



Republic of the Philippines
SOUTHERN LUZON STATE UNIVERSITY
Lucban, Quezon



REQUEST FOR QUOTATION

**WATER DRILLING/ SHALLOW WELL WITH PUMPHOUSE AT BRGY. VILLA NAVA GUMACA CAMPUS
(PMO)**

**Purchase Request No. 2026-03-0926
Approved Budget for the Contract: ₱ 650,000.00**

The Southern Luzon State University through the Bids and Awards Committee invites interested firms/supplier to submit quotation for the procurement of **Water Drilling / Shallow Well with Pumphouse at Brgy. Villa Nava Gumaca Campus (PMO)** to apply the sum of **Six Hundred Fifty Thousand Pesos Only (₱650,000.00)** inclusive of VAT, being the **Approved Budget for the Contract (ABC)**, details as follows:

Qty.	Unit	ITEM/S DESCRIPTION
1	lot	Water Drilling / Shallow Well with Pumphouse at Brgy. Villa Nava Gumaca Campus, Gumaca, Quezon

1. The quotation must be submitted (can also be sent 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 : slsuprocurement@slsu.edu.ph

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
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: Water Drilling/Shallow Well with Pumphouse at Brgy. Villa Nava Gumaca Campus, Gumaca Quezon

PROJECT LOCATION: Brgy. Villa Nava, Quezon

OWNER : Southern Luzon State University

ABC : P 650,000.00

PROJECT DURATION : 90 CD

PROJECT BRIEF DESCRIPTION : Construction of pumphouse including water well drilling, casing & installation of pumps testing and commissioning

SUMMARY

ITEM	DESCRIPTION	COST OF MATERIALS	COST OF LABOR AND EQUIPMENT	TOTAL
I	General Requirements			
II	Earthworks (Pump House Only)			
III	Reinforced Concrete Works			
IV	Masonry Works			
V	Form Works and Scaffolding			
VI	Plumbing Works (Deep Well-incl. drilling)			
VII	Doors & Windows			
VIII	Electrical Works			
IX	Truss & Tinsmithry			
X	Painting Works			
		TOTAL ESTIMATED DIRECT COST P		
		OVERHEAD, CONTINGENCIES & MISC.(OCM) P		
		INDIRECT COST		
		CONTRACTOR'S PROFIT P		
		VALUE ADDED TAX (VAT) P		
		TOTAL PROJECT COST P		

Amount in Words :

Name of Bidder :



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

PROJECT TITLE: Water Drilling/Shallow Well with Pumphouse at Brgy. Villa Nava Gumaca Campus, Gumaca Quezon
PROJECT LOCATION: Brgy. Villa Nava Gumaca, Quezon
OWNER : Southern Luzon State University
MODE OF IMPLEMENTATION : by Contract
PROJECT DURATION: 90 CD
PROJECT BRIEF DESCRIPTION : Construction of pumphouse including water well drilling, casing & installation of water pump and testing and commissioning

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 with Marine, Plywood Backing		
1	lot	Temporary Facilities		
1	lot	Material Testing		
1	lot	Safety Program and Policy		
Sub - Total			P	

II. Earthworks (Pump House Only)				
Quantity	Unit	Description	Unit Cost	Total Cost
	cu.m.	Earthfill/backfill incl. compaction		
	sq.m	Clearing and Grubbing		
	lot	Hauling and Disposal		
	cu.m.	Excavation		
Sub - Total			P	

III. Reinforced Concrete Works				
Quantity	Unit	Description	Unit Cost	Total Cost
	bags	Portland Cement		
	cu.m.	Sand S1		
	cu.m.	Gravel 3/4"		
	cu.m.	G-1 (gravel bedding)		
	pcs	12mm dia RSB x 6m		
	pcs	10mm dia RSB x 6m		
	kgs	G.I. Tie Wire #16		
1	lot	Consumables		
Sub - Total			P	

IV. Masonry Works				
Quantity	Unit	Description	Unit Cost	Total Cost
	pcs	CHB 5"		
	bags	Portland Cement		
	cu.m.	White Sand		
	pcs	10 mm dia RSB x 6m		
	kgs	G.I. Tie Wire #16		
1.00	lot	Consumables		
Sub - Total			P	

V. Form Works and Scaffolding Works				
Quantity	Unit	Description	Unit Cost	Total Cost
	bd.ft	2"x3" coco lumber		
	pcs	1/2"thk x4'x8' Phenolic Board		
	kg	Assorted Nail		
1.00	lot	Consumables		
Sub - Total			P	

VI. Electrical Works				
Quantity	Unit	Description	Unit Cost	Total Cost
	set	Panel Board with Complete Electronic Sensor (Including breaker)		
	m	THHN Wire 5.5mm sq.		
	pcs	PVC Pipe 3/4" x 3m (Conduit)		
1	lot	Consumables		
Sub - Total			P	

VII. Doors and Windows				
Quantity	Unit	Description	Unit Cost	Total Cost
	set	Steel Doors with bottom Louvers (1.00m x 2.10m)		
	set	Powder Coated Aluminum Frame Awning Glass Window (0.50m x 1.00m)		
1	lot	Consumables		
			Sub - Total	P

VIII. Plumbing Works (Deep Well)				
Quantity	Unit	Description	Unit Cost	Total Cost
	set/s	Submersible Pump (3hp)		
	pcs	4" Ø Well Casing Sch. 20 L=6.0m		
	pcs	2" Ø G.I. Pipe Sch 20 L=6.0m		
	pcs	2" Ø G.I. Coupling		
	pcs	2" Ø G.I. Elbow		
	pcs	2" Ø Brass Ball Valve		
	pcs	4" Ø Well Seal		
	pcs	2" Ø Foot Valve		
1	lot	Consumables		
			Sub - Total	P

IX. Truss and Tinsmithry Works (Roofing Works)				
Quantity	Unit	Description	Unit Cost	Total Cost
	lm	0.50mm thk PPGI Rib Typed		
	pcs	0.50mm thk 0.610m x 2.44m PPGI Fascia Flashing		
	pcs	50mm x 75mm x 1.20mm thk C-Purlins		
	pcs	50mm x 150mm x 1.20mm thk C-Purlins		
	gal	Epoxy Gray Primer with Catalyst		
1	lot	Consumables (Tekscrew, Blind Rivets, Cutting Disc, Welding Rod)		
			Sub - Total	P

X. Painting Works				
Quantity	Unit	Description	Unit Cost	Total Cost
	gal	Flat Latex Paint -White		
	gal	Semi-Gloss Latex Paint		
	bags	Skim Coat (20 kgs)		
1.00	lot	Consumables (paint brush, paint roller brush, spatula, sand paper etc.)		
			Sub - Total	P

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

PROJECT TITLE : Water Drilling/Shallow Well with Pumphouse at Brgy. Villa Nava Gumaca Campus,
Gumaca Quezon

PROJECT LOCATION : Brgy. Villa Nava, Gumaca, Quezon

OWNER : Southern Luzon State University

PROJECT DURATION : 90 CD

SUBJECT : Scope of Works/Specification

SCOPE OF WORKS/SPECIFICATIONS

I. GENERAL WORKS

- Mobilization – Mobilization shall include all activities and associated cost for transportation of contractor's personnel, equipment and material supplies to the site.
- Construction of temporary facilities.
- Project Billboards – refer to the project engineer for the design/lay-out.
- Material Testing – all material testing and quality control expenses shall be shouldered by the contractor.
- Safety & health program - This shall include the labor cost of first aider and material cost that will be used for construction, such as safety shoes, safety helmet, first aid kit/meds, and specialized PPE in the duration of building project including DOLE application.
- Demobilization – Demobilization shall include all activities and cost for transportation of personnel, equipment and supplies not required or included in the contract from the site; including disassembly, removal and site clean-up of facilities assembled at the site.

II. EARTHWORKS (Pump House)

- **Clearing & Grubbing**
 - This item shall consist of clearing, grubbing, removing and disposing all vegetation and debris as designated in the Contract, except those objects that are designated to remain in place or are to be removed in consonance with other provisions of this Specification. The work shall also include the preservation from injury or defacement of all objects designated to remain.
- **Excavation**
 - This item shall consist of foundation, drainage and borrow excavation and the disposal of material in accordance with this Specification and in conformity with the lines, grades and dimensions shown on the Plans or established by the Engineer.
- **Gravel Bedding**
 - This item shall consist of the construction of gravel bedding for the following structural member: column footings, wall footings, footing tie beams and slab on grade to cover of any particles that will weaken the structure.
 - All gravel bedding shall be tamped by a plate compactor or any tampering equipment to make it compact
- **Earth fill/Backfill**
 - An 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.
- **Hauling & Disposal**
 - Hauling & disposal shall consist of authorized hauling in excess of the free-haul distance. Hauling distance is the specified distance that excavated material shall be hauled without additional compensation.

III. REINFORCED CONCRETE WORKS

- All concrete works shall be done in accordance with the standard specification for plain and reinforced concrete.
- Concrete works included the pouring of concrete for footing, column, slab, stair / ramp and other concrete structures of the building.
- Concrete mix and steel reinforcement shall be approved by the Civil / Structural Engineer of the Southern Luzon State University.
- Reinforcing steel bars shall conform to ASTM Specifications A-615. All mild steel columns, shear wall, footings, footing tie beams and beams shall be high grade deformed bars $F_y = 276 \text{ Mpa}$.

IV. MASONRY WORKS

- The masonry works include the laying of the Concrete Hollow Blocks of non-bearing type with even textures and wall defined edges, all masonry walls shall provide with 10mm reinforcing bars as specified in the details.
- The masonry finishes shall be smooth plaster finish unless otherwise specified.
- The scope covers only the perimeter wall and partition wall of ground floor.
- The scope also covers the wall at roof.

V. FORMWORKS AND SCAFFOLDINGS

- The work includes the construction and installation of formworks and scaffolding, fabrication of column and beam forms and erection of the forms and scaffolding and dismantling & stripping of forms.
- The work under this project shall include the furnishing of all materials, labor, tools, equipment and other facilities and construction necessary as on the plans and in accordance with the specifications.

VI. PLUMBING WORKS (Well Construction)

- 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.
- This scope of works requires construction of well for SLSU Gumaca Campus. The works include drilling of well, well development, insertion of casings, installation of pump & conducting pump test.
- This scope of works also includes connection to existing water tank at SLSU-Gumaca Campus and also testing & commissioning are included.
- 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.

VII. DOORS & WINDOWS

- The contractor shall provide all the steel door, steel door jamb, awning glass windows and other materials needed as specified in the drawing plans and specifications.
- All materials shall be new and shall conform to reference code and standard. Use of materials shall further be governed by other requirements, imposed on the specifications. Materials shall be subjected to test if necessary, for fitness if so required.

VIII. ELECTRICAL WORKS

- All electrical works shall provide all materials and equipment and perform all the works necessary for the complete execution of the electrical system shown on the electrical drawings with the reference to the general construction drawings as herein specified,

for both excepts as otherwise excluding the generality of the foregoing, shall include but not limited to the following principal items of the works.

- Supply and installation of electrical fixtures.
- Supply and installation of electrical wire and cable.
- Supply and installation of electrical pipeline.
- Tapping of electrical lines to electrical service lines which include testing and commissioning.
- 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 conform to the reference code and standard. Use of materials shall future be governed by other requirements, imposed on the specification. Materials shall be subjected to test if necessary, for their fitness if so required.

IX. TRUSS & TINSMITHRY

- Fabrication of steel trusses, installation of roof frame, ribbed type roof, cap flashing , gutter and other accessories.
- Painting of steel rafters and framing (epoxy paint).

X. PAINTING WORKS

- This item shall consists of furnishing all paints, enamels, epoxy, varnishes and other products to be used including labor, tools and equipment required as shown on the plans and in accordance with this specifications.

Prepared by:


Engr. Joe Marino P. Abutal
Assistant Planning Engineer

Reviewed by:


Engr. Joel E. Morales
Project Development Officer -1

Recommending Approval:


Engr. Melvin A. Makipagay
Director, Project Development Officer

Approved by:


Dr. Frederick T. Villa
University President

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

PROJECT TITLE: Water Drilling/Shallow Well with Pumphouse at Brgy. Villa Nava Gumaca Campus,
Gumaca Quezon

PROJECT LOCATION: Brgy. Villa Nava, Gumaca Quezon

OWNER: Southern Luzon State University

PROJECT DURATION: 90 CD


SUBJECT: Minimum Technical Personnel and Equipment

MINIMUM TECHNICAL PERSONNEL AND EQUIPMENT


QUANTITY	MINIMUM TECHNICAL PERSONNEL
1	Project Engineer / Site Engineer
1	Foreman
1	Timekeeper/Warehouse Man
2	Skilled Worker
2	Unskilled Worker

QUANTITY	MINIMUM EQUIPMENT
1	One Bagger Mixer
1	Welding Machine
1	Well Drilling Machine

Prepared by:


Engr. Joe Marino P. Abutal
Assistant Planning Engineer

Reviewed by:


Engr. Joel E. Morales
Project Development Officer -1

Recommending Approval:


Engr. Melvin A. Makipagay
Director, Project Management Office

Approved by:


Dr. Frederick T. Villa
University President

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

Project : Water Drilling/Shallow Well with Pumphouse at Brgy. Villa Nava Gumaca Campus, Gumaca Quezon
Location Brgy. Villa Nava, Gumaca Quezon
Owner : Southern Luzon State University
Mode of Implementation : by Contract
Project Duration : 90 Calendar Days

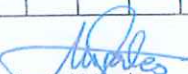
GANTT CHART/CONSTRUCTION SCHEDULE

Item	Description	Duration (days)	Duration (Days)														
			7	14	21	28	35	42	49	56	63	70	77	84	90		
I	GENERAL REQUIREMENTS																
	Mobilization	7	█														
	Demobilization	7															█
	Project Identification	5	█														
	Material Testing	14															
	Safety Health Program	90	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
II	EARTHWORKS																
	Earthfill/backfill incl. compaction																
	Cleaning and Grubbing	3		█													
	Handling and Disposal	7															
	Excavation	7		█													
III	REINFORCED CONCRETE WORKS																
	Fabrication & Installation of RSB	7															
	Installation of formworks	7															
	Concrete Pouring	7															
IV	MASONRY WORKS																
	C18 Laying incl. reinforcements	7															
	Plastering	7															
V	ELECTRICAL WORKS																
	Electrical Works	7															
VI	DOORS & WINDOWS																
	Fabrication & installation of Doors & Windows	7															
VII	PLUMBING WORKS																
	Well Drilling	21															
	Installation of Pipes & Casing	14															
	Installation of Water Pump	7															
VIII	TRUSS & TINSMITHRY WORKS																
	Fabrication of roof framing	7															
	Installation of roofing & flashings	7															
IX	PAINT WORKS																
	Surface Preparations	7															
	Application of paint	7															

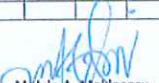
Prepared by:


Engr. Joe Marino P. Abutal
Assistant Planning Engineer

Reviewed by:

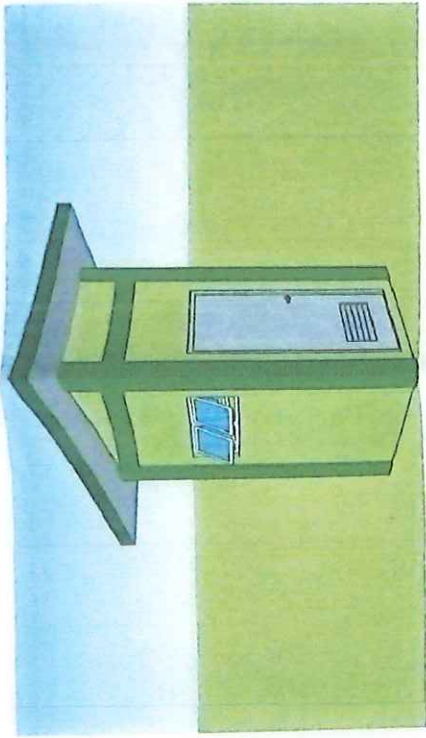

Engr. Joel E. Morales
Project Development Officer 1

Recommending Approval:

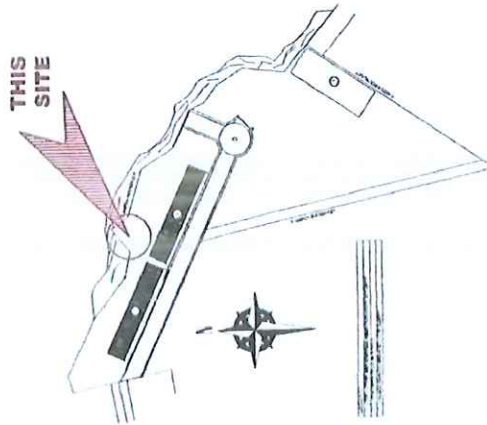

Engr. Melvin A. Maripagay
Director, Project Management Office

Approved by:

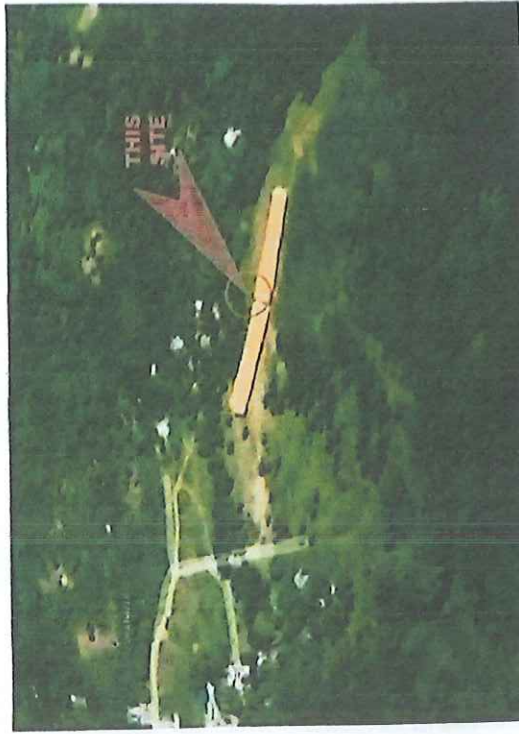

Dr. Frederick T. Villa
University President



1 PERSPECTIVE
A-1 SCALE: NTS

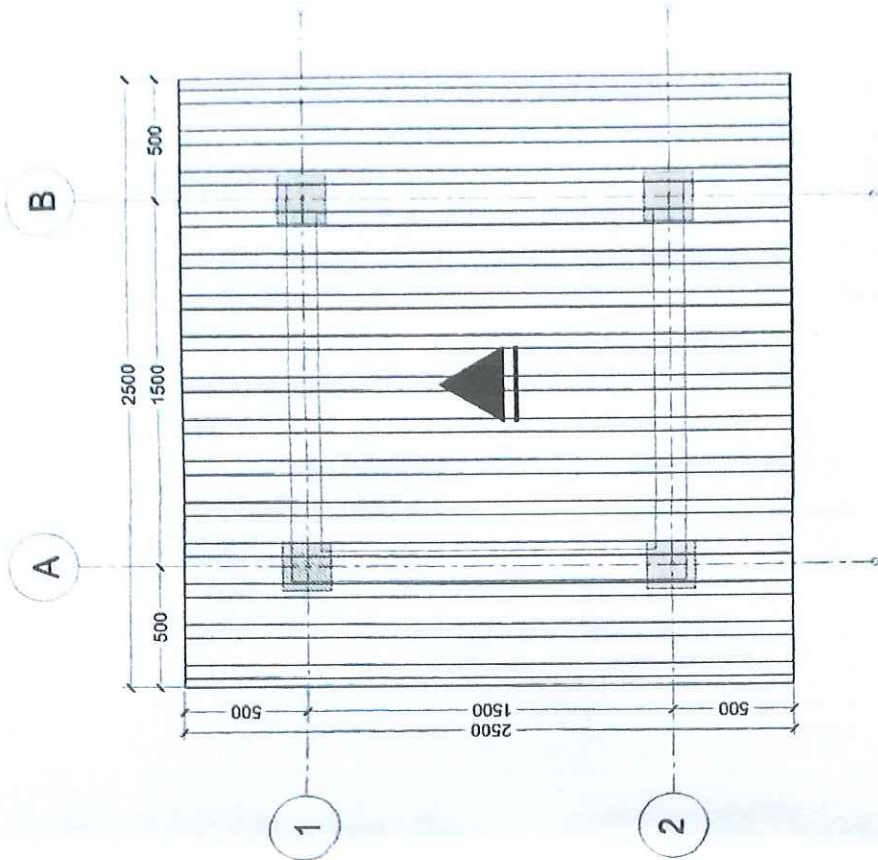


2 SITE DEVELOPMENT
A-1 SCALE: NTS

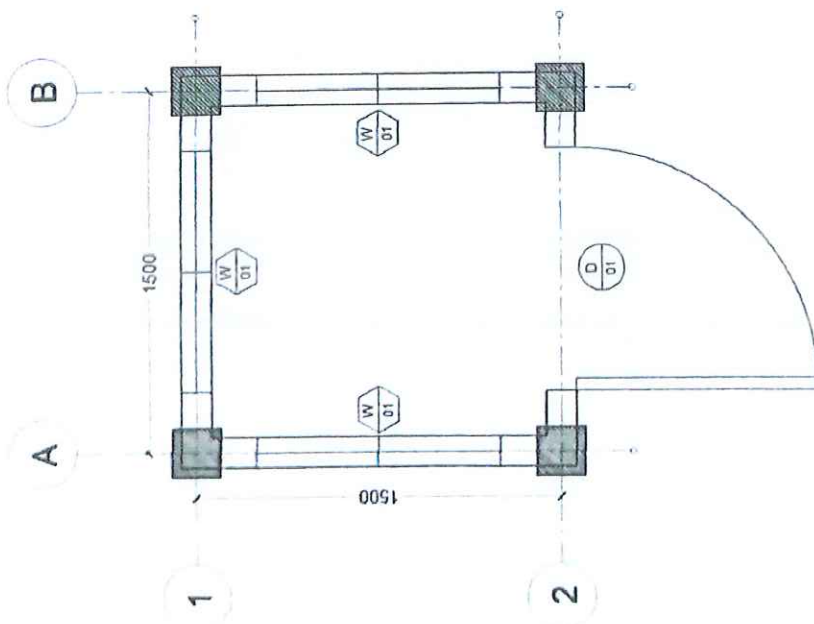


3 VICINITY MAP
A-1 SCALE: NTS

 CIVIL/STRUCTURAL ENGINEER	PROJECT TITLE WATER DRILLING-SHALLOW WELL WITH PUMPHOUSE AT BRGY. VILLA NAVA GUMACA CAMPUS GUMACA QUEZON	DRAWN BY  ENGR. JOE MARIANO P. ABUTAL <small>REGISTERED PROFESSIONAL ENGINEER</small> <small>REG. NO. 10111</small>	REVIEWED BY:  ENGR. JOSE L. MORALES <small>REGISTERED PROFESSIONAL ENGINEER</small> <small>REG. NO. 10111</small>	RECOMMENDING APPROVAL  ENGR. MELVIN A. GUIPAGAY <small>REGISTERED PROFESSIONAL ENGINEER</small> <small>REG. NO. 10111</small>	APPROVED BY  DR. FREDERICK T. VILLA <small>REGISTERED PROFESSIONAL ENGINEER</small> <small>REG. NO. 10111</small>	SHEET CONTENT PROJECT PLAN SITE DEVELOPMENT PLAN	SHEET # A-1
	<small>DATE: 08/15/2023</small>						

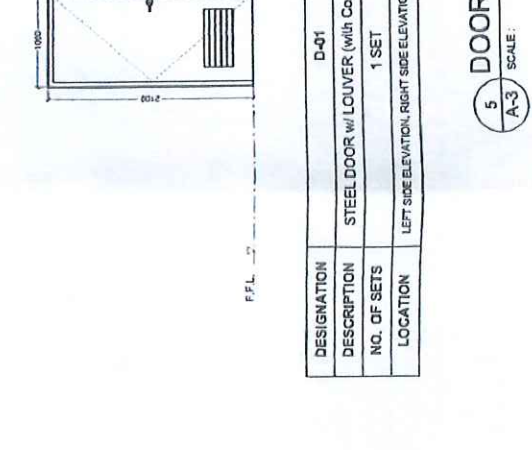
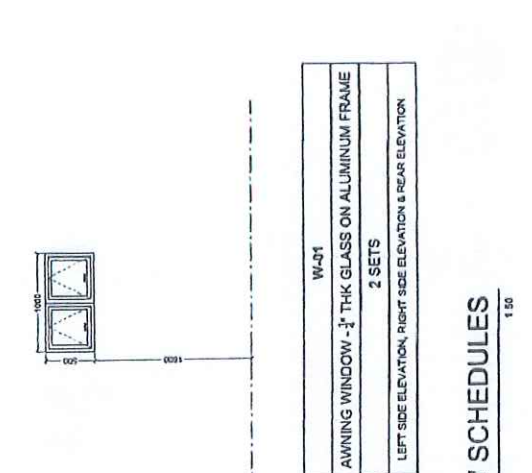
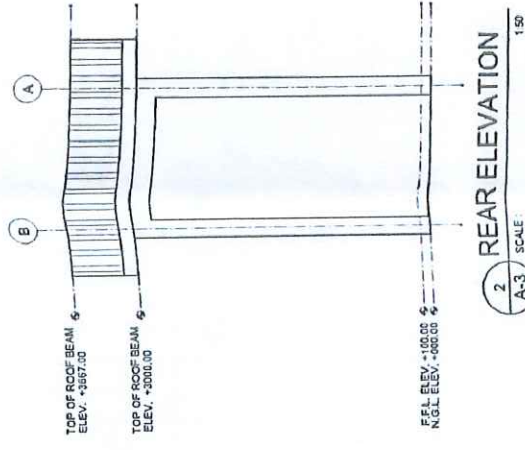
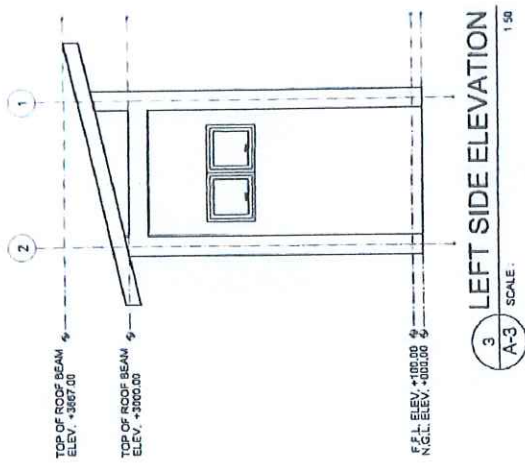


2 ROOF PLAN
A-2 SCALE 1:20



1 FLOOR PLAN
A-2 SCALE 1:20

	PROJECT TITLE WATER DRILLING-SHALLOW WELL WITH PUMPHOUSE AT BRGY. VILLA NAVA GUMACA CAMPUS GUMACA, QUEZON	DRAWN BY ENGR. JOE MARINO P. ABITAL (Professional Engineer Seal)	REVIEWED BY ENGR. JOE MARINO P. ABITAL (Professional Engineer Seal)	RECOMMENDING APPROVAL ENGR. MELVIN A. MANIPAGAY (Professional Engineer Seal)	DESIGNED BY DR. FREDERICK T. VILLA (Professional Engineer Seal)	SHEET CONTENT ROOF PLAN A-2
	SHEET NO. 1 OF 1					



DESIGNATION	RECOMMENDING APPROVAL	APPROVED BY	SHEET CONTENT
D-01	ENGR. MELVIN MAKIPAGAY	DR. ANDERICK T. VILLA	FRONT ELEVATION
W-01	ENGR. MELVIN MAKIPAGAY	DR. ANDERICK T. VILLA	FRONT ELEVATION
AWNING WINDOW - 3" THK GLASS ON ALUMINUM FRAME	ENGR. MELVIN MAKIPAGAY	DR. ANDERICK T. VILLA	LEFT SIDE ELEVATION
NO. OF SETS	1 SET	DR. ANDERICK T. VILLA	RIGHT SIDE ELEVATION
LOCATION	LEFT SIDE ELEVATION, RIGHT SIDE ELEVATION & REAR ELEVATION	DR. ANDERICK T. VILLA	EXTERIOR & WINDOW SCHEDULES

5 DOOR & WINDOW SCHEDULES
 1:50 SCALE
 A-3

	DRAWN BY ENGR. JICE MARINO P. ARIBAL ENGR. JICE MARINO P. ARIBAL PROJECT ENGINEER	REVIEWED BY ENGR. MELVIN MAKIPAGAY PROJECT MANAGER	RECOMMENDING APPROVAL DR. ANDERICK T. VILLA ARCHITECT	SHEET CONTENT FRONT ELEVATION LEFT SIDE ELEVATION RIGHT SIDE ELEVATION EXTERIOR & WINDOW SCHEDULES	SHEET # A-3
	PROJECT TITLE WATER DRILLING/SHALLOW WELL WITH PUMPHOUSE AT BRGY. VILLA NAVA GUMACA CAMPUS GUMACA, QUEZON				

CONSTRUCTION NOTES

- A. GENERAL**
1. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF ALL APPLICABLE CODES AND STANDARDS.
 2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF ALL APPLICABLE CODES AND STANDARDS.
 3. ALL MATERIALS SHALL BE OF THE BEST QUALITY AND SHALL BE SUBMITTED FOR APPROVAL BY THE ENGINEER BEFORE USE.
 4. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF ALL APPLICABLE CODES AND STANDARDS.
 5. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF ALL APPLICABLE CODES AND STANDARDS.

- B. CONCRETE & REINFORCEMENT**
1. ALL REINFORCING AND REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF ALL APPLICABLE CODES AND STANDARDS.
 2. ALL CONCRETE SHALL BE OF THE BEST QUALITY AND SHALL BE SUBMITTED FOR APPROVAL BY THE ENGINEER BEFORE USE.
 3. ALL CONCRETE SHALL BE CAST IN ACCORDANCE WITH THE LATEST EDITIONS OF ALL APPLICABLE CODES AND STANDARDS.
 4. ALL CONCRETE SHALL BE CURED IN ACCORDANCE WITH THE LATEST EDITIONS OF ALL APPLICABLE CODES AND STANDARDS.
 5. ALL CONCRETE SHALL BE FINISHED IN ACCORDANCE WITH THE LATEST EDITIONS OF ALL APPLICABLE CODES AND STANDARDS.

ITEM	UNIT	QUANTITY	REMARKS
1. ALL REINFORCING AND REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF ALL APPLICABLE CODES AND STANDARDS.			
2. ALL CONCRETE SHALL BE OF THE BEST QUALITY AND SHALL BE SUBMITTED FOR APPROVAL BY THE ENGINEER BEFORE USE.			
3. ALL CONCRETE SHALL BE CAST IN ACCORDANCE WITH THE LATEST EDITIONS OF ALL APPLICABLE CODES AND STANDARDS.			
4. ALL CONCRETE SHALL BE CURED IN ACCORDANCE WITH THE LATEST EDITIONS OF ALL APPLICABLE CODES AND STANDARDS.			
5. ALL CONCRETE SHALL BE FINISHED IN ACCORDANCE WITH THE LATEST EDITIONS OF ALL APPLICABLE CODES AND STANDARDS.			

1. ALL REINFORCING AND REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF ALL APPLICABLE CODES AND STANDARDS.
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5. ALL CONCRETE SHALL BE FINISHED IN ACCORDANCE WITH THE LATEST EDITIONS OF ALL APPLICABLE CODES AND STANDARDS.

- C. MASONRY AND CONCRETE BLOCKS**
1. ALL MASONRY AND CONCRETE BLOCKS SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF ALL APPLICABLE CODES AND STANDARDS.
 2. ALL MASONRY AND CONCRETE BLOCKS SHALL BE SUBMITTED FOR APPROVAL BY THE ENGINEER BEFORE USE.
 3. ALL MASONRY AND CONCRETE BLOCKS SHALL BE CAST IN ACCORDANCE WITH THE LATEST EDITIONS OF ALL APPLICABLE CODES AND STANDARDS.
 4. ALL MASONRY AND CONCRETE BLOCKS SHALL BE CURED IN ACCORDANCE WITH THE LATEST EDITIONS OF ALL APPLICABLE CODES AND STANDARDS.
 5. ALL MASONRY AND CONCRETE BLOCKS SHALL BE FINISHED IN ACCORDANCE WITH THE LATEST EDITIONS OF ALL APPLICABLE CODES AND STANDARDS.

- D. FOUNDATION**
1. ALL FOUNDATION WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF ALL APPLICABLE CODES AND STANDARDS.
 2. ALL FOUNDATION WORK SHALL BE SUBMITTED FOR APPROVAL BY THE ENGINEER BEFORE USE.
 3. ALL FOUNDATION WORK SHALL BE CAST IN ACCORDANCE WITH THE LATEST EDITIONS OF ALL APPLICABLE CODES AND STANDARDS.
 4. ALL FOUNDATION WORK SHALL BE CURED IN ACCORDANCE WITH THE LATEST EDITIONS OF ALL APPLICABLE CODES AND STANDARDS.
 5. ALL FOUNDATION WORK SHALL BE FINISHED IN ACCORDANCE WITH THE LATEST EDITIONS OF ALL APPLICABLE CODES AND STANDARDS.

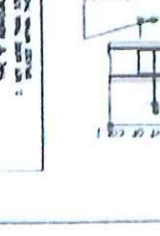
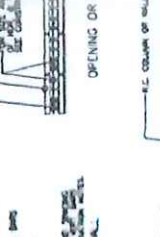
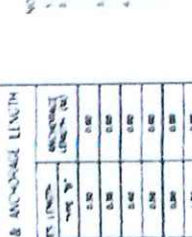
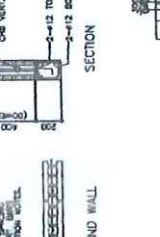
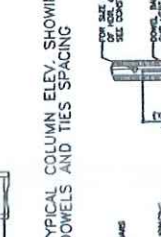
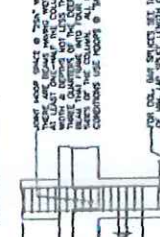
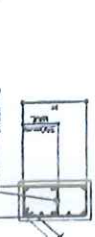
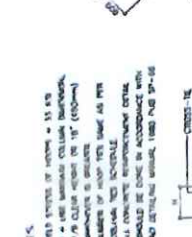
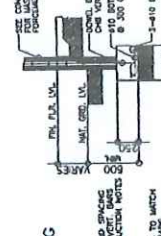
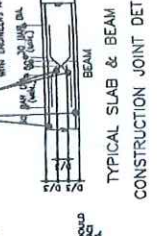
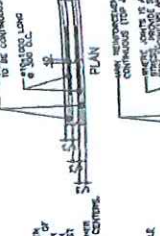
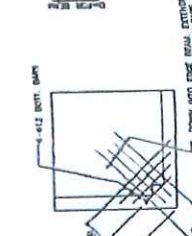
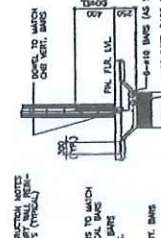
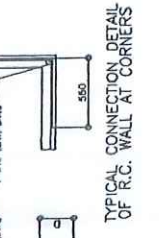
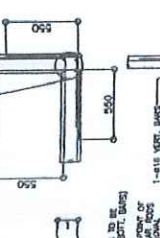
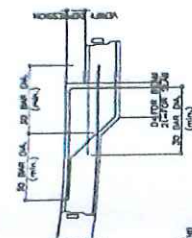
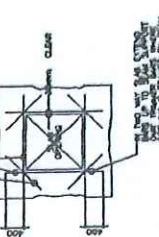
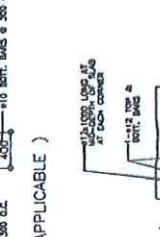
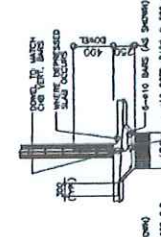
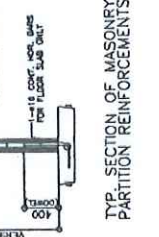
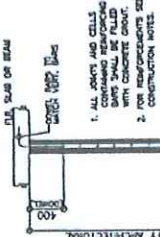
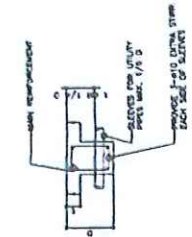


TABLE OF LAP SPACE & ANCHORAGE LENGTH

BAR SIZE	LAP SPACE (MIN)	ANCHORAGE LENGTH (MIN)
10	400	400
12	450	450
14	500	500
16	550	550
18	600	600
20	650	650
22	700	700
24	750	750
26	800	800
28	850	850
30	900	900

- NOTES**
1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF ALL APPLICABLE CODES AND STANDARDS.
 2. ALL MATERIALS SHALL BE OF THE BEST QUALITY AND SHALL BE SUBMITTED FOR APPROVAL BY THE ENGINEER BEFORE USE.
 3. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF ALL APPLICABLE CODES AND STANDARDS.
 4. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF ALL APPLICABLE CODES AND STANDARDS.
 5. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF ALL APPLICABLE CODES AND STANDARDS.



PROJECT TITLE: WATER DRILLING/HALLOW WELL WITH PUMPHOUSE AT BRGY VILLA NAVA GUMACA CAMPUS GUMACA QUEZON

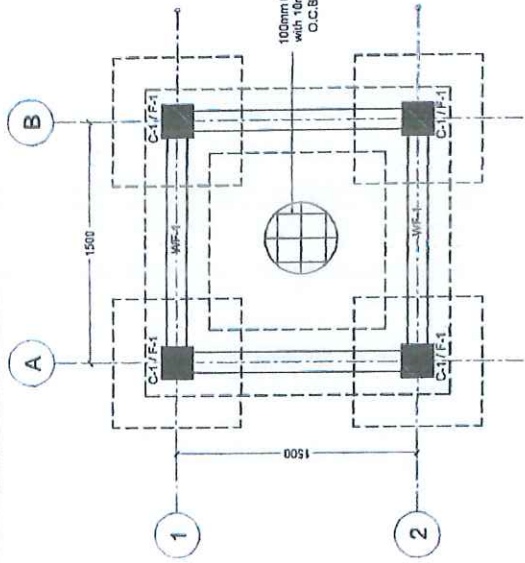
DESIGNED BY: ENGR. JOE MARIANO P. ABULITA

CHECKED BY: ENGR. MELVIN M. MANIPAGAY

RECOMMENDING APPROVAL: DR. FREDERICK T. VILLA

APPROVED BY: DR. FREDERICK T. VILLA

SHEET NO: S-1

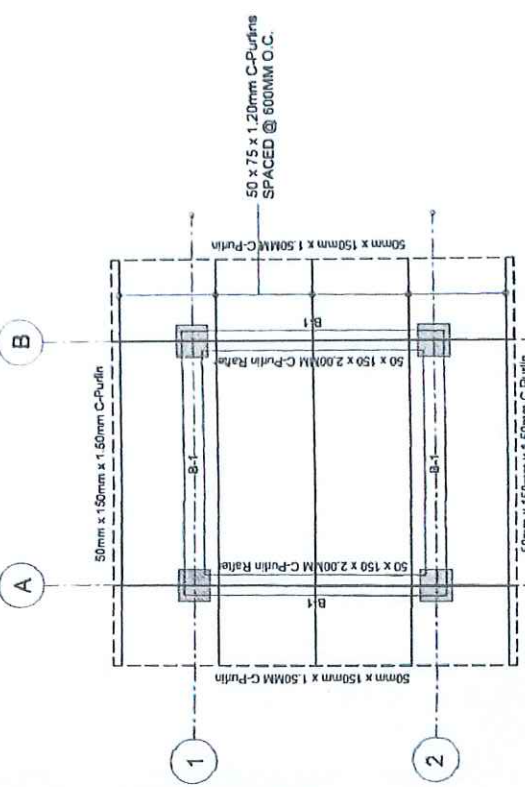


1 FOUNDATION PLAN
SCALE: 1:30

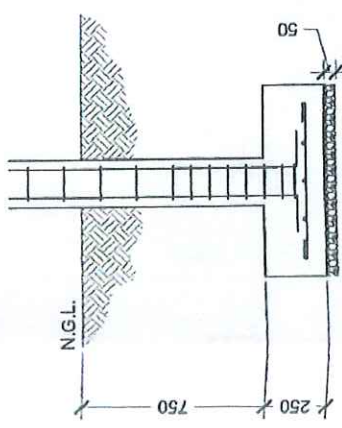
LEVEL	C-1	B-1
TOP OF ROOF LEVEL	<p>MAIN BAR: 4-Ø 12mm TIES: Ø 10mm</p>	<p>MAIN BAR: 4-Ø 12mm TIES: Ø 10mm</p>
FOUNDATION LEVEL	<p>MAIN BAR: 1-Ø 50mm, 6-Ø 12mm, REST Ø 12mm ON CENTER</p>	<p>MAIN BAR: 4-Ø 12mm TIES: Ø 10mm</p>

MARK	SIZE (L x W x D)	DEPTH OF FOOTING	REINFORCEMENTS # OF BARS
F-1	800 x 800 x 250	1000	S - Ø 12mm both ways

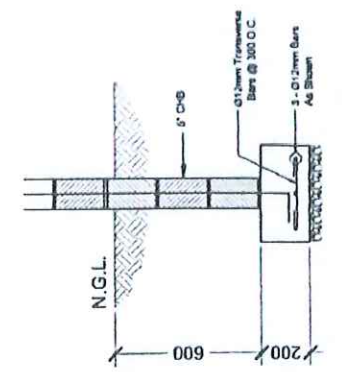
3 COLUMN, BEAM, FTG. SCHED.
SCALE: 1:20



2 FRAMING PLAN
SCALE: 1:40

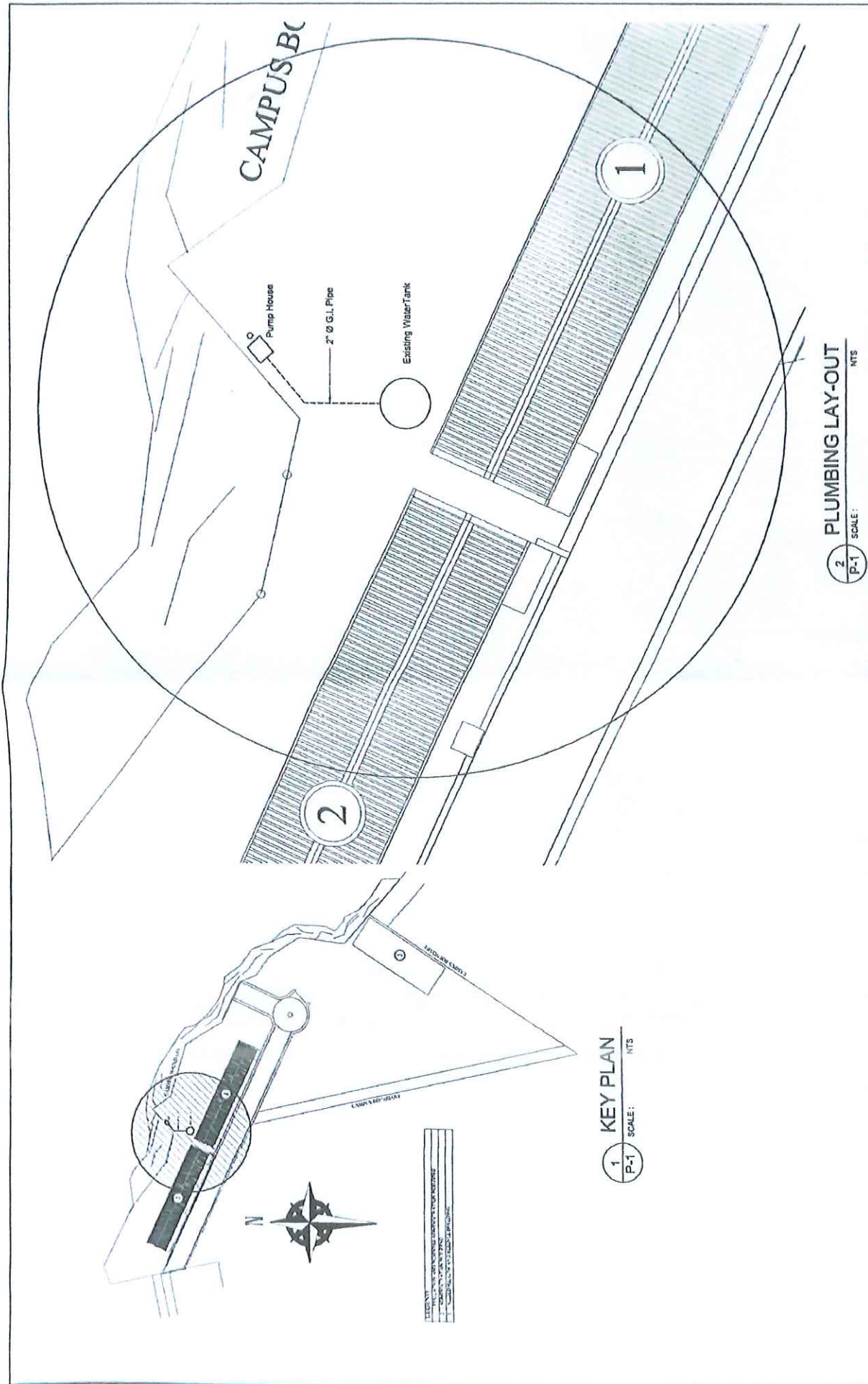


4 COLUMN FOOTING DET.
SCALE: 1:20



5 WALL FOOTING DET.
SCALE: 1:20

	PROJECT TITLE	WATER DRILLING/SHALLOW WELL WITH PUMP/HOUSE AT BRGY. VILLA NAVA GUMACA CAMPUS GUIMACA, QUEZON	DESIGNED BY	ENGR. JOE MARRINO P. ABUTAL	REVIEWED BY	ENGR. MELVIN P. SALES	RECOMMENDING APPROVAL	ENGR. MELVIN P. KIPAGAY	APPROVED BY	DR. FREDERICK T. VILLA	SHEET CONTENT	S-2
	PROJECT NO.		DATE		DATE						PROJECT NO.	



2 PLUMBING LAY-OUT
P-1 SCALE: NTS

1 KEY PLAN
P-1 SCALE: NTS

 PROFESSIONAL ENGINEER REGISTERED PROFESSIONAL ENGINEER REGISTERED PROFESSIONAL ENGINEER REGISTERED PROFESSIONAL ENGINEER	PROJECT TITLE	REVIEWED BY	RECOMMENDING APPROVAL	SHEET CONTAINS	SHEET #
	WATER DRILLING/SHALLOW WELL WITH PUMPHOUSE AT BRGY. VILLA NAVA GUMACA CAMPUS BC, QUEZON DRAWING NO. 211-000-1388-1 (2/2/20)	ENGR. JOE MARIANO P. ABUTAL REGISTERED PROFESSIONAL ENGINEER REGISTERED PROFESSIONAL ENGINEER REGISTERED PROFESSIONAL ENGINEER	ENGR. MELVIN A. ANKAPAGAY REGISTERED PROFESSIONAL ENGINEER REGISTERED PROFESSIONAL ENGINEER REGISTERED PROFESSIONAL ENGINEER	DR. FREDERICK T. VILLA REGISTERED PROFESSIONAL ENGINEER REGISTERED PROFESSIONAL ENGINEER REGISTERED PROFESSIONAL ENGINEER	NET PLAN PLUMBING LAY-OUT

