY	REVIEWED BY	RECOMMENDING APPROVAL	APPROVED BY	SHEET CONTENTS	SHEET NO.
	PROPOSED TUNNEL TYPE GREENHOUSE	IMELDA B. VILLAFLOR ASSISTANT PLUMBING ENGINEER		ENGR. MELVIN A. MAKIPAGAY DIRECTOR PLANNING AND DEVELOPMENT	DR. NILO J. DATOR VIC. UNIVERSITY PRESIDENT	FLOOR PLAN & PLUMBING LAYOUT FRONT AND SIDE ELEVATION PLUMBING SCHEDULE	A-2



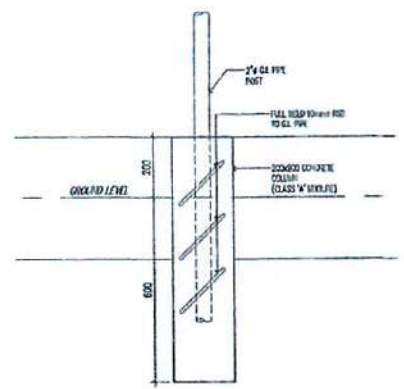
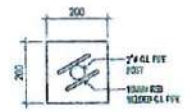
1 FOUNDATION PLAN
SCALE 1:50



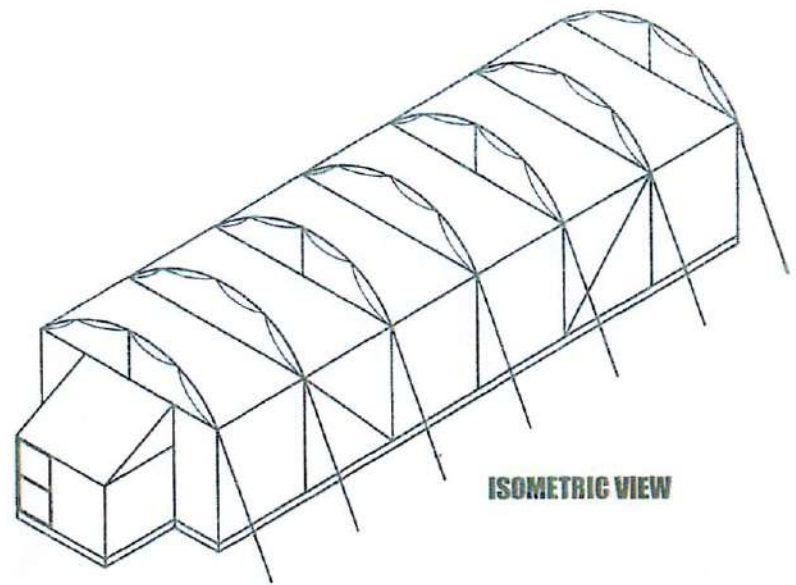
2 FRAMING PLAN
SCALE 1:50



3 FRONT ELEVATION (SUPPORT)
SCALE 1:50

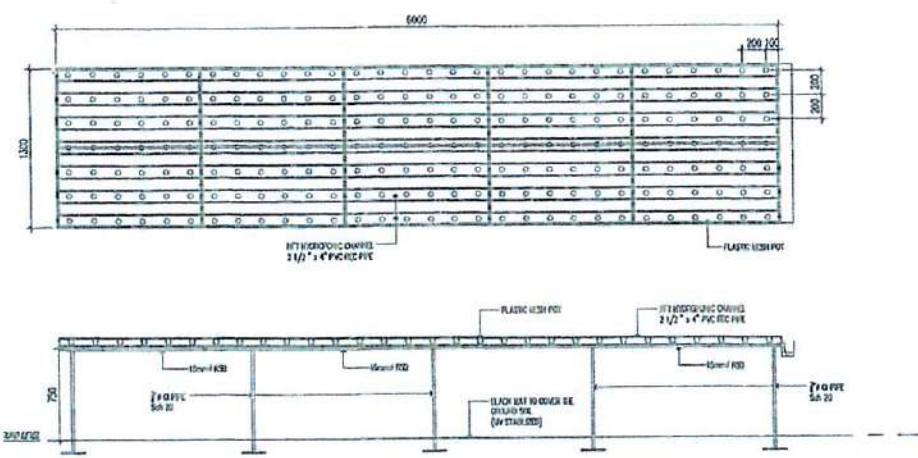


4 COLUMN DETAILS
SCALE 1:10

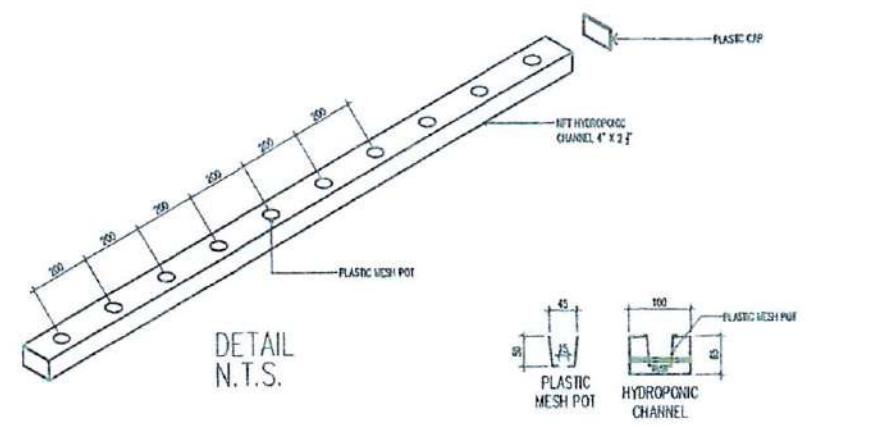


ISOMETRIC VIEW

I.L. STRUCTURAL ENGINEER DATE: _____ DESIGNED: _____ CHECKED: _____	PROJECT TITLE PROPOSED TUNNEL TYPE GREENHOUSE ADDRESS: ELGU MATH CAYPUL BRGY. NEAR PALUCANAN, QUEZON	PLANNED BY: <i>Melinda B. Villaplora</i> MELINDA B. VILLAPLORA ASSISTANT PLANNING ENGINEER	REVIEWED BY: 	RECOMMENDING APPROVAL: <i>Melvin A. Marpacay</i> ENGR. MELVIN A. MARPACAY DIRECTOR, PLANNING AND DEVELOPMENT	APPROVED BY: <i>Dr. Miloch Dator</i> DR. MILOCH DATOR OIC, UNIVERSITY FREE ZONE	SHEET CONTENTS FOUNDATION PLAN COLUMN DETAILS RIBB FRAMING PLAN	SHEET NO. A-3
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HYDROPONIC TABLE DETAILS
 1
 A-4 SCALE 1:25



03 DOOR SCHEDULE
 A-4 SCALE 1:50

PL / STRUCTURAL ENGINEER	PROJECT TITLE	PLANNED BY	REVIEWED BY	RECOMMENDING APPROVAL	APPROVED BY	SHEET CONTENTS:	SHEET NO.
	PROPOSED TUNNEL TYPE GREENHOUSE	IMELDA B. VILLAFLOR ASSISTANT PLANNING ENGINEER		ENGR. MELVINA MARIKAGAY DIRECTOR, PLANNING AND DEVELOPMENT	DR. NILD T. DATOR CIC UNIVERSITY PRESIDENT	HYDROPONIC TABLE DETAILS DOOR SCHEDULE	A-4
DATE: 08/20/2024	ADDRESS: ELDO MANCAYANUS, BLDG. 100, UNIVERSITY OF CEBU	PROJ. NO.	DATE: 08/20/2024	PROJ. NO.	DATE: 08/20/2024		