

Republic of the Philippines  
Department of Agriculture

**PHILIPPINE FIBER INDUSTRY DEVELOPMENT AUTHORITY**

3/F DA-PCAF Bldg., Department of Agriculture, Elliptical Rpad, Diliman, Quezon City

**THE BIDS AND AWARDS COMMITTEE**

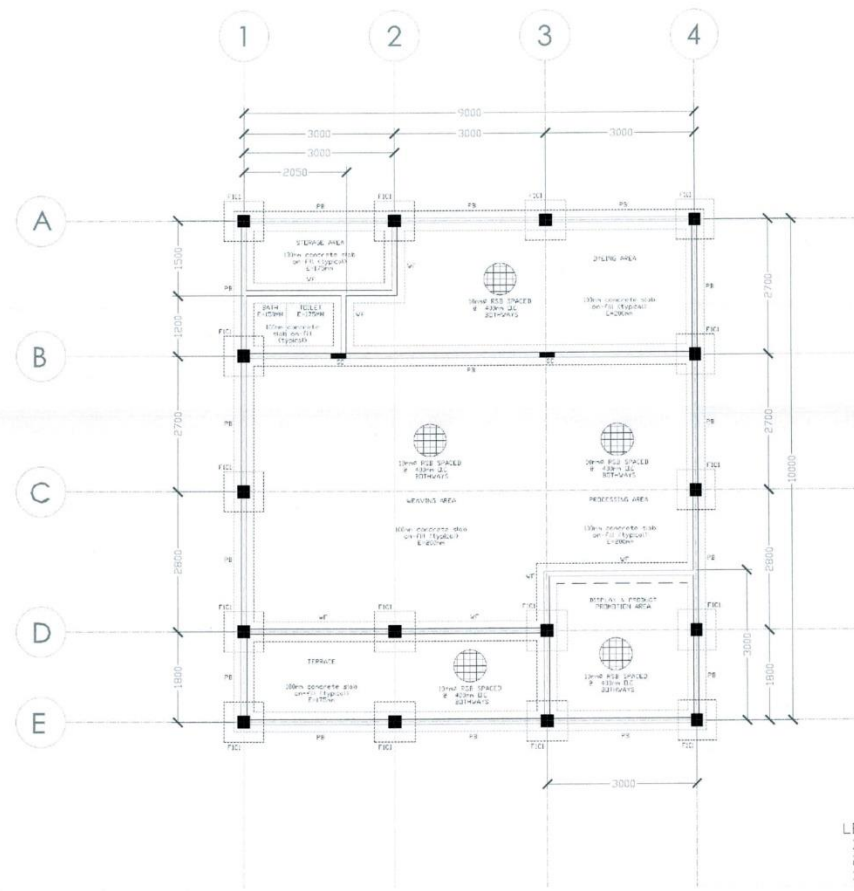
Tel. Nos. 98288756 to 65 loc. 2652; 87219813 | Email: bac@philfida.da.gov.ph



**Invitation to Bid for the Procurement of  
Weaving and Processing Center in Ibaan, Batangas**

**Annex A.3**

**DETAILED ENGINEERING DESIGN**

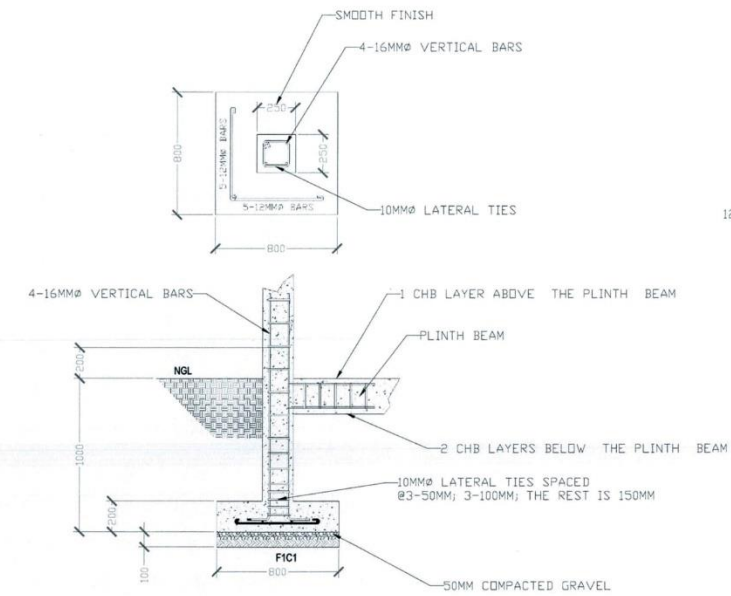


- NOTES:
1. All dimension is in millimeter, or unless otherwise specified;
  2. It shall be the contractor's responsibility to provide adequate shoring and bracing of the structure for all loads that may be imposed during construction;
  3. Contractor shall verify all dimensions before all works is to begin;
  4. Subject to actual verification.

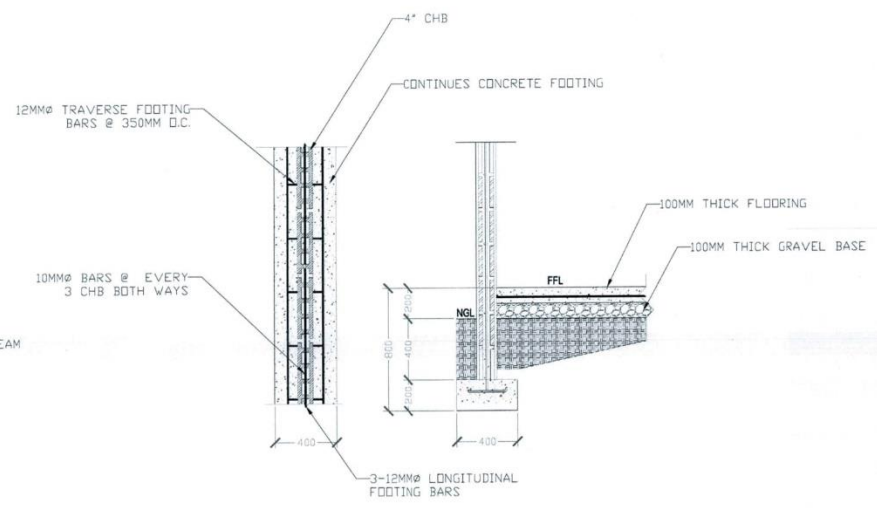
- LEGEND:
1. FIC: FOOTING 1, COLUMN 1
  2. PB: PLINTH BEAM
  3. WF: WALL FOOTING

1 FOUNDATION PLAN  
S-01 SCALE 1:90 MM

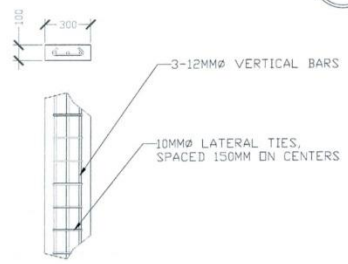
OWNER:  <b>PHILIPPINE FIBER INDUSTRY DEVELOPMENT AUTHORITY</b> <small>3F PCFIP BLDG., DEPARTMENT OF AGRICULTURE ELLIPALAN ROAD, DILIMAN, QUEZON CITY</small>	PROJECT TITLE/LOCATION: <b>WEAVING AND PROCESSING CENTER</b> SITIO STA. MARGARETA, BROY, MUNTING TUBIG, IBAAN, BATANGAS	SHEET CONTENTS: AS SHOWN	DRAWN & DESIGNED BY:  <b>ENGR. CLARA M. ARQUILLA</b> <small>AGRICULTURAL AND FISHERIES ENGINEER</small>	CHECKED BY:  <b>ENGR. DEPITO M. SORIANO III</b> <small>ENGINEER II</small>	RECOMMENDING APPROVAL:  <b>CONCEPTION B. JOCSON</b> <small>OIC, FIBER UTILIZATION AND TECHNOLOGY DIVISION</small>	APPROVED BY:  <b>EVELYN B. CABASAN, MM</b> <small>OIC, EXECUTIVE DIRECTOR</small>	SHEET NO. <b>S-01</b> 18   27
		DATE: PTR: TIT: REV. NO.:                      REV. DATE:	PRC: 007711 PTR: TIT: VALIDITY DATE: 07/13/2025	PRC: 00864 PTR: TIT: VALIDITY DATE: 09/29/2025			



**1 COLUMN FOOTING DETAILS**  
SCALE 1:30 MM



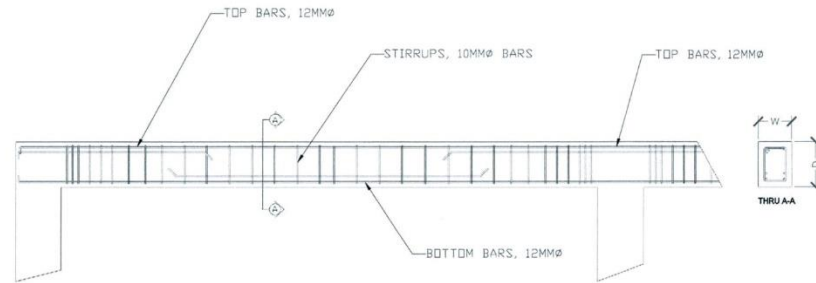
**2 WALL FOOTING DETAILS**  
SCALE 1:30 MM



**2 STIFFENER COLUMN DETAILS**  
SCALE 1:30 MM

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	DATE:	REV. NO.:	PRC: 007711 PTR: TIN: VALIDITY DATE: 07/13/2025	PRC: 008684 PTR: TIN: VALIDITY DATE: 09/29/2025			



SECTION OF BEAM

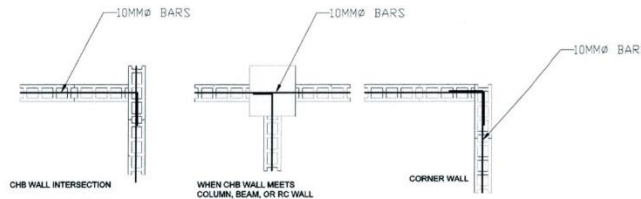
SECTION	1. BEAM		PI BULK BEAM	
	AT SUPPORT	AT HESPAN	AT SUPPORT	AT HESPAN
	300 X 450	300 X 250	200 X 250	200 X 250
CON. TOP BARS	2-12MMØ RSR	2-12MMØ RSR	2-12MMØ RSR	2-12MMØ RSR
CON. TOP BARS	2-12MMØ RSD	2-12MMØ RSD	2-12MMØ RSD	2-12MMØ RSD
CON. BOT BARS	2-12MMØ RSD	2-12MMØ RSD	2-12MMØ RSD	2-12MMØ RSD
CON. BOT BARS	2-12MMØ RSD	2-12MMØ RSD	2-12MMØ RSD	2-12MMØ RSD

10MMØ REBARS STIRRUPS SPACE @ 3-025, 3-015, 3-015, REST @ 3-025 E.C.

1  
S-03

**SCHEDULE OF BEAMS**

SCALE 1:40 MM



NOTES:

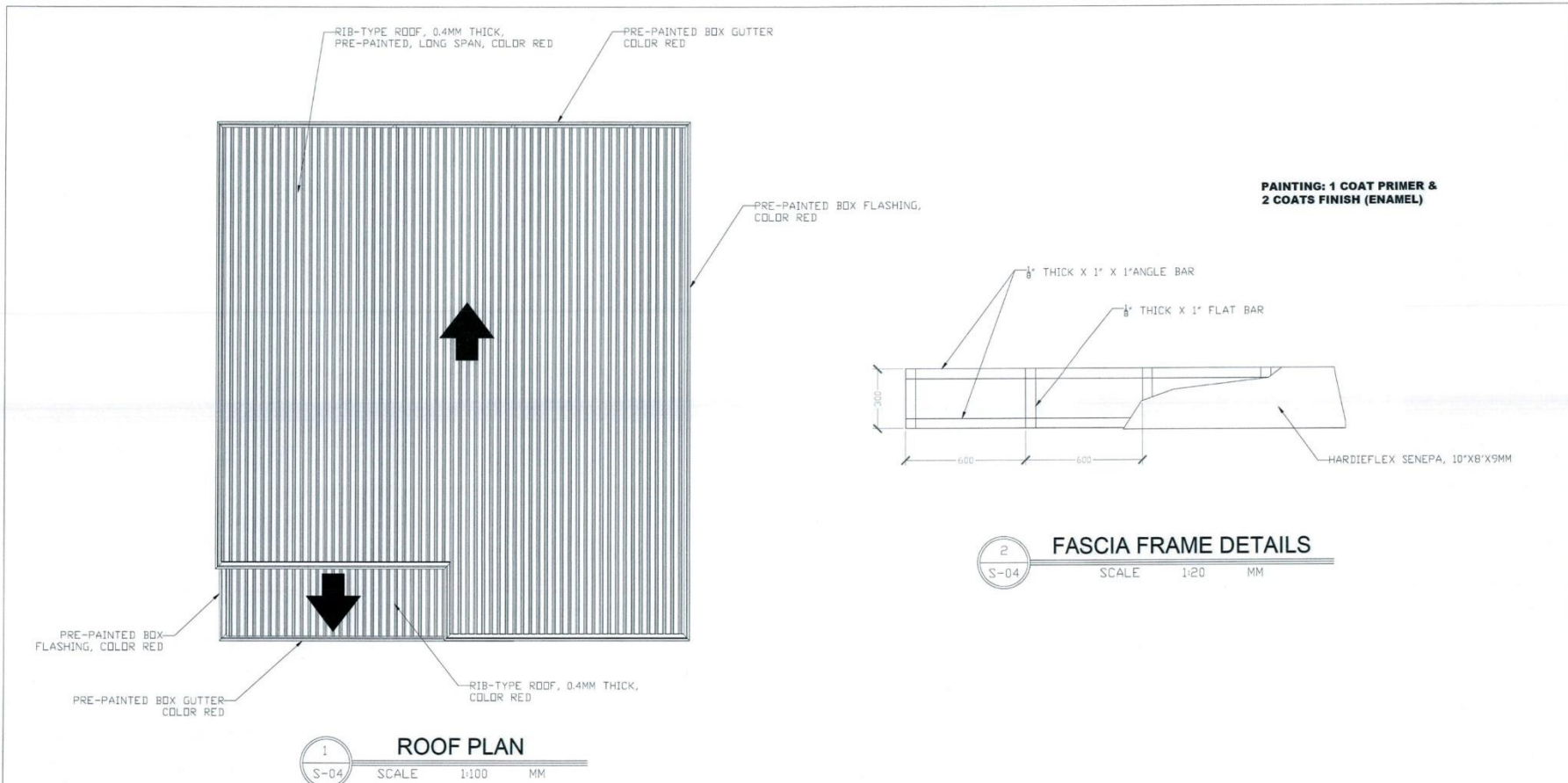
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1  
S-03

**CHB CONNECTION DETAILS**

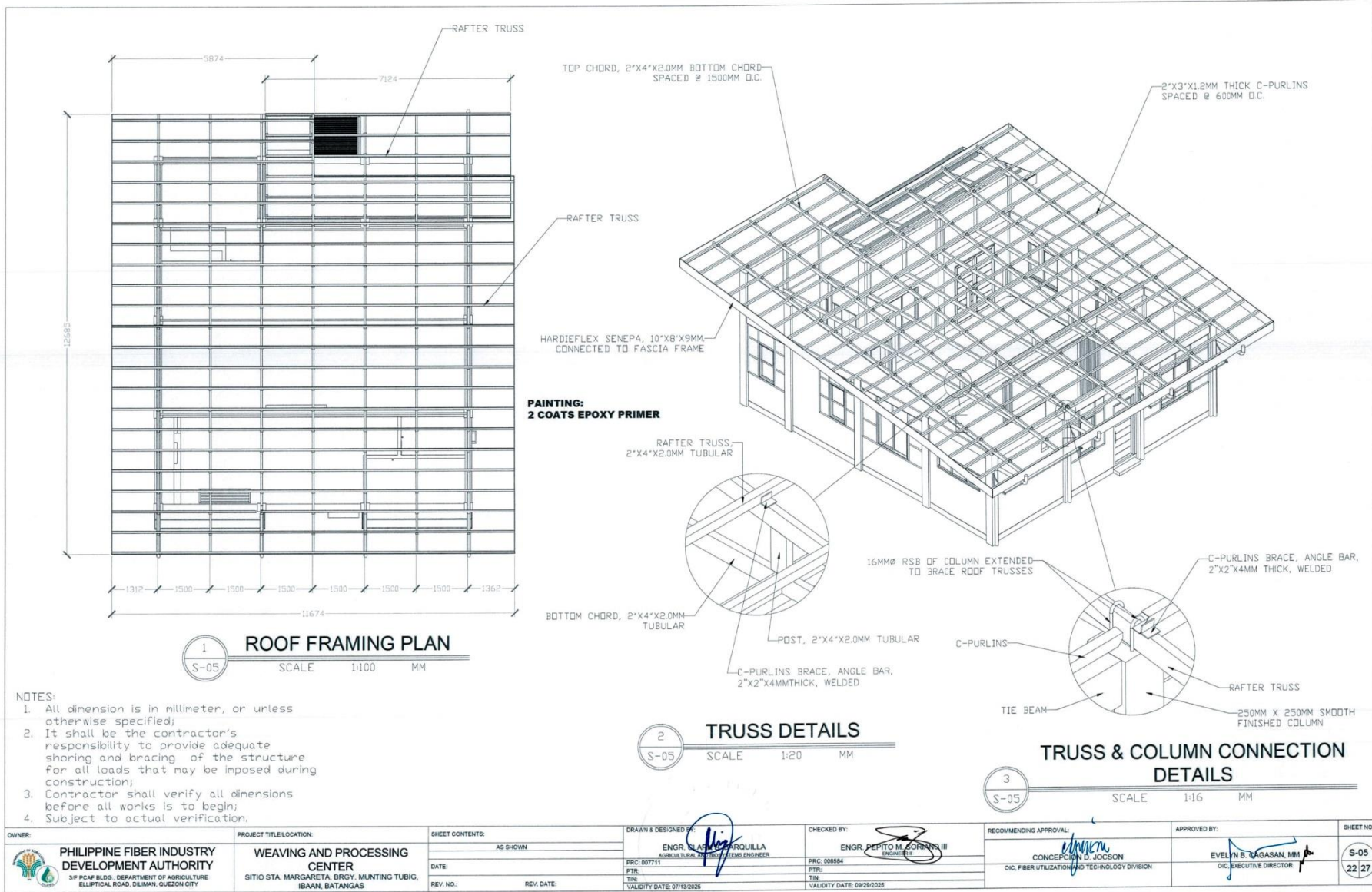
SCALE 1:40 MM

OWNER: <b>PHILIPPINE FIBER INDUSTRY DEVELOPMENT AUTHORITY</b> <small>3F PCAF BLDG., DEPARTMENT OF AGRICULTURE ELLIPTICAL ROAD, DILIMAN, QUEZON CITY</small>	PROJECT TITLE/LOCATION: <b>WEAVING AND PROCESSING CENTER</b> SITIO STA. MARGARETA, BROY, MUNTING TUBIG, IBAAN, BATANGAS	SHEET CONTENTS:	DRAWN & DESIGNED BY:	CHECKED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	SHEET NO.
		AS SHOWN	ENGR. CLAYTON BARQUILLA AGRICULTURAL AND FISHERIES SYSTEMS ENGINEER	ENGR. PEPI TO M. SORIANO III ENGINEER II	CONCEPCION D. JOCSON OIC, FIBER UTILIZATION AND TECHNOLOGY DIVISION	EVELYN B. CAGASAN, MM OIC, EXECUTIVE DIRECTOR	S-03 20/27
		DATE: PRC: 007711 PTR:	VALIDITY DATE: 07/15/2025	PRC: 08664 PTR:			
		REV. NO.: REV. DATE:		TIN: TIN:			
				VALIDITY DATE: 09/29/2025			



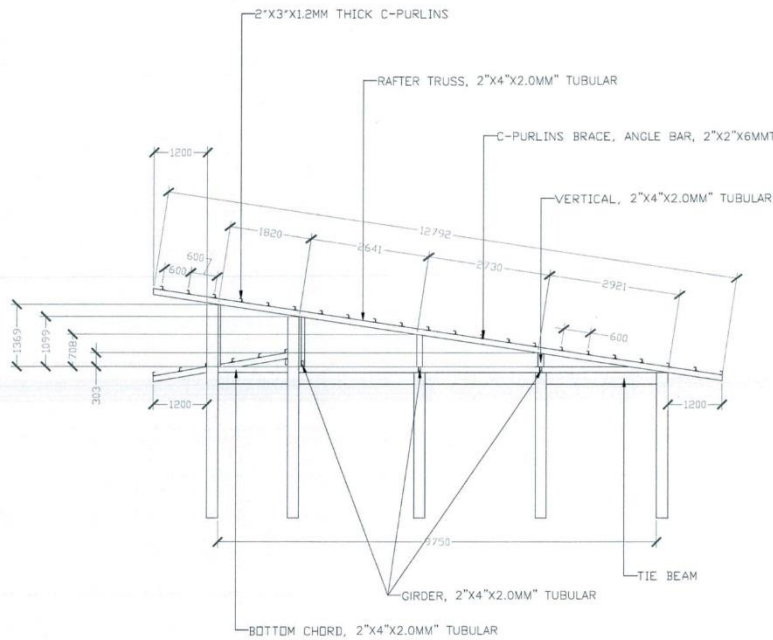
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<b>OWNER:</b>  <b>PHILIPPINE FIBER INDUSTRY DEVELOPMENT AUTHORITY</b> <small>3/F PCFAP BLDG. DEPARTMENT OF AGRICULTURE          ELLIPTICAL ROAD, QUEZON CITY</small>	<b>PROJECT TITLE/LOCATION:</b> <b>WEAVING AND PROCESSING CENTER</b> <small>SITIO STA. MARGARETA, BRGY. MUNTING TUBIG,          IBAAN, BATANGAS</small>	<b>SHEET CONTENTS:</b> AS SHOWN	<b>DRAWN &amp; DESIGNED BY:</b> ENGR. CLAYTON BARQUILLA <small>AGRICULTURAL ENGINEER/MECHANICAL SYSTEMS ENGINEER</small>	<b>CHECKED BY:</b> ENGR. PERITO M. SORIANO III <small>ENGINEER</small>	<b>RECOMMENDING APPROVAL:</b>  CONCEPCION D. JOCCSON <small>CHIEF, FIBER UTILIZATION AND TECHNOLOGY DIVISION</small>	<b>APPROVED BY:</b>  EVELYN B. TAGASAN, MM <small>CHIEF, EXECUTIVE DIRECTOR</small>	<b>SHEET NO.</b> S-04 21/27
		<b>DATE:</b> PRC: 507711 PFR: TIR: VALIDITY DATE: 07/15/2025	<b>DATE:</b> PRC: 00884 PFR: TIR: VALIDITY DATE: 06/26/2025				

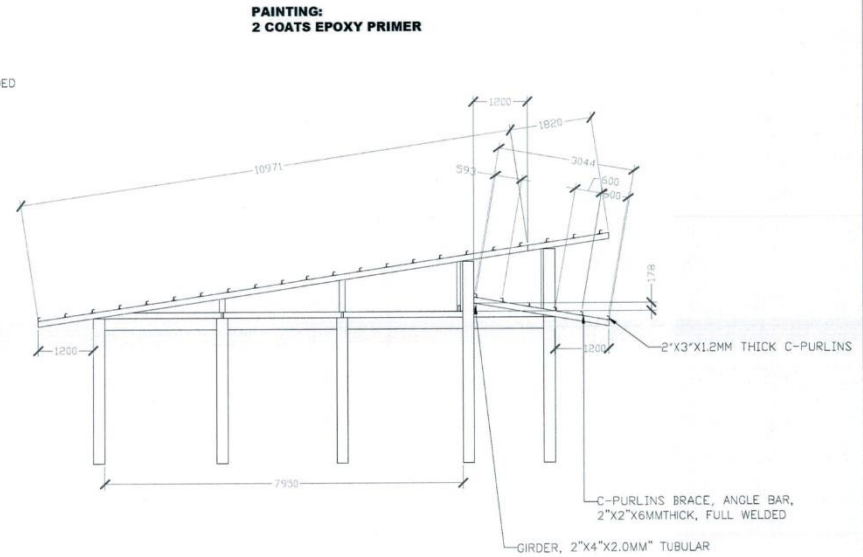


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OWNER: <b>PHILIPPINE FIBER INDUSTRY DEVELOPMENT AUTHORITY</b> <small>3/F PCAF BLDG., DEPARTMENT OF AGRICULTURE          ELLIPTICAL ROAD, DELMAN, QUEZON CITY</small>	PROJECT TITLE/LOCATION: <b>WEAVING AND PROCESSING CENTER</b> <small>SITIO STA. MARGARETA, BRGY. MUNTING TUBIG,          IBAAN, BATANGAS</small>	SHEET CONTENTS: AS SHOWN	DRAWN & DESIGNED BY:  <b>ENGR. ALAN M. ARQUILLA</b> <small>AGRICULTURAL ARCHITECTURE ENGINEER</small>	CHECKED BY:  <b>ENGR. PEPITO M. SORIANO III</b> <small>ENGINEER</small>	RECOMMENDING APPROVAL:  <b>CONCEPCION D. JOCSON</b> <small>OIC, FIBER UTILIZATION AND TECHNOLOGY DIVISION</small>	APPROVED BY:  <b>EVELYN B. LAGASAN, MM</b> <small>OIC, EXECUTIVE DIRECTOR</small>	SHEET NO. 
		DATE: REV. NO.:	PRC: 007711 PTR: TIN: VALIDITY DATE: 07/15/2025	PRC: 008584 PTR: TIN: VALIDITY DATE: 08/28/2025	RECOMMENDING APPROVAL: CONCEPCION D. JOCSON <small>OIC, FIBER UTILIZATION AND TECHNOLOGY DIVISION</small>	APPROVED BY: EVELYN B. LAGASAN, MM <small>OIC, EXECUTIVE DIRECTOR</small>	SHEET NO. 



1  
S-06  
**RAFTER DETAILS**  
SCALE 1:100 MM

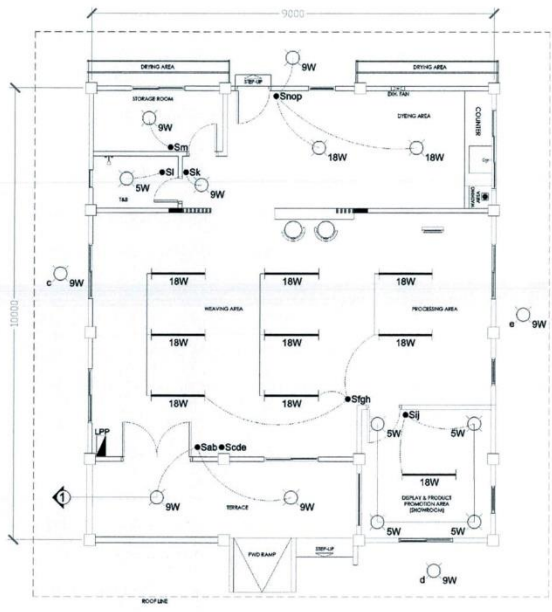


2  
S-06  
**TERRACE RAFTER DETAILS**  
SCALE 1:100 MM

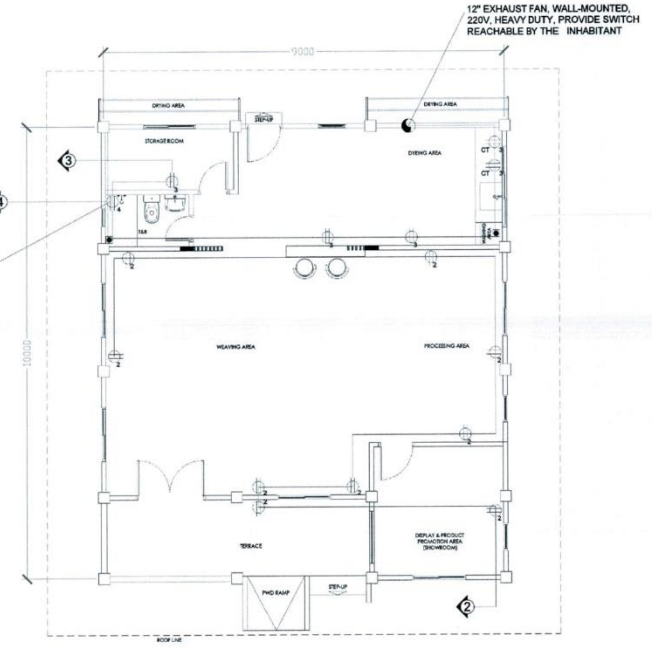
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		<p><b>DATE:</b></p> <p>PRC: 307711 PTR:</p>	<p><b>PRC: 008884</b></p> <p>PTR:</p>	<p><b>VALIDITY DATE: 07/13/2025</b></p>	<p><b>VALIDITY DATE: 09/26/2025</b></p>		



**1 LIGHTING LAYOUT PLAN**  
 SCALE 1:100 MM



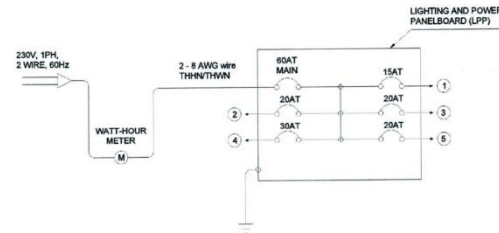
**2 POWER LAYOUT PLAN**  
 SCALE 1:100 MM

<b>OWNER:</b> <b>PHILIPPINE FIBER INDUSTRY DEVELOPMENT AUTHORITY</b> <small>3/F PCAF BLDG., DEPARTMENT OF AGRICULTURE, ELLIPTICAL ROAD, DILIMAN, QUEZON CITY</small>	<b>PROJECT TITLE/LOCATION:</b> <b>WEAVING AND PROCESSING CENTER</b> <small>SITIO STA. MARGARETA, BROY, MUNTING TUBIG, IBAAN, BATANGAS</small>	<b>SHEET CONTENTS:</b> AS SHOWN	<b>DRAWN &amp; DESIGNED BY:</b>  <b>ENGR. GLADYS BARQUILLA</b> <small>AGRICULTURAL AND BIOTECHNOLOGY ENGINEER</small>	<b>CHECKED BY:</b>  <b>ENGR. PEPITO M. SERRANO III</b> <small>ENGINEER</small>	<b>RECOMMENDING APPROVAL:</b>  <b>CONCEPCION D. JOCSON</b> <small>OIC, FIBER UTILIZATION AND TECHNOLOGY DIVISION</small>	<b>APPROVED BY:</b>  <b>EVELYN C. AGASAN, MM</b> <small>OIC, EXECUTIVE DIRECTOR</small>	<b>SHEET NO.:</b> 
		<b>DATE:</b> PTR: 007711 TPN:	<b>DATE:</b> PTR: 00864 TPN:	<b>REV. NO.:</b> REV. DATE:	<b>VALIDITY DATE:</b> 07/13/2025	<b>VALIDITY DATE:</b> 09/29/2025	



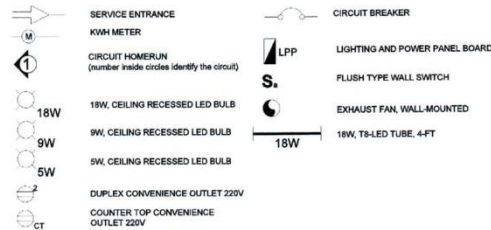
**ELECTRICAL SPECIFICATIONS**

- TYPE OF SERVICE SHALL BE 230-V, SINGLE-PHASE, 2-WIRE, 60-Hz.
- WIRING METHOD SHALL BE IN RIGID FLEXIBLE HOSE ON WALLS, SLABS, CEILINGS OR PARTITIONS. ALL MATERIALS TO BE INSTALLED SHALL BE BRAND NEW AND APPROVED TYPE FOR LOCATION AND PURPOSE.
- MOUNTING HEIGHTS SHALL BE:  
 LIGHT CONTROL SWITCHES-1.30m ABOVE FINISHED FLOOR LINE  
 CONVENIENCE OUTLET - 0.30m ABOVE FINISHED FLOOR LINE  
 PANEL BOARD-1.8m FROM TOP OF PANEL TO FINISHED FLOOR LINE  
 OTHER OUTLETS-AS SPECIFIED IN THE PLAN
- WHENEVER REQUIRED AND NECESSARY, PULL BOXES AND JUNCTION BOXES OF APPROPRIATE SIZES SHALL BE INSTALLED AT CONVENIENT LOCATIONS ALTHOUGH SUCH BOXES ARE NOT SHOWN ON THE PLANS.
- FOR EACH SPARE BRANCH CIRCUITS IN PANEL BOARDS, PROVIDE ONE 20mm DIA. FLEXIBLE HOSE TERMINATED TO A 100mm OCTAGONAL BOX ABOVE. PROVIDE GALVANIZED PULL WIRES IN ALL EMPTY CONDUITS.
- ALL WORKS HEREIN SHALL BE DONE UNDER THE DIRECT SUPERVISION OF A DULY LICENSED ELECTRICAL ENGINEER (PEE/REE) OR A REGISTERED MASTER ELECTRICIAN (RME).



**SINGLE LINE DIAGRAM**

**LEGEND & SYMBOLS :**



**LOAD SCHEDULE**

(220 - 230 V, 60Hz, Single Phase) LIGHTING AND POWER PANEL "LPP"

CRT NO.	LOAD DESCRIPTION	LTS	C.O.	OTHER LOADS	WATTS	AMP LOAD PER CIRCUIT	PROTECTION PER CRT.	SIZE OF HOMERUN WIRE	CONDUIT
1	5W LED BULBS	5			25.0	1.34	15AT	2-3.5MM <sup>2</sup>	1/2" FLEX. HOSE
	9W LED BULBS	8			72.0				
	18W LED BULBS	2			36.0				
	18W LED TUBE, 4 FEET	9			162.0				
2	CONVENIENCE OUTLET DUPLEX	9		3,240.0	14.73	20AT	2-3.5MM <sup>2</sup>	1/2" FLEX. HOSE	
3	CONVENIENCE OUTLET DUPLEX	6		2,160.0	9.82	20AT	2-3.5MM <sup>2</sup>	1/2" FLEX. HOSE	
4	SPECIAL PURPOSE OUTLET	1		1,500.0	6.82	30AT	2-5.2MM <sup>2</sup>	1/2" FLEX. HOSE	
5	SPARE	1		1,500.0	6.82	20AT	2-3.5MM <sup>2</sup>	1/2" FLEX. HOSE	
TOTAL LOAD IN THE BUILDING						39.53	AMPERES		
D.F. (DEMAND FACTOR) = 80% 1 (TOTAL) = (39.53 X 0.8) + (8 X 0.25) = 33.62 AMPERES						USE : 60AT 2P 240V CB (CIRCUIT BREAKER)			



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		DATE:	PRC: 007711 PTR:	PRC: 008884 PTR:			
		REV. NO.:	REV. DATE:	TIN: VALIDITY DATE: 07/13/2025	TIN: VALIDITY DATE: 09/29/2025		



\_\_\_\_\_  
Signature over Printed Name  
of Bidder's Authorized Representative

\_\_\_\_\_  
Position

\_\_\_\_\_  
Name of Company

\_\_\_\_\_  
Date Signed

**REMINDER**

***Bidder's authorized representative must affix his/her signature. Failure of the authorized representative to sign each and every page of the Detailed Engineering Design shall be a cause for rejection of his/her bid.***