





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 Construction of Abaca Processing Center in Josefina, Zamboanga del Sur

Annex A DETAILED ENGINEERING DESIGN



REPUBLIC OF THE PHILIPPINES PHILIPPINE FIBER INDUSTRY DEVELOPMENT AUTHORITY CENTRAL OFFICE 3/F DAPCAF BLDG., DEPARTMENT OF AGRICULTURE, ELLIPTICAL RD., DILIMAN, QUEZON CITY

C.Y. 2024 PROJECT DETAILED ENGINEERING DESIGN PLAN FOR

CONSTRUCTION OF ABACA PROCESSING CENTER UNDER HIBLA FARMING

JOSEFINA, ZAMBOANGA DEL SUR

DRAWN/PREPARED BY:

REVIEWED BY:

RECOMMENDING APPROVAL:

APPROVED BY:

ENGR. LIAM ROBER A. LAGARTO / ENGR. WAXA JILL ANN P. PERI

ENGINEER I / ENGINEER /

ENGR. ROMY ALVIN D. DOMINGO FIBER DEVELOPMENT OFFICER II/HEAD, EPDSS ALMA MARIA K. SANTOS

OIC, INTERIM FIBER ENGINEERING DIVISION

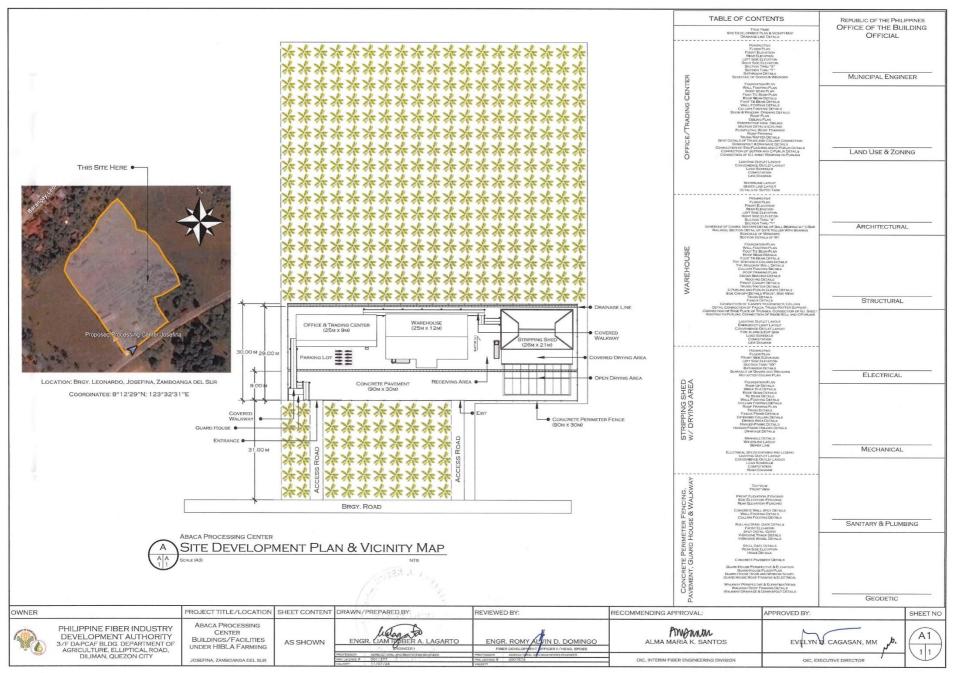
EVELYN B. CAGASAN, MM

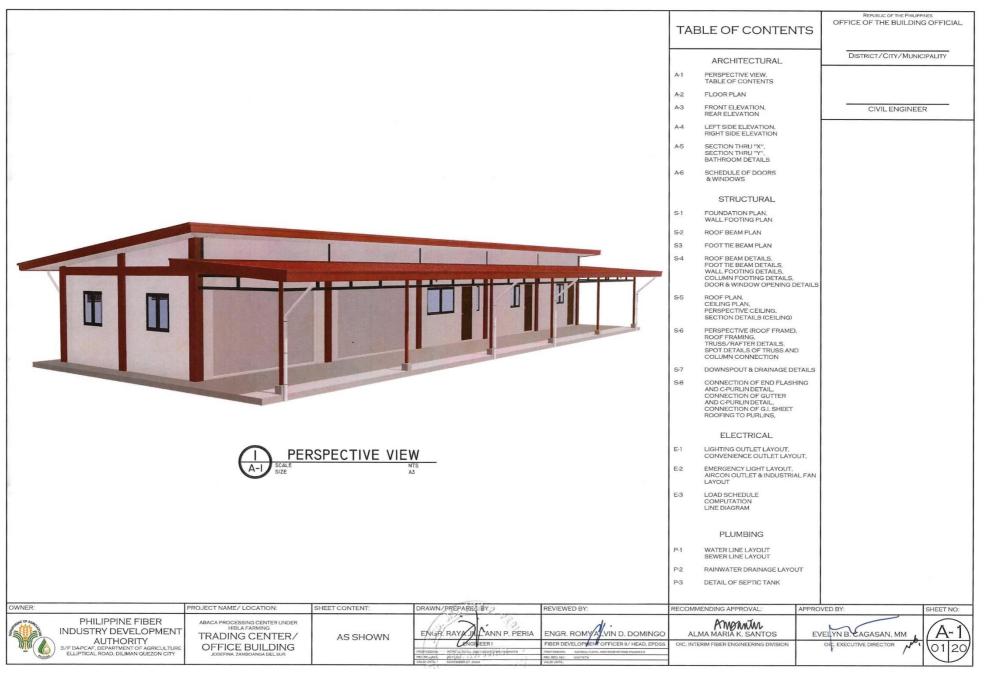
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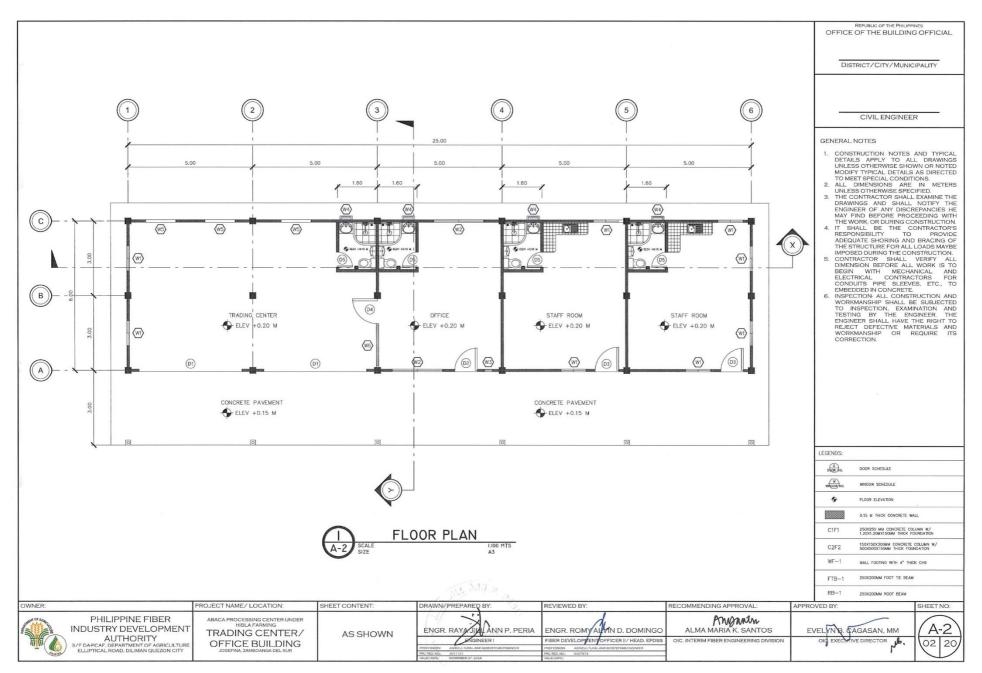
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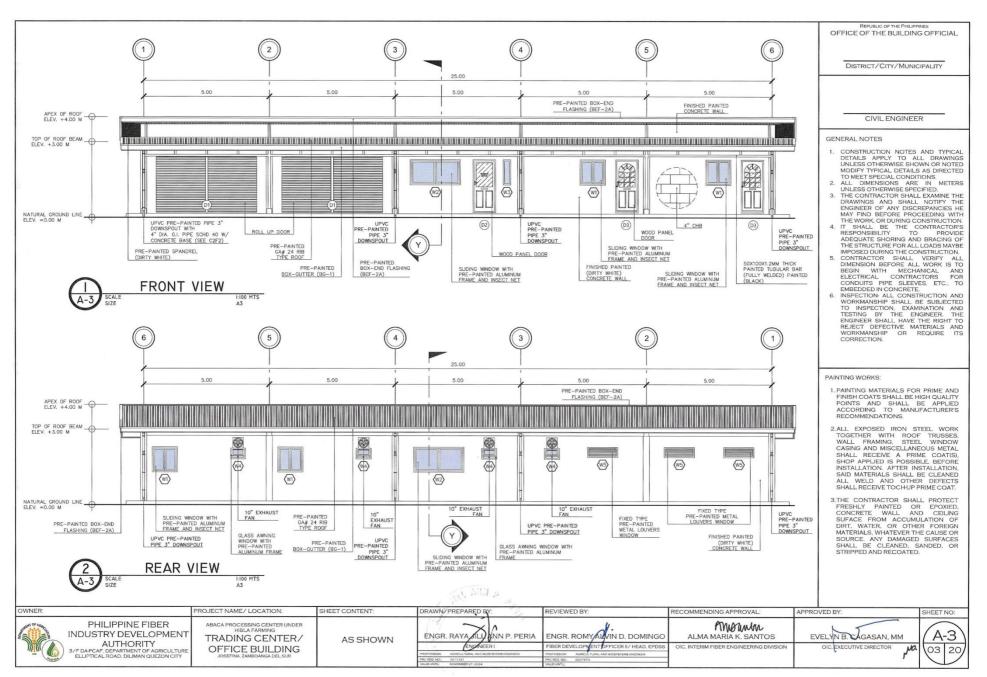
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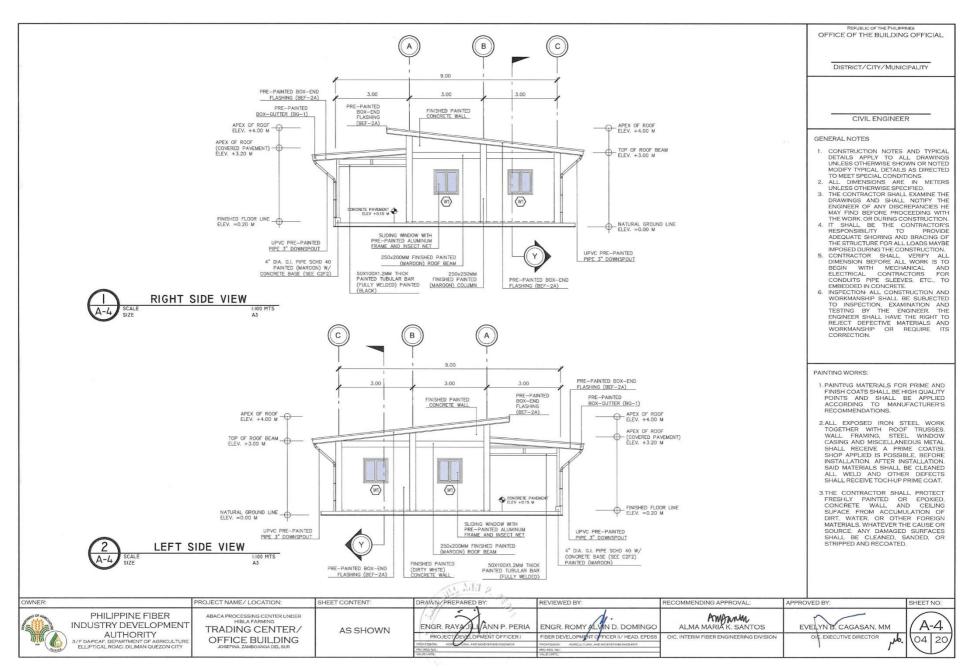
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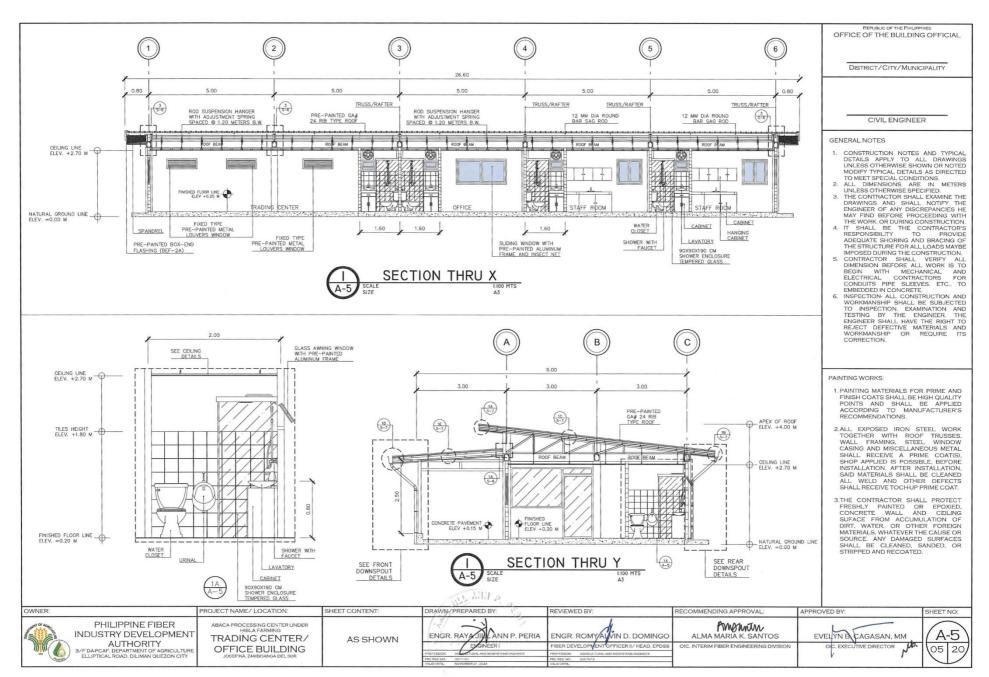


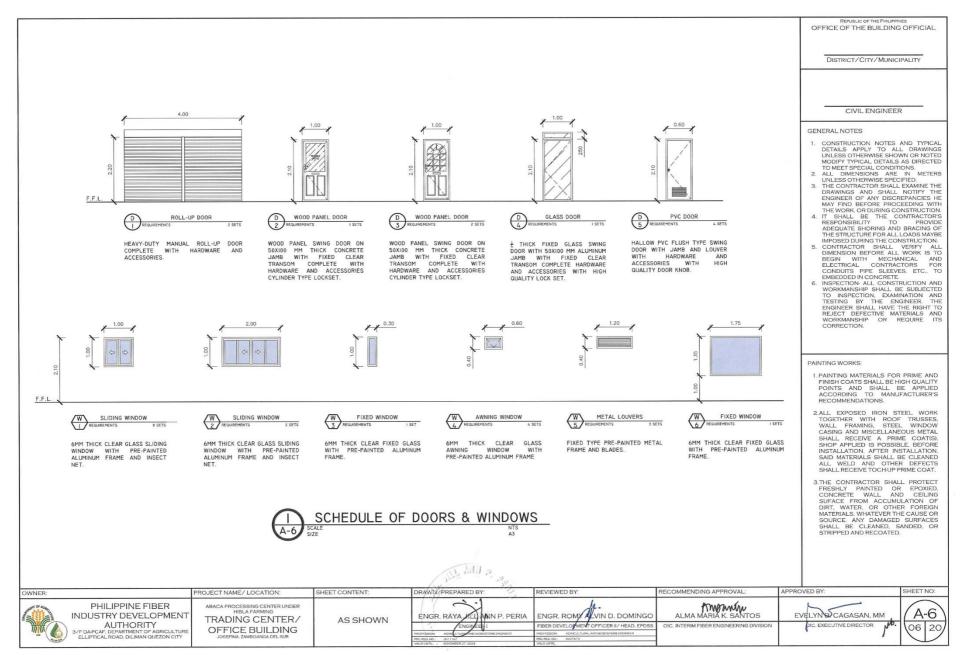


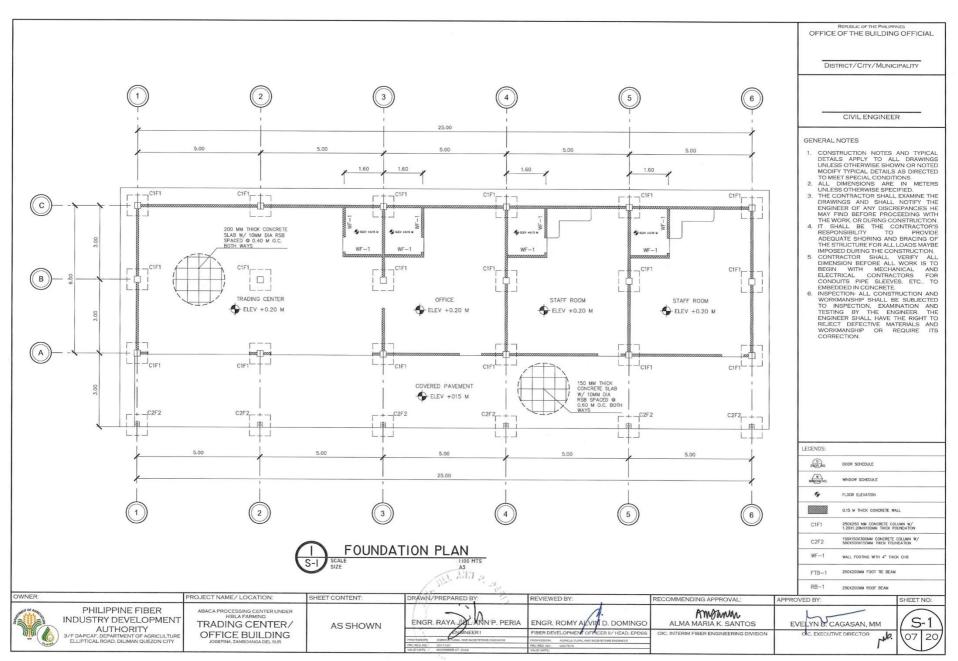


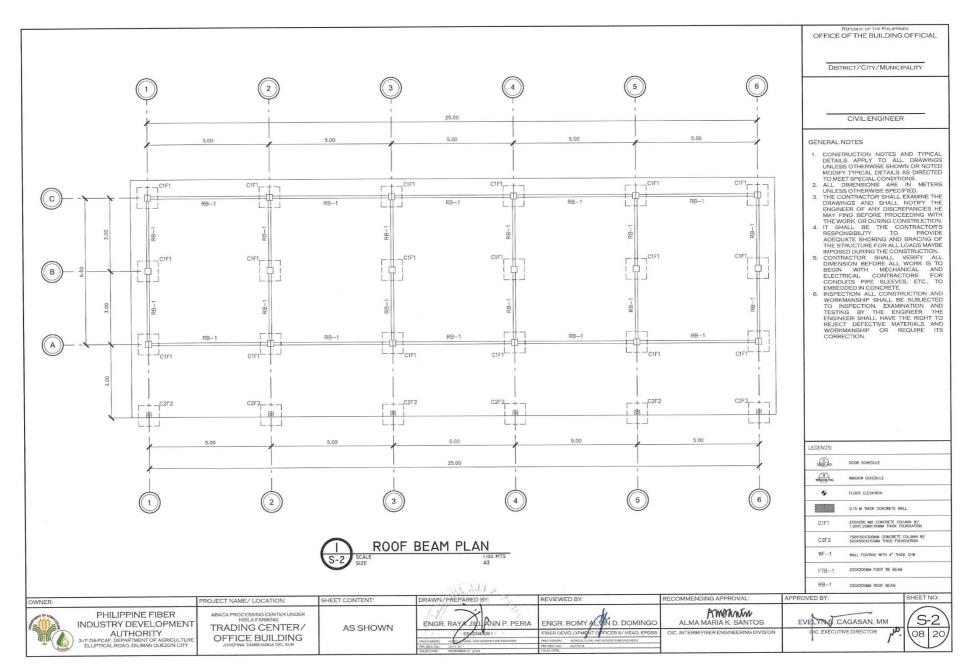


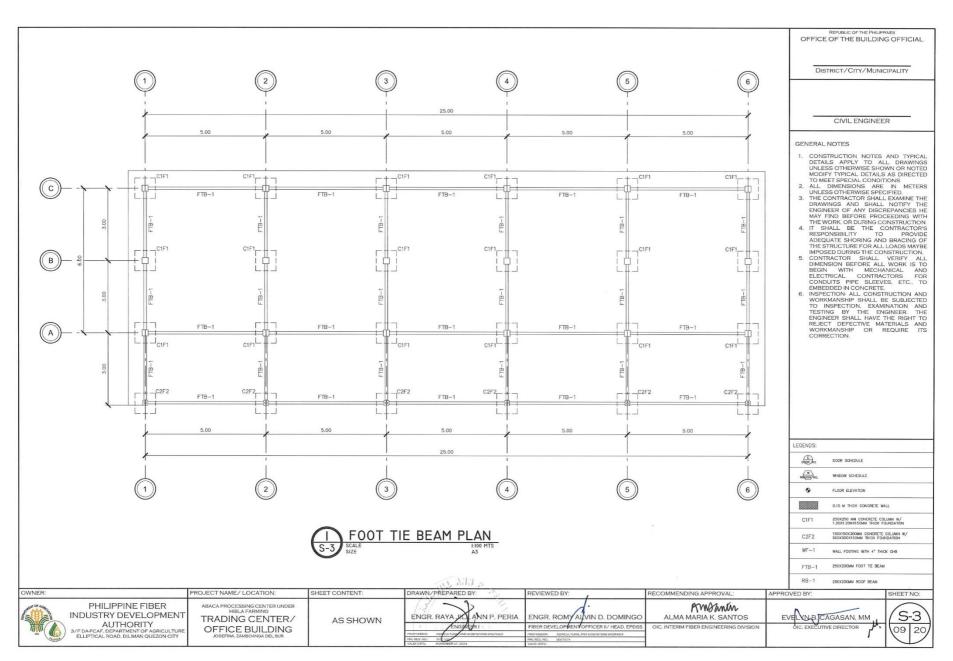


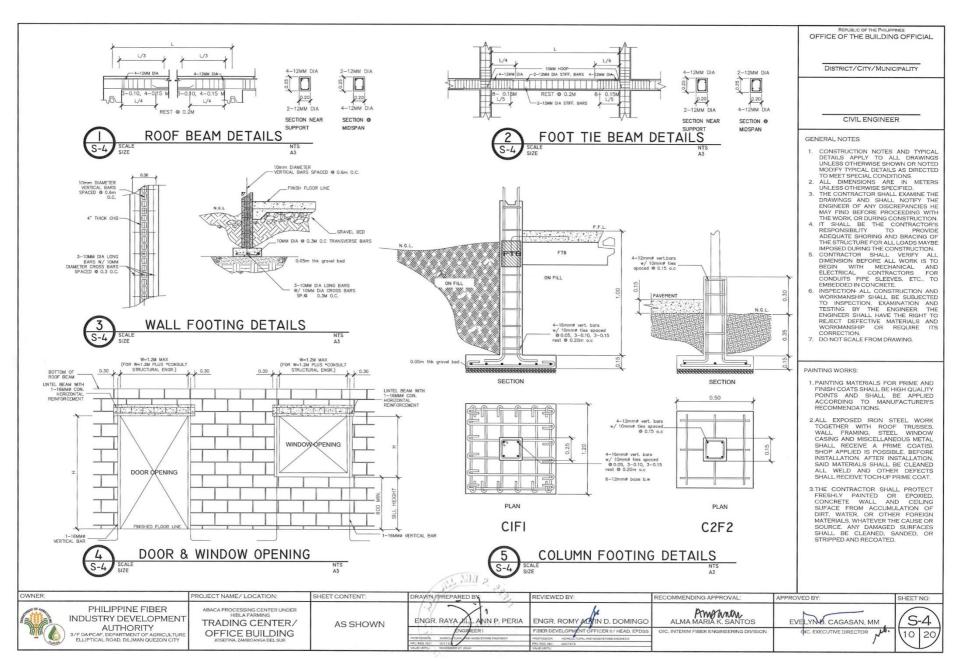


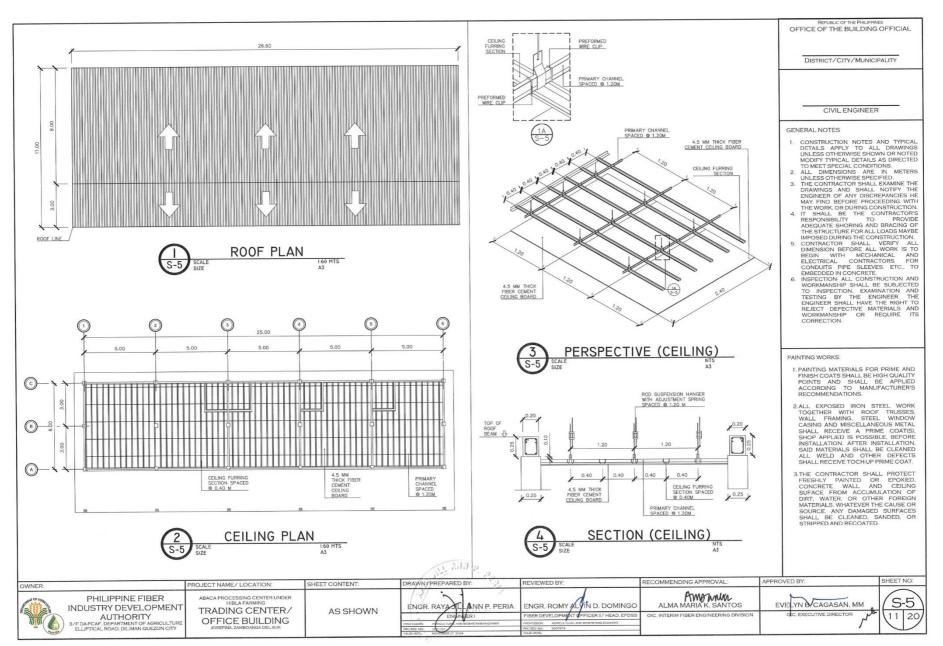


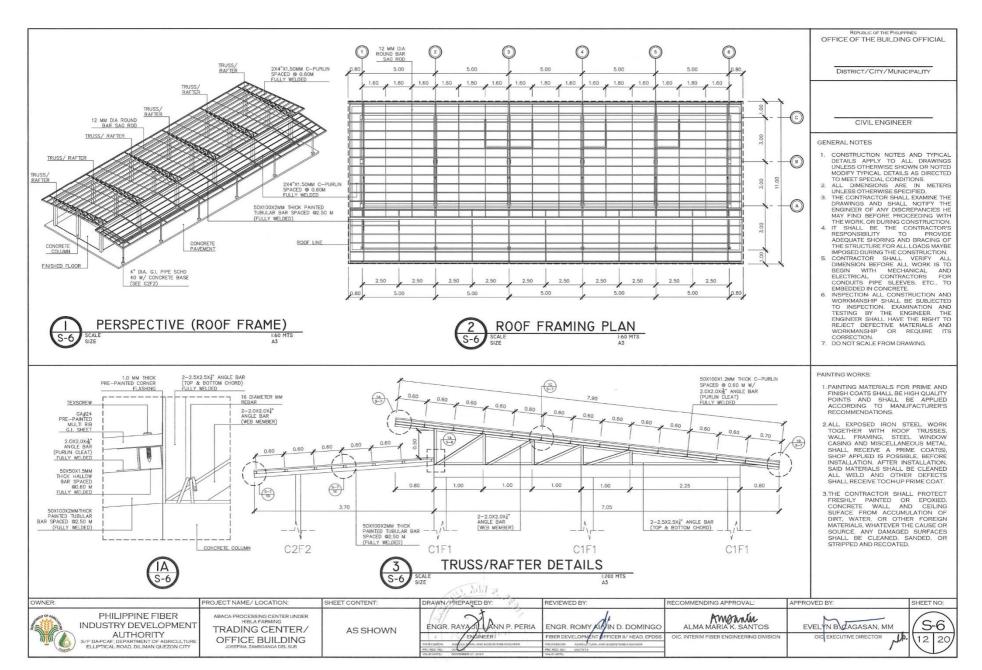


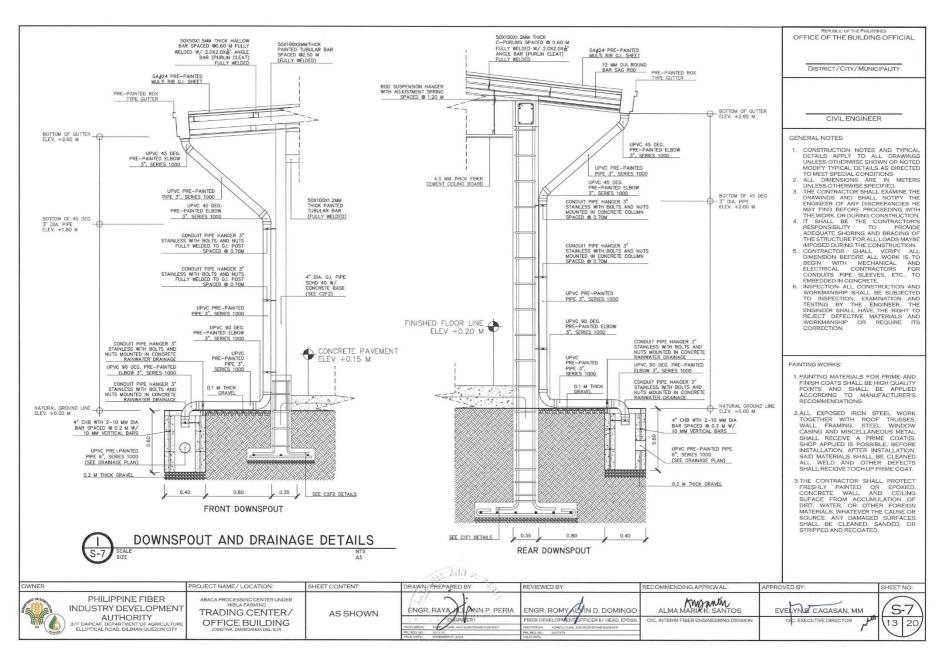


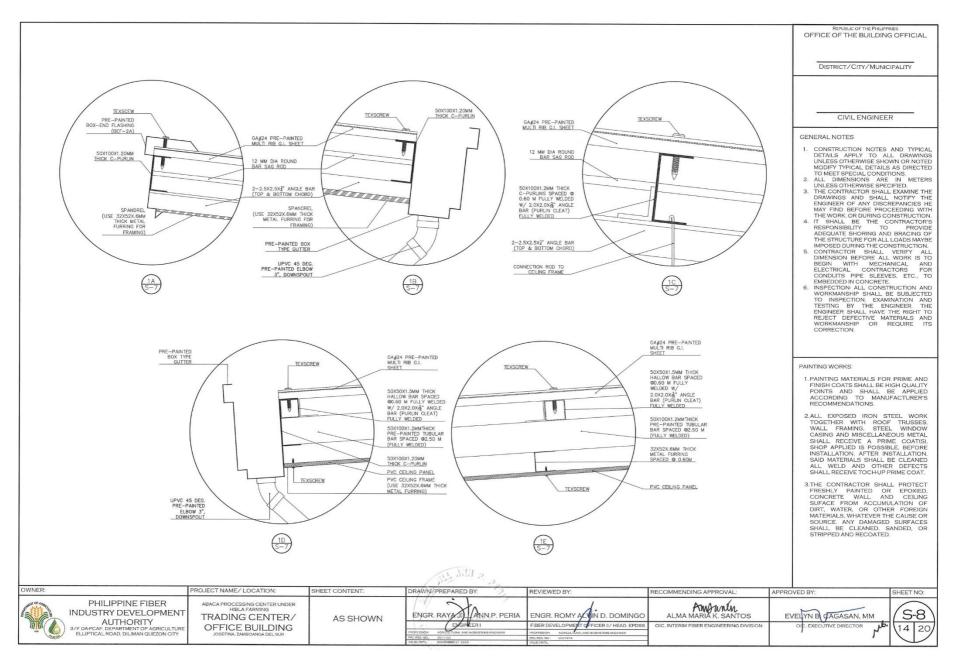


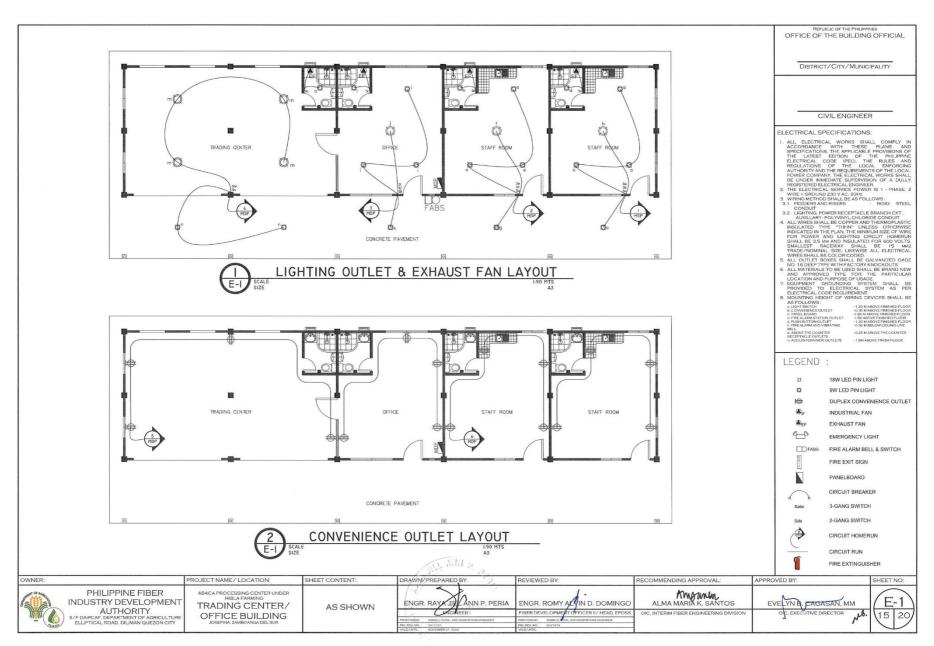


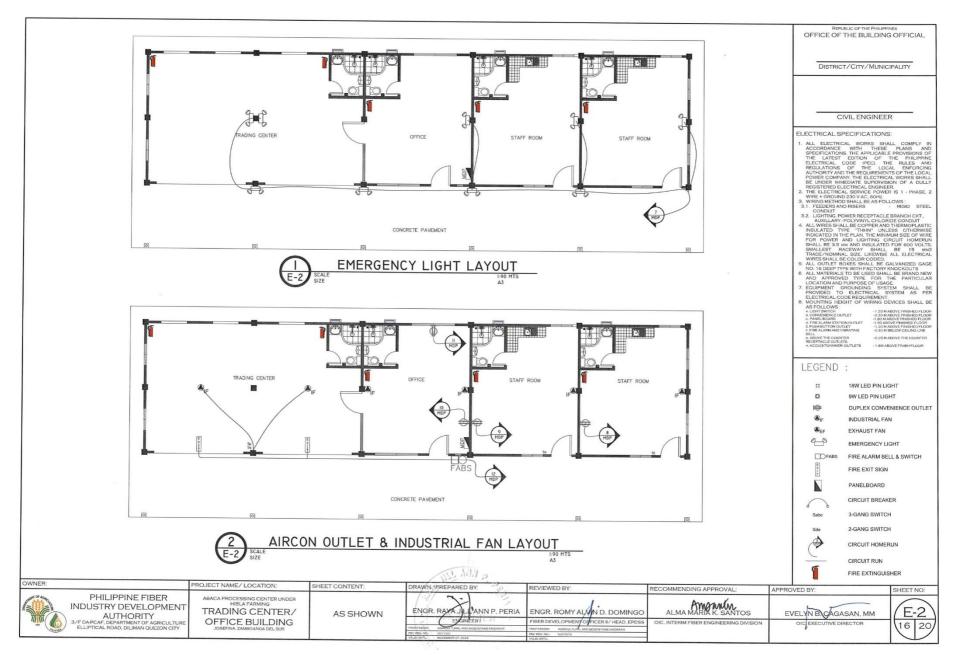








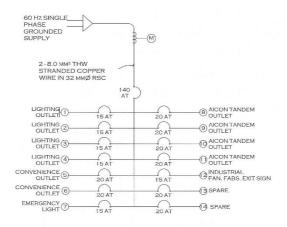




LOAD SCHEDULE

CIRCUIT	DESCRIPTION OF LOAD	VA LOAD	CURRENT	CIRCUIT BREAKER			CONDUCTOR		CONDUIT	
				POLE	FRAME	TRIP	SIZE	TYPE	DIAMETER	TYPE
1	1 X 18W LIGHT	96	0.42	2	50	15 A	2-2.0 MM ² & 1-2.0 MM ² (G)	THHN	13 MM	uPVC
	5 X 9W LIGHT			2	50	15 A	2 · 2.0 MM² & 1 · 2.0 MM² (G)	THHN	13 MM	uPVC
	1 X 33W EXHAUST FAN			2	50	15 A	2 - 2.0 MM² & 1 - 2.0 MM² (G)	THHN	13 MM	uPVC
2	1 X 18W LIGHT	96	0.42	2	50	15 A	2-2.0 MM ² & 1-2.0 MM ² (G)	THHN	13 MM	uPVC
	5 X 9W LIGHT			2	50	15 A	2 · 2.0 MM ² & 1 · 2.0 MM ² (G)	THHN	13 MM	uPVC
	1 X 33W EXHAUST FAN			2	50	15 A	2 - 2.0 MM ² & 1 - 2.0 MM ² (G)	THHN	13 MM	uPVC
3	1 X 18W LIGHT	96	0.42	2	50	15 A	2 - 2.0 MM ² & 1 - 2.0 MM ² (G)	THHN	13 MM	uPVC
	5 X 9W LIGHT			2	50	15 A	2-2.0 MM ² & 1-2.0 MM ² (G)	THHN	13 MM	uPVC
	1 X 33W EXHAUST FAN			2	50	15 A	2 - 2,0 mm² 8: 1 - 2,0 mm² (G)	THHN	13 MM	uPV0
4	4 X 18W LIGHT	132	0.57	2	50	15 A	2 · 2.0 MM ² & 1 · 2.0 MM ² (G)	THHN	13 MM	uPVC
	3 X 9W LIGHT			2	50	15 A	2 - 2.0 MM ² & 1 - 2.0 MM ² (G)	THHN	13 MM	uPVC
	1 X 33W EXHAUST FAN			2	50	15 A	2 - 2.0 MM ² & 1 - 2.0 MM ² (G)	THHN	13 MM	uPVC
5	2-8 X 180W CONVENIENCE OUTLET	2,880	12.52	2	50	20 A	2 - 3.5 MM ² & 1 - 3.5 MM ² (G)	THHN	20 MM	uPVC
6	2-8 X 180W CONVENIENCE OUTLET	2,880	12.52	2	50	20 A	2 - 3.5 mm ² & 1 - 3.5 mm ² (G)	THHN	20 MM	uPVC
7	9 X 2-3W LED EMERGENCY LIGHT	54	0.23	2	50	15 A	2 - 2.0 MM ² & 1 - 2.0 MM ² (G)	THHN	13 MM	uPVC
8	1 X 746 W(1HP) AIRCON TANDEM OUTLET	746	3.24	2	50	20 A	2 · 3.5 MM ² & 1 · 3.5 MM ² (G)	THHN	20 MM	uPVC
9	1 X 746 W(1HP) AIRCON TANDEM OUTLET	746	3.24	2	50	20 A	2 - 3.5 MM ² & 1 - 3.5 MM ² (G)	THHN	20 MM	uPVC
10	1 X 746 W(1HP) AIRCON TANDEM OUTLET	746	3.24	2	50	20 A	2 · 3.5 MM² & 1 · 3.5 MM² (G)	THHN	20 MM	UPVC
1.1	1 X 746 W(1HP) AIRCON TANDEM OUTLET	746	3.24	2	50	20 A	2 - 3.5 MM ² & 1 - 3.5 MM ² (G)	THHN	20 MM	uPVC
12	4 X 50 W INDUSTRIAL WALL FAN	526	2.29	2	50	15 A	2 · 2.0 MM² & 1 · 2.0 MM² (G)	THHN	13 MM	uPVC
	2 X 60 W INDUSTRIAL CEILING FAN			2	50	15 A	2 · 2.0 MM ² & 1 · 2.0 MM ² (G)	THHN	13 MM	uPVC
	2 X 3 W LED EXIT SIGN			2	50	15 A	2 · 2.0 MM² & 1 · 2.0 MM² (G)	THHN	13 MM	uPVC
	1 X 200 W FIRE ALARM			2	50	15 A	2 · 3.5 MM ² & 1 · 3.5 MM ² (G)	THHN	20 MM	uPVC
13	2-8 X 180W CONVENIENCE OUTLET (SPARE)	2,880	12.52	2	50	20 A	2 - 3.5 MM ² & 1 - 3.5 MM ² (G)	THHN	20 MM	uPVC
14	2-8 X180W CONVENIENCE OUTLET (SPARE)	2,880	12.52	2	50	20 A	2 - 3.5 MM ² & 1 - 3.5 MM ² (G)	THHN	20 MM	uPVC

LINE DIAGRAM



OFFICE OF THE BUILDING OFFICIAL

DISTRICT/CITY/MUNICIPALITY

CIVIL ENGINEER

ELECTRICAL SPECIFICATIONS:

- ALL ELECTRICAL WORKS SHALL COMPLY IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS THE APPLICABLE PROVISIONS OF THE LATEST SOFTION OF THE PHILIPPINE ELECTRICAL CODE (PEC) THE RULES AND REGULATIONS OF THE LOCAL ENPORCING AUTHORITY AND THE REQUIREMENTS OF THE LOCAL

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- BELL.

 B. ABOVE THE COUNTER
 RECEPTACLE OUTLETS
 H. ACCUIS FORNNER/ OUTLETS -0.25 M ABOVE THE COUNTER - 1.8M ABOVE FINISH FLOOR

LEGEND :

18W LED PIN LIGHT 0 9W LED PIN LIGHT DUPLEX CONVENIENCE OUTLET

(A) INDUSTRIAL FAN

ØEF EXHAUST FAN 90 EMERGENCY LIGHT

FIRE ALARM BELL & SWITCH □ ○ FABS

FIRE EXIT SIGN

CIRCUIT BREAKER

3-GANG SWITCH

2-GANG SWITCH

CIRCUIT HOMERUN

FIRE EXTINGUISHER

CIRCUIT RUN

SHEET NO:

COMPUTATION

I_T = 15.504 kVA / (230 V) = 67.41 A x 80% DEMAND FACTOR = 54 A USE 2 - 8.0 MM2 & 1 - 5.5 MM2 THW STRANDED COPPER WIRE IN 32 MMØ RSC

OWNER: PHILIPPINE FIBER INDUSTRY DEVELOPMENT **AUTHORITY** 3/F DA-PCAF, DEPARTMENT OF AGRICULTUR ELLIPTICAL ROAD, DILIMAN QUEZON CITY

ROJECT NAME / LOCATION: ABACA PROCESSING CENTER UNDER HIBLA FARMING TRADING CENTER/ OFFICE BUILDING

AS SHOWN

SHEET CONTENT

DRAWN/PREPARED BY -ENGR. RAYAJIL ANN P. PERIA

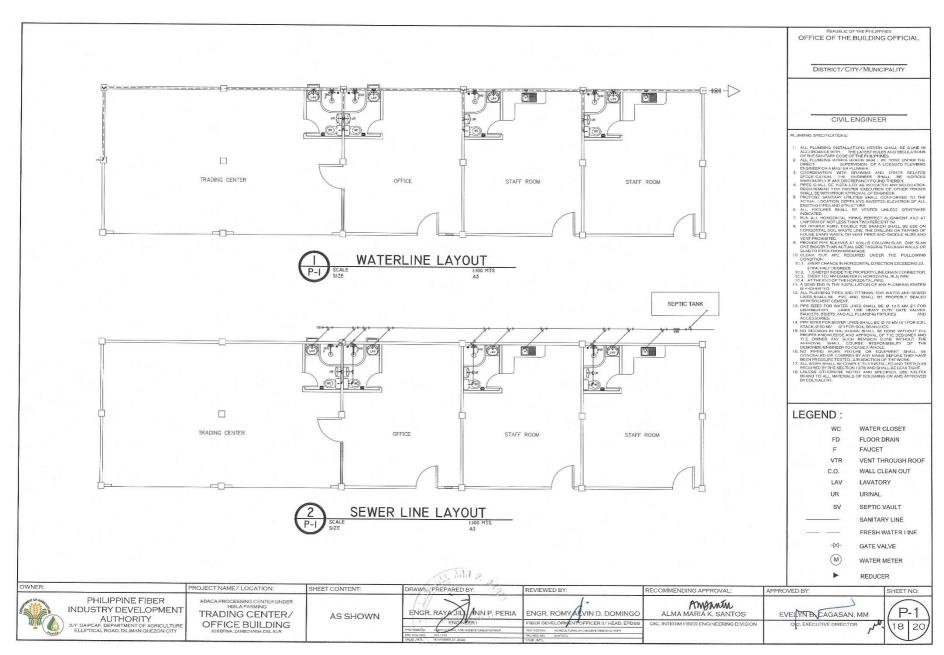
REVIEWED BY: ENGR. ROMY ALM D. DOMINGO FIBER DEVELOPMENT OFFICER II/ HEAD, EPI

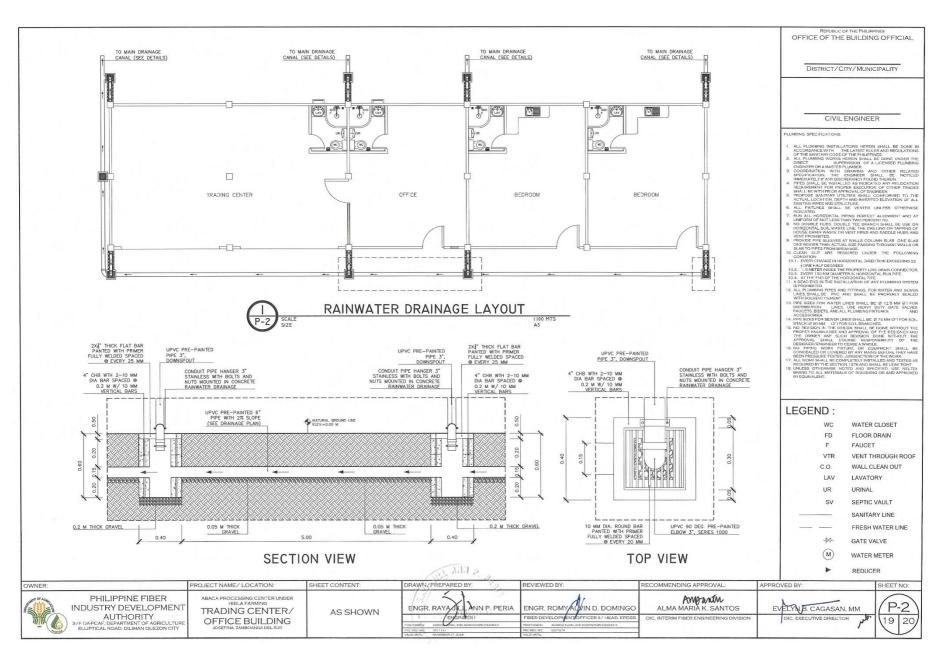
mounter ALMA MARIA K. SANTOS

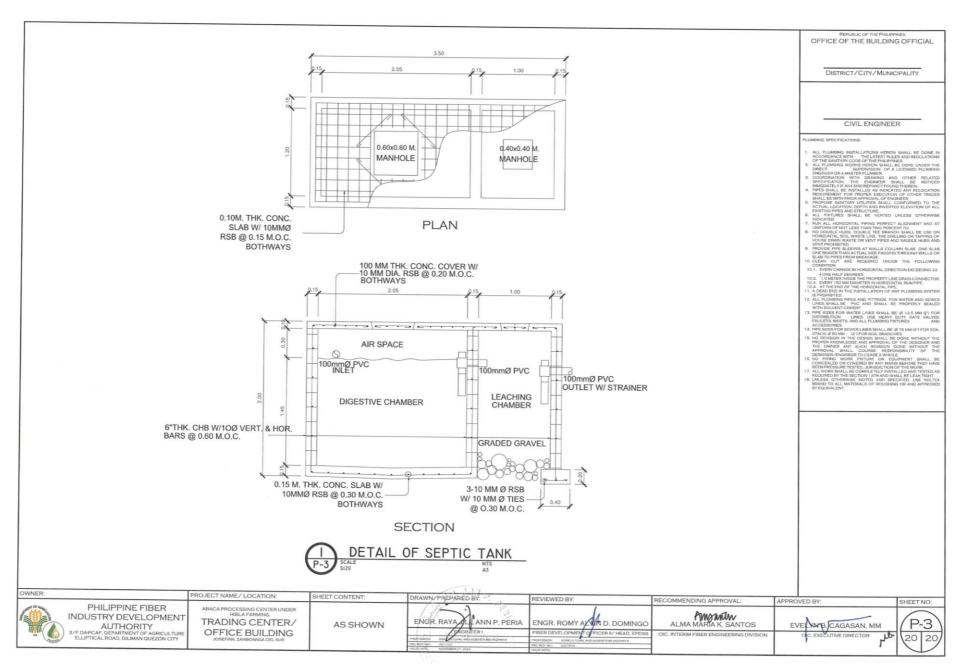
RECOMMENDING APPROVAL:

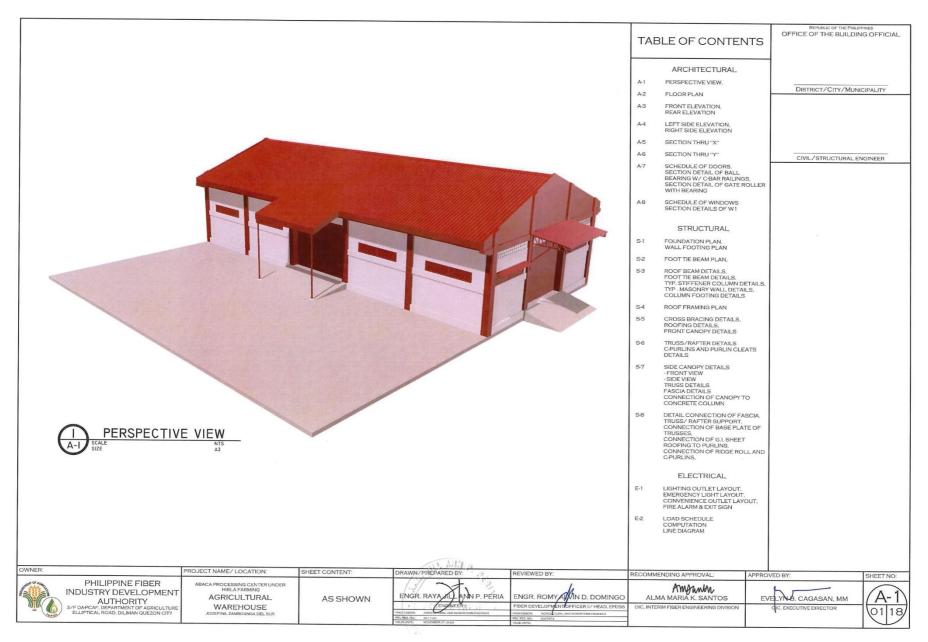
EVELYN B. CAGASAN, MM OIC EXECUTIVE DIRECTOR

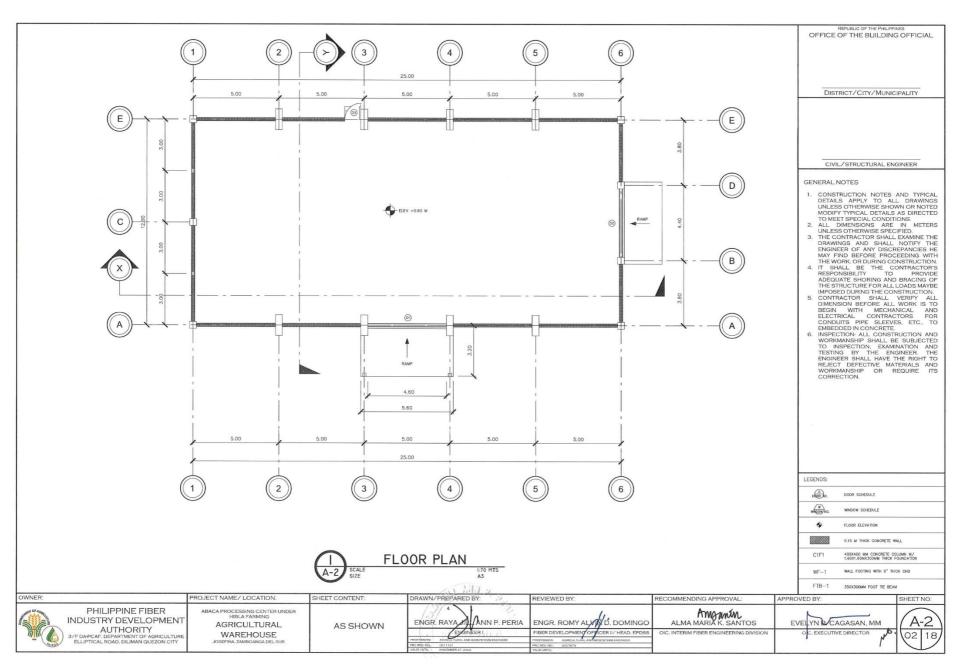
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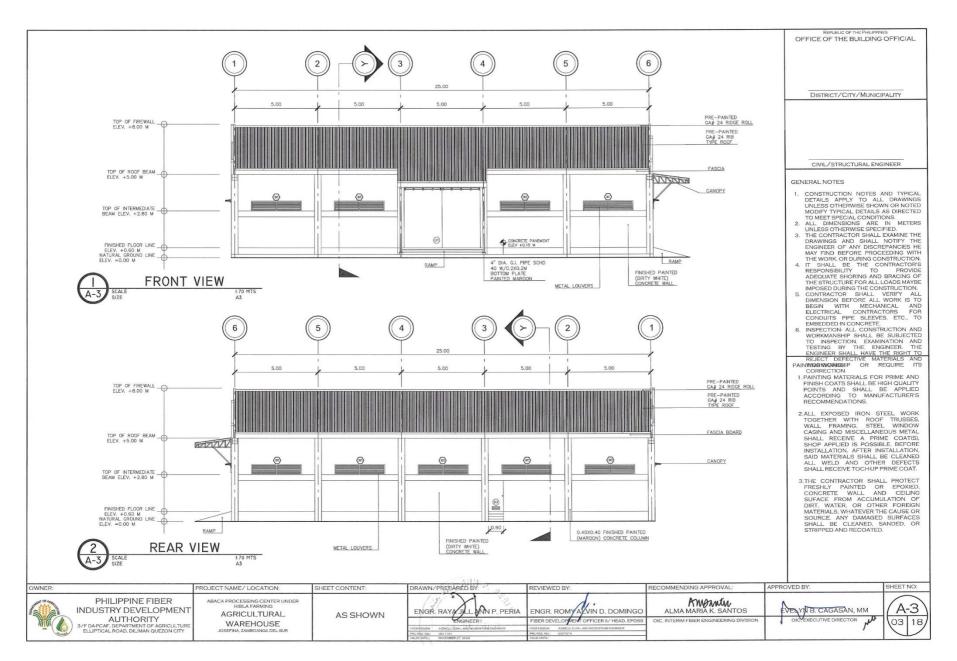


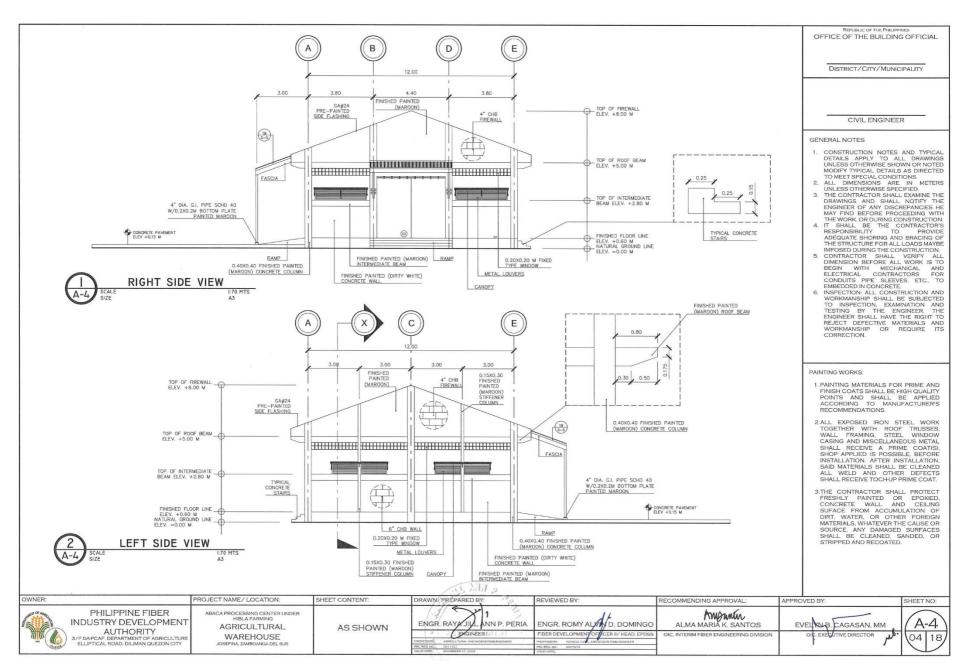


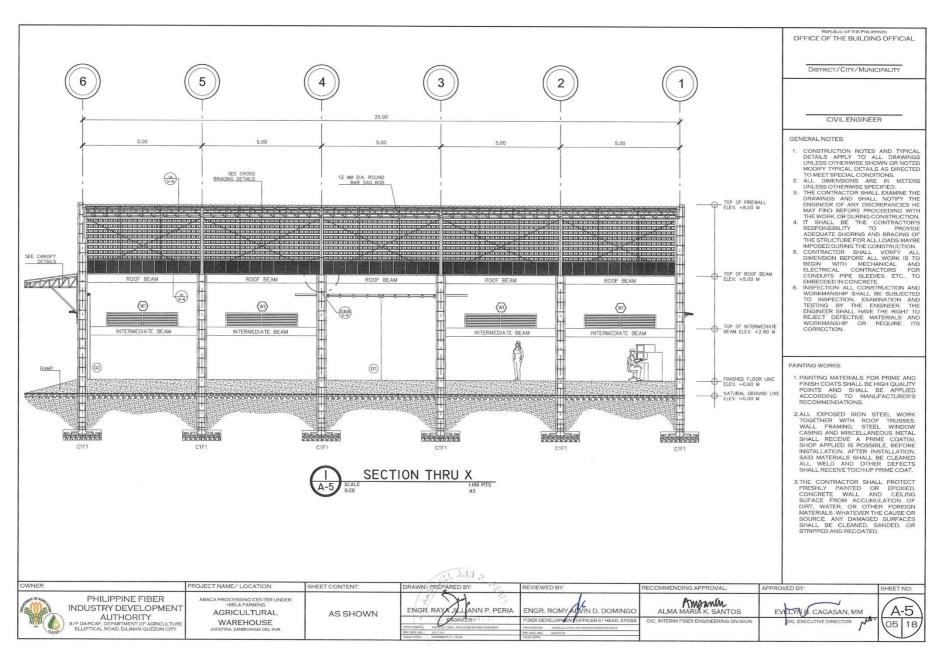


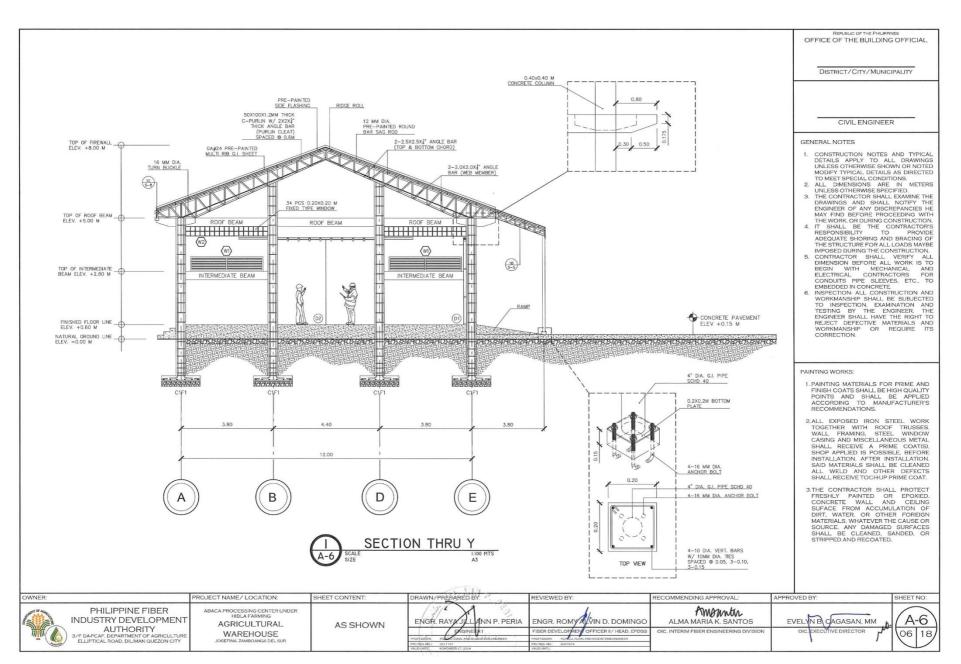


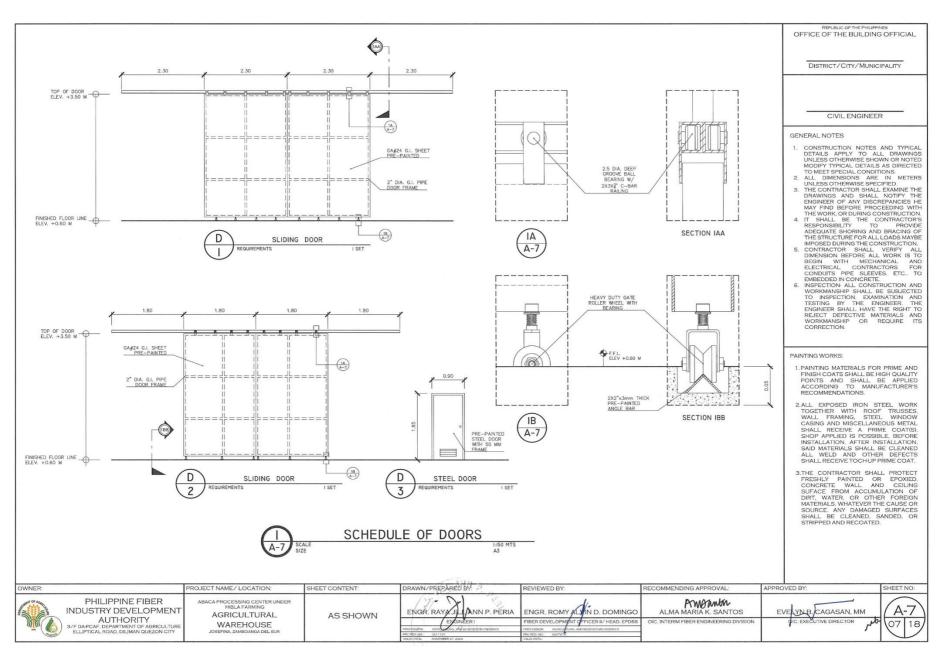


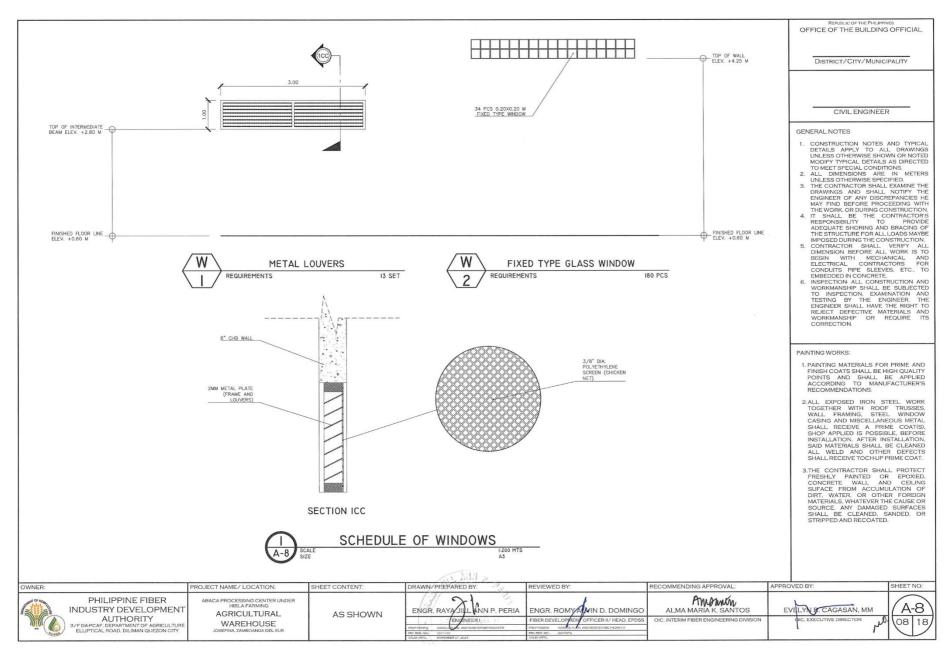


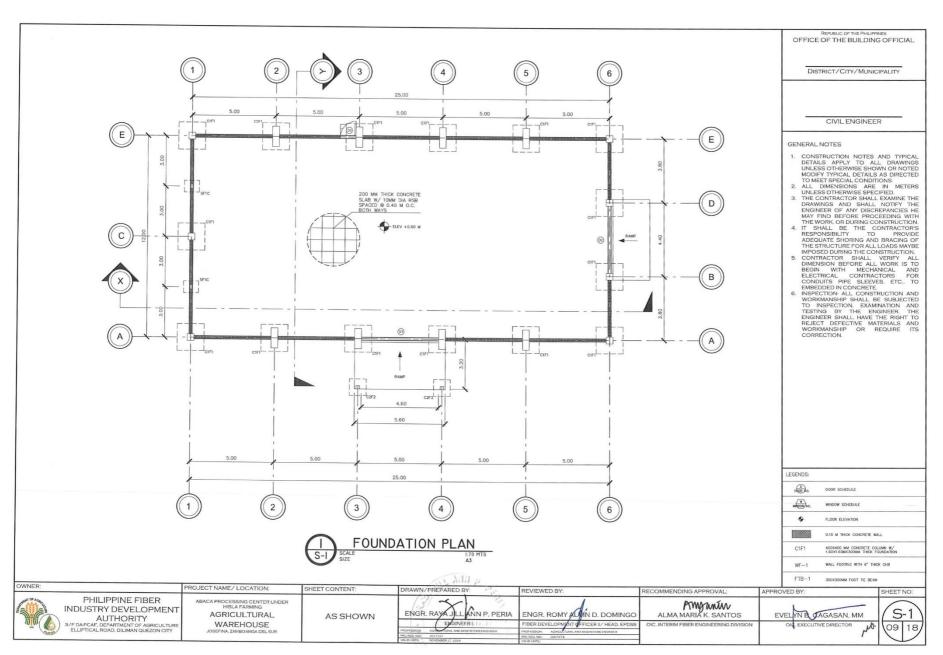


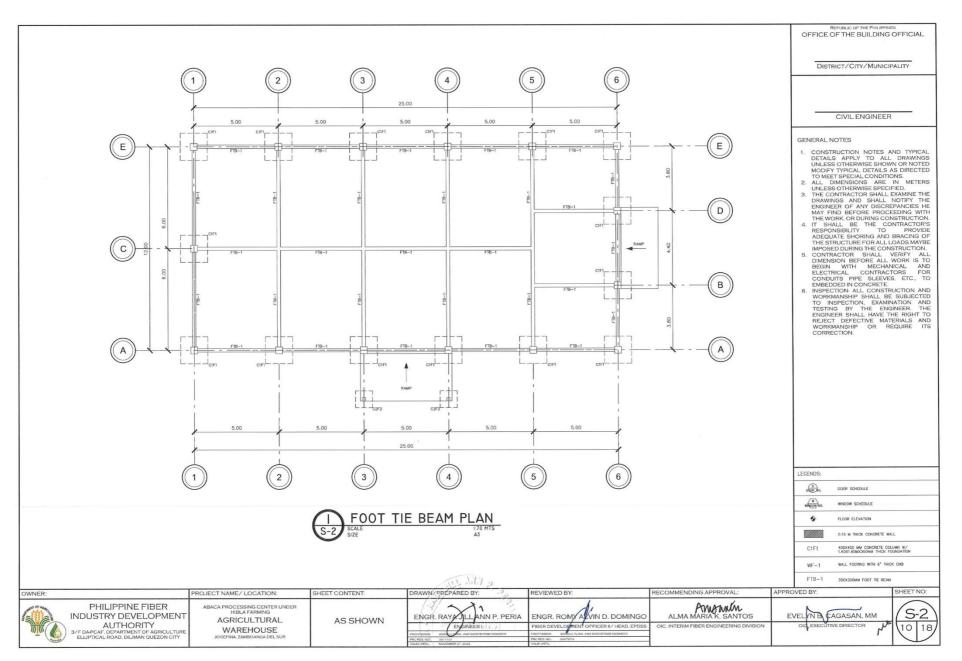


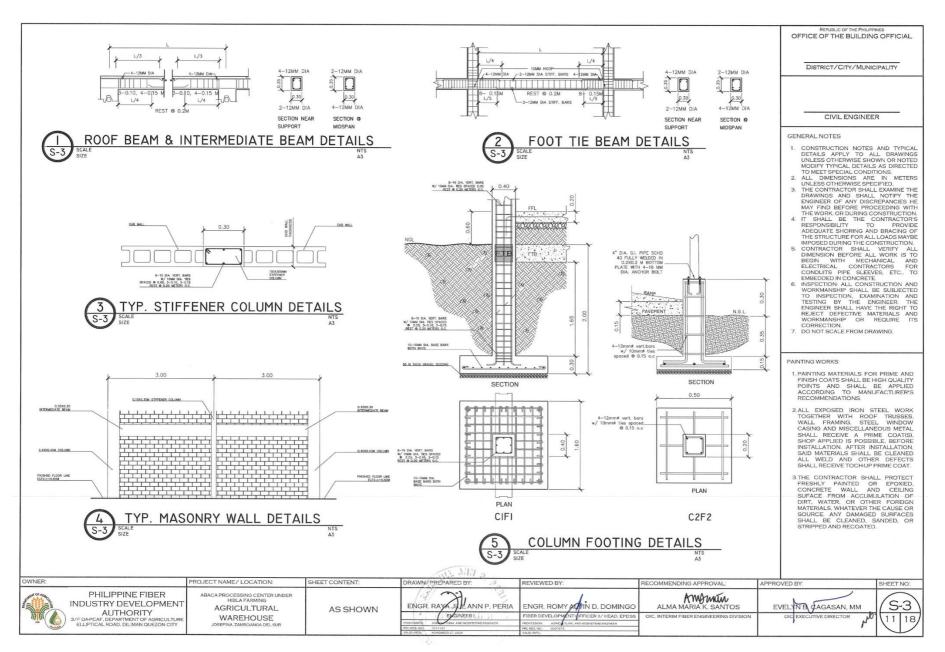


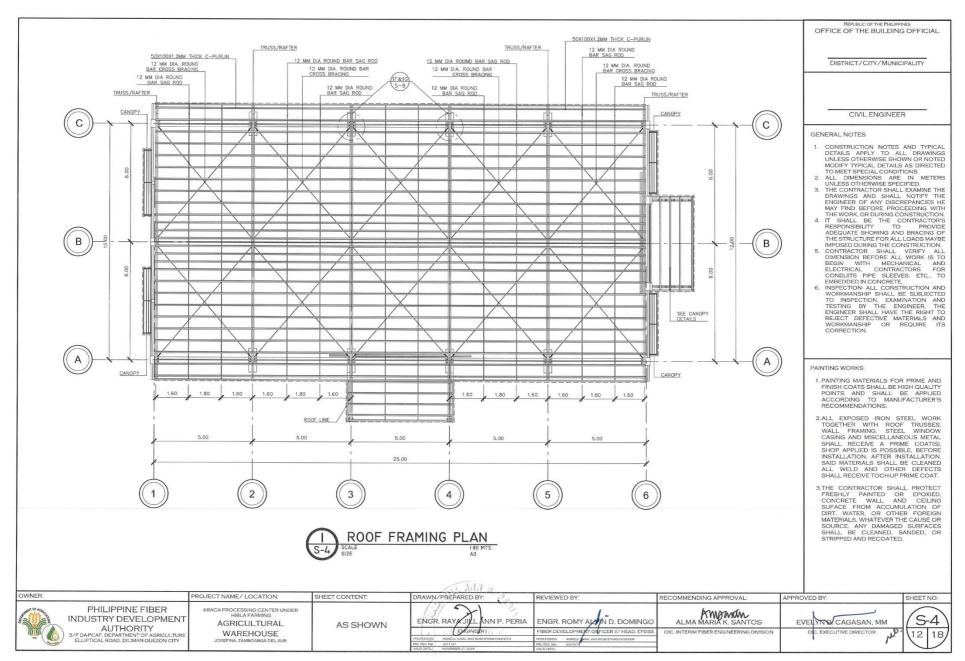


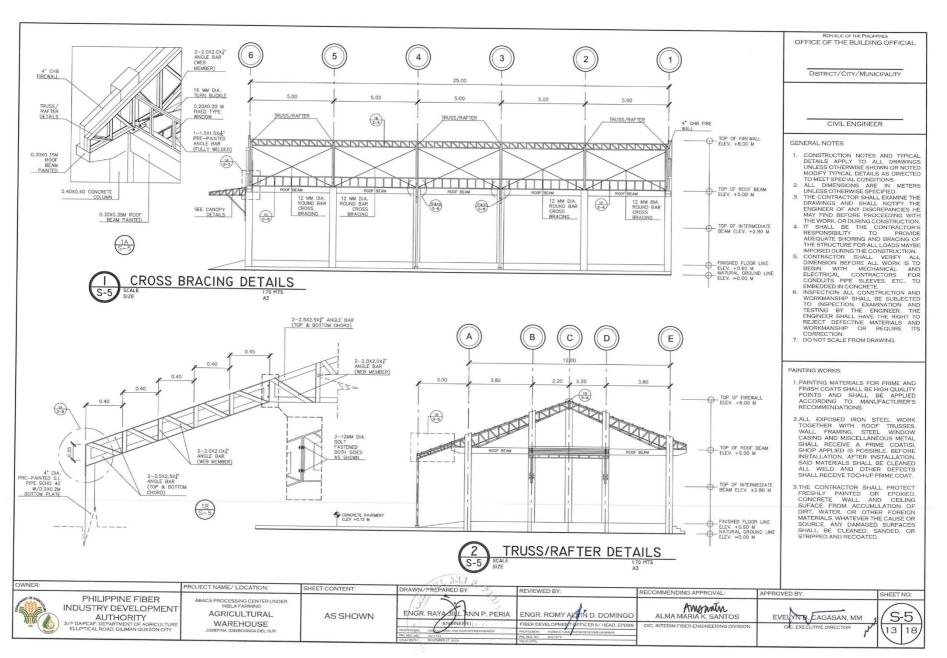


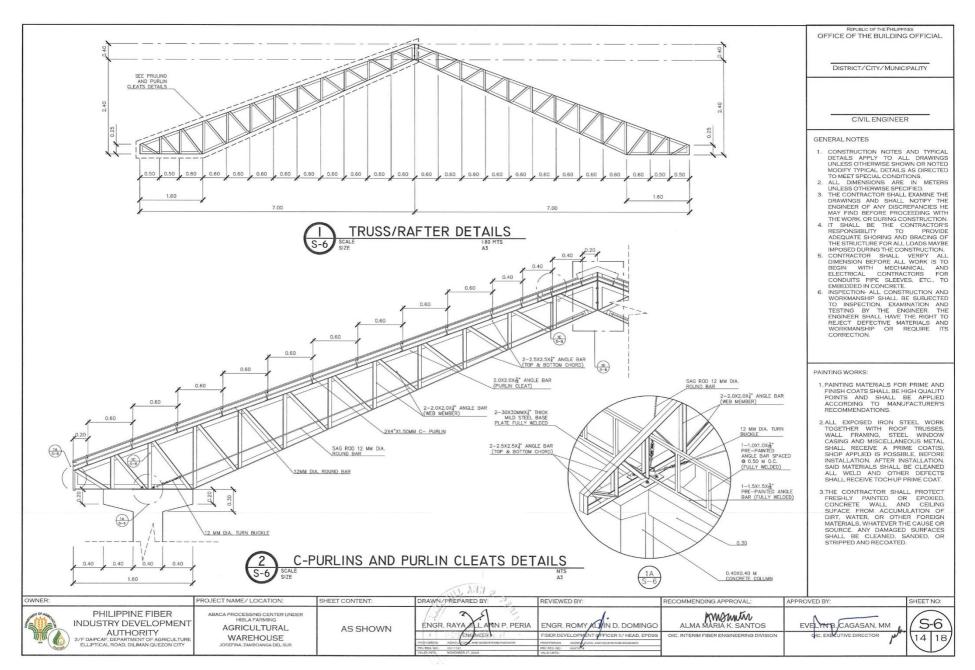


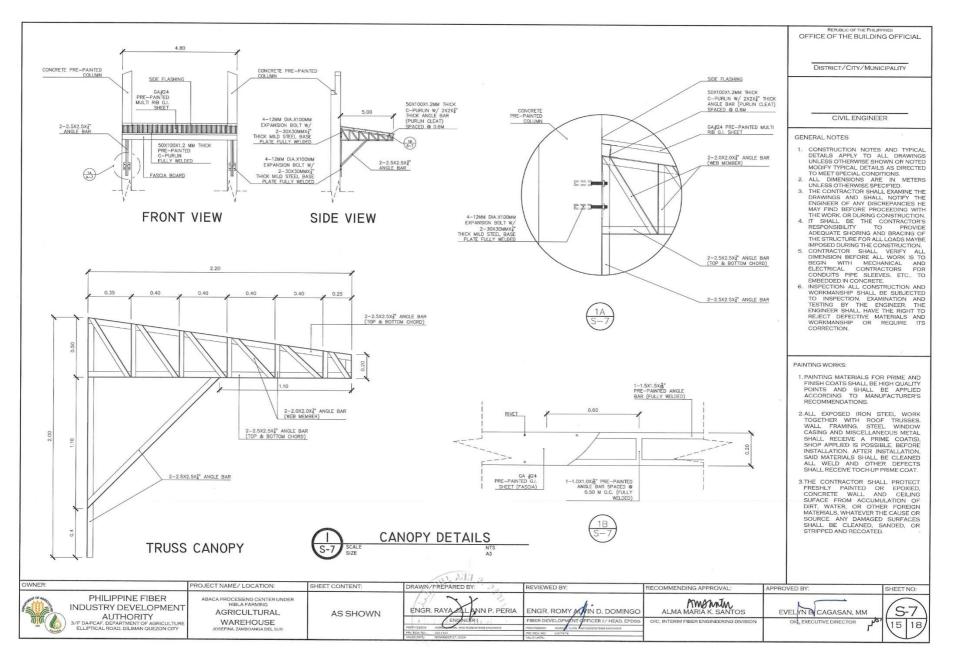


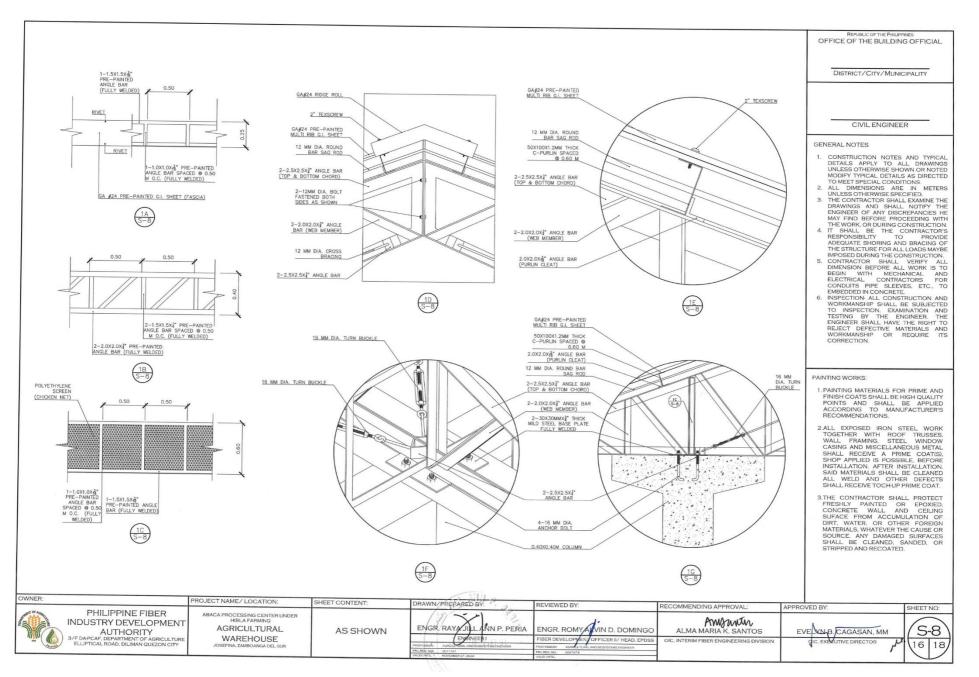


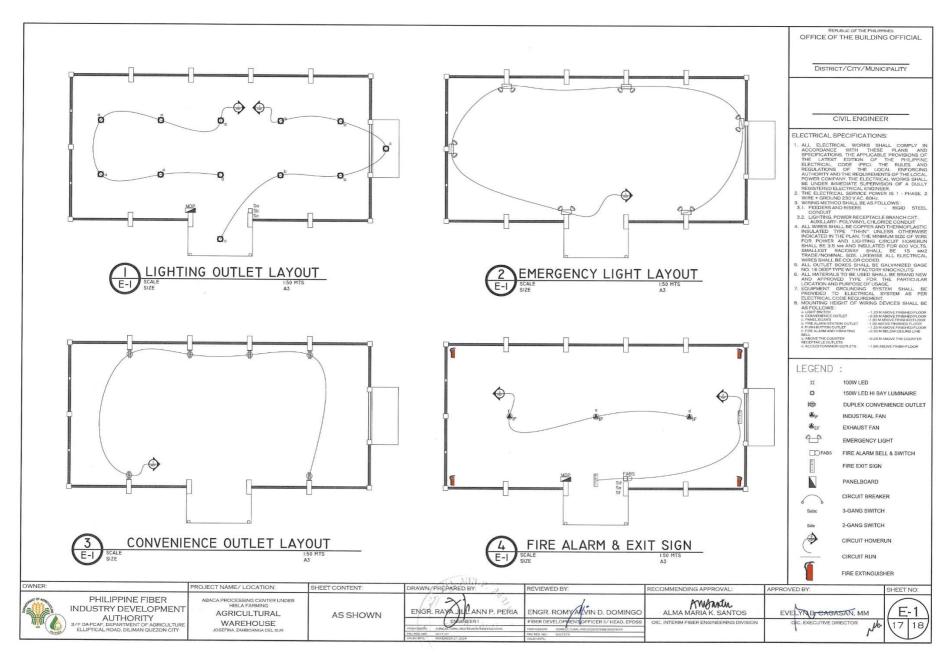












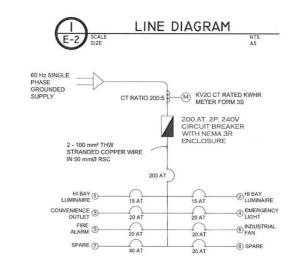
LOAD SCHEDULE

CIRCUIT		VA LOAD	CURRENT	CIRCUIT BREAKER			CONDUCTOR	CONDUIT				
NUMBER	DECOMM HON OF ECHE	WA COAD	CONNENT	POLE	FRAME	TRIP	SIZE	TYPE	DIAMETER	TYPE		
1	6 X 150W LED HI BAY LUMINAIRE	900	3.91	2	225	15 A	2 - 3.5 mm ² & 1 - 3.5 mm ² (G)	THHN	20 mm	uPVC		
2	4 X 150W LED HI BAY LUMINAIRE	600	2.61	2	225	15 A	2 - 3.5 mm ² & 1 - 3.5 mm ² (G)	THHN	20 mm	uPVC		
-	2 X 100W LIGHT	200	0.86	2	225	15 A	2 - 3.5 mm ² & 1 - 3.5 mm ² (G)	THHN	20 mm	uPVC		
3	2-6 X 180W CONVENIENCE OUTLET	2,160	9.39	2	225	20 A	2 - 3.5 mm² & 1 - 3.5 mm² (G)	THHN	20 mm	uPVC		
4	6 X 100W EMERGENCY LIGHT	600	2.61	2	225	20 A	2 - 3.5 mm² & 1 - 3.5 mm² (G)	THHN	20 mm	uPVC		
5	1 X 200W FIRE ALARM BELL	200			0.96		80000					
3	2 X 10W FIRE EXIT SIGN	20	0.96	2	225	20 A	2 - 3.5 mm² & 1 - 3.5 mm² (G)	THHN	20 mm	uPVC		
6	3 X 320W INDUSTRIAL FAN	960	4.17	2	225	20 A	2 - 3.5 mm ² & 1 - 3.5 mm ² (G)	THHN	20 mm	uPVC		
7	1 X 5 kW SPARE CIRCUIT	5000	21.74	2	225	40 A	2 - 8.0 mm² & 1 - 5.5 mm² (G)	THHN	25 mm	uPVC		
8	1 X 5 kW SPARE CIRCUIT	5000	21.74	2	225	40 A	2 - 8.0 mm² & 1 - 5.5 mm² (G)	THHN	25 mm	uPVC		
	TOTAL PHASE CURRENT	15,640	68									

COMPUTATION

TOTAL CONNECTED LOAD = 15.640 VA / 1000 = 15.64 kVA

IFL = 14.68 kVA / (230 V) = 68 X 80% DEMAND FACTOR = 55 A USE 200 AT, 2P, 240V MOLDED CASE CIRCUIT BREAKER USE 2 - 8.0 mm² & 1 - 5.5 mm² THW STRANDED COPPER WIRE IN 32 mmØ RSC



OFFICE OF THE BUILDING OFFICIAL

DISTRICT/CITY/MUNICIPALITY

CIVIL ENGINEER

ELECTRICAL SPECIFICATIONS:

- ELECTRICAL SPECIFICATIONS:

 1. ALL ELECTRICAL WORKS SHALL COMPLY IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS THE APPLICABLE PROVISIONS OF SHEEP SHAPE AND ASSEMBLY OF THE APPLICABLE PROVISIONS OF ELECTRICAL CODE PEC, THE RULES AND REGULATIONS OF THE LOCAL ENFORCING AUTHORITY AND THE REQUIREMENTS OF THE LOCAL BE UNDER IMMEDIATE SUPERVISION OF A DULLY REGISTERED ELECTRICAL ENDINEER.

 2. THE ELECTRICAL SERVICE FOWER IS 1 PHASE, 2 SHAPE SHAPE

- A. LIGHT SWITCH B. CONVENENCE OUTLET C. PANEL BOARD D. FIRE ALARM STATION OUTLET E. PUSH BUTTON OUTLET F. FIRE ALARM AND VIBRATING BELL.
- -0.25 M ABOVE THE COUNTER - 1.8M ABOVE FINISH FLOOR

LEGEND

100W LED n

O 150W LED HI BAY LUMINAIRE 1 DUPLEX CONVENIENCE OUTLET

Ø)F INDUSTRIAL FAN

△EF EXHAUST FAN 90

EMERGENCY LIGHT FIRE ALARM BELL & SWITCH □ ○ FABS

FIRE EXIT SIGN

PANELBOARD CIRCUIT BREAKER

3-GANG SWITCH

2-GANG SWITCH **A** CIRCUIT HOMERUN

CIRCUIT RUN

FIRE EXTINGUISHER

OWNER: PHILIPPINE FIBER INDUSTRY DEVELOPMENT AUTHORITY
3/F DAPCAF, DEPARTMENT OF AGRICULTURE
ELLIPTICAL ROAD, DILIMAN QUEZON CITY

PROJECT NAME / LOCATION: ABACA PROCESSING CENTER UNDER HIBLA FARMING **AGRICULTURAL** WAREHOUSE

SHEET CONTENT AS SHOWN DRAWN/PREPARED BY

REVIEWED BY: ENGR. ROMY ALAN D. DOMINGO BER DEVELOPMENT OFFICER II/ HEAD, EPDS

RECOMMENDING APPROVAL:

Ampanter ALMA MARIA K. SANTOS OIC, INTERIM FIBER ENGINEERING DIVISION EVELVILE, CAGASAN, MM

APPROVED BY:

SHEET NO: E-2 18 18



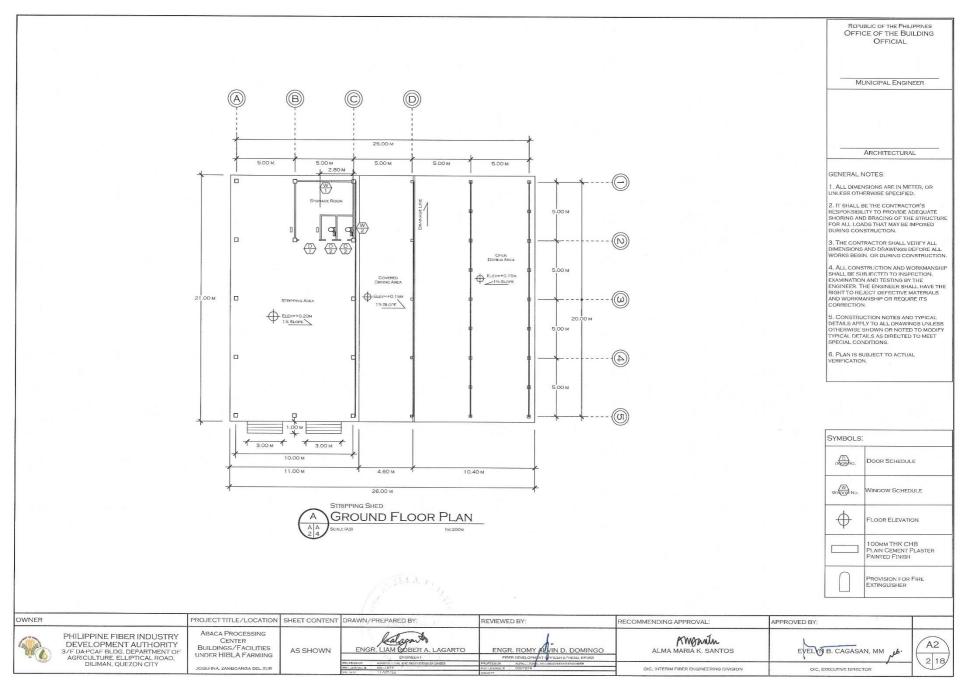
REPUBLIC OF THE PHILIPPINES OFFICE OF THE BUILDING TABLE OF CONTENTS OFFICIAL A2 GROUND FLOOR PLAN A3 FRONT SIDE ELEVATION LEFT SIDE ELEVATION MUNICIPAL ENGINEER A4 SECTION THRU "XX"

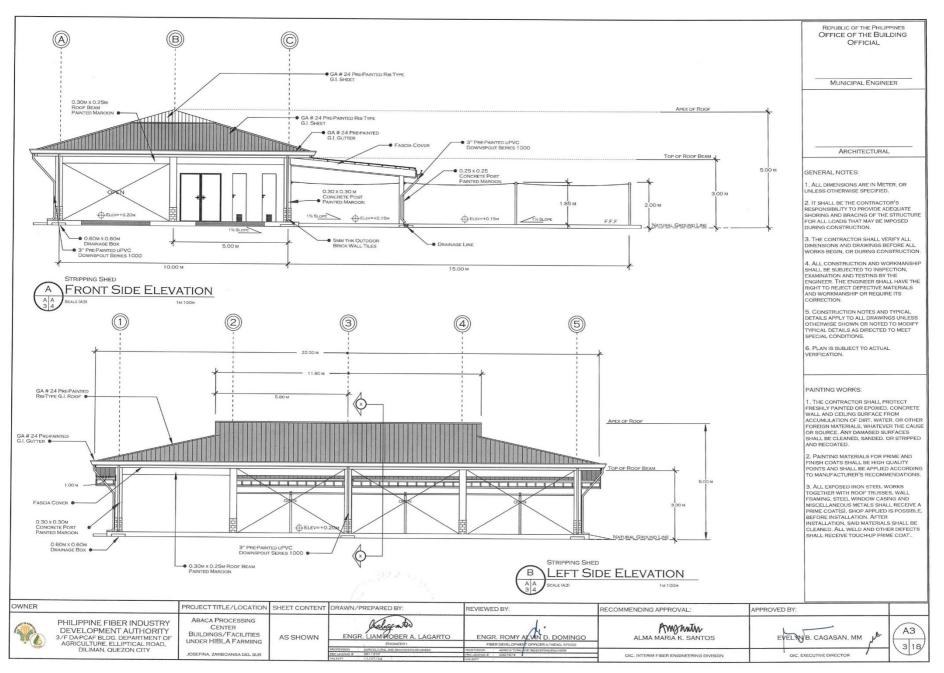
BATHROOM DETAILS

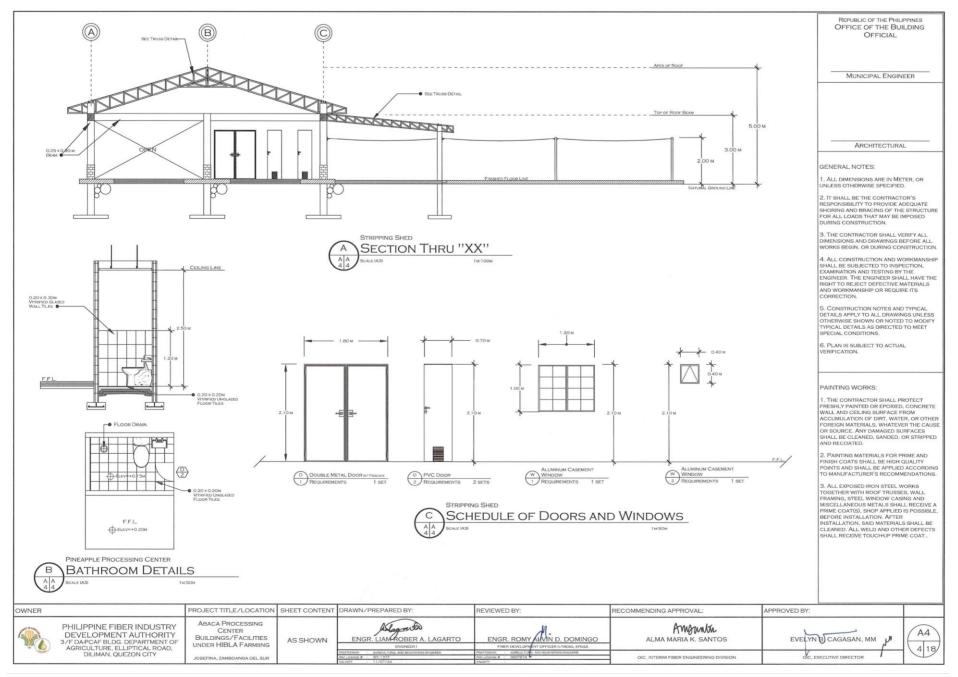
SCHEDULE OF DOORS AND WINDOWS S1 FOUNDATION PLAN S2 RAMP UP DETAILS BRICK TILE DETAILS S3 ROOF BEAM DETAILS THE BEAM DETAILS WALL FOOTING DETAILS COLUMN FOOTING DETAILS ARCHITECTURAL S4 REFLECTED CEILING PLAN PERSPECTIVE VIEW (CEILING) CEILING SECTION CHANNEL SPOT DETAIL GENERAL NOTES: ALL DIMENSIONS ARE IN METER, OR UNLESS OTHERWISE SPECIFIED. S5 ROOF FRAMING PLAN S6 TRUSS DETAILS 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. S7 GUTTER DETAILS FASCIA FRAME DETAILS EXTENDED COLUMN DETAILS S8 DRYING AREA DETAILS HANGER FRAME DETAILS HANGER FRAME HOLDER DETAILS 3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND DRAWINGS BEFORE ALL WORKS BEGIN, OR DURING CONSTRUCTION. S9 DRAINAGE DETAILS A. ALL CONSTRUCTION AND WORKMANSHIP SHALL BE SUBJECTED TO INSPECTION, EXAMINATION AND TESTING BY THE ENGINEER. THE ENGINEER SHALL HAVE THE RIGHT TO REJECT DEPECTIVE MATERIALS AND WORKMANSHIP OR REQUIRE ITS CORRECTION. P1 MANHOLE DETAILS P2 WATERLINE LAYOUT SEWER LINE E1 ELECTRICAL SPECIFICATIONS AND LEGEND 5. CONSTRUCTION NOTES AND TYPICAL DETAILS APPLY TO ALL DRAWINGS UNLESS OTHERWISE SHOWN OR NOTED TO MODIFY TYPICAL DETAILS AS DIRECTED TO MEET E2 LIGHTING OUTLET LAYOUT CONVENIENCE OUTLET LAYOUT E3 LOAD SCHEDULE COMPUTATION RISER DIAGRAM SPECIAL CONDITIONS. 6. PLAN IS SUBJECT TO ACTUAL VERIFICATION.

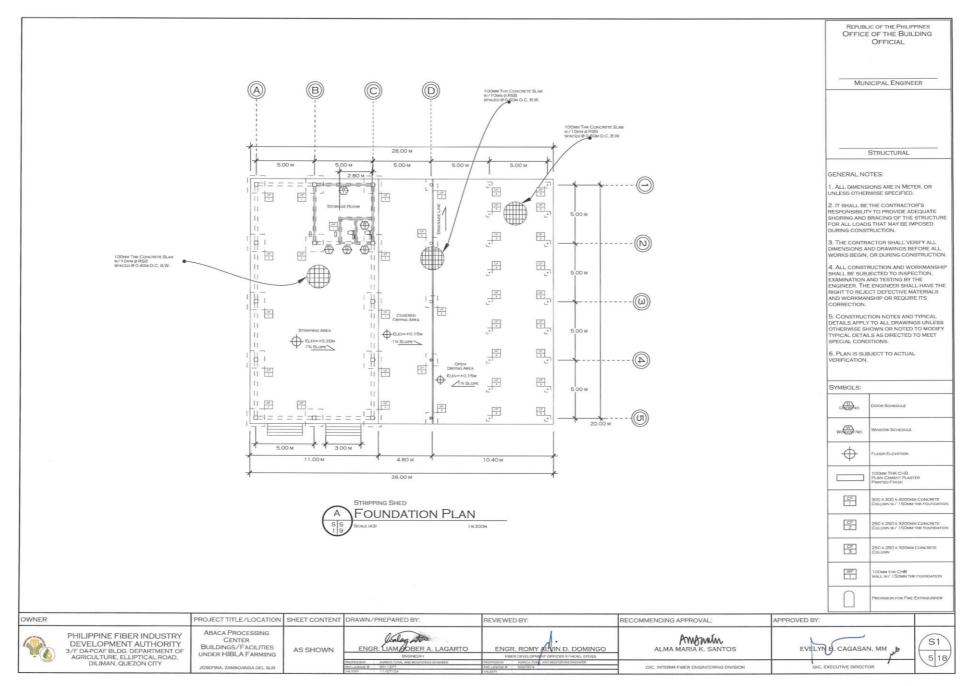
		STRIPPING SHED	
P	1	PERSPECTIVE	
(A	A 4	SCALE (A3)	NTS

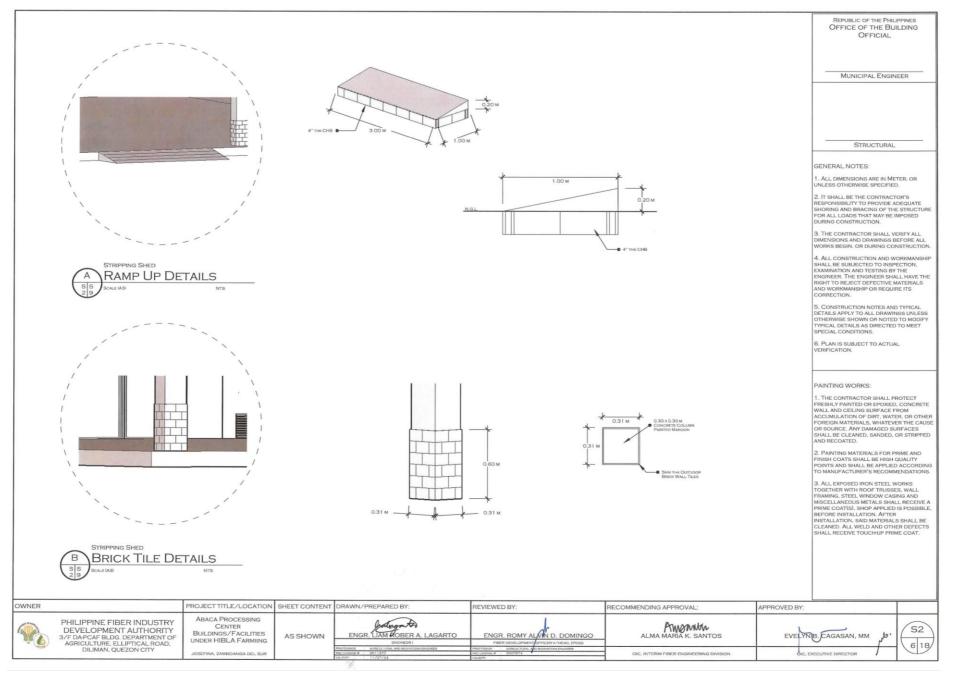
OWNER		PROJECT TITLE/LOCATION	SHEET CONTENT	DRAWN/PREPARED BY:	REVIEWED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	
	PHILIPPINE FIBER INDUSTRY DEVELOPMENT AUTHORITY 3/F DAPCAF BLDG, DEPARTMENT OF AGRICULTURE, ELLIPTICAL ROAD.	ABACA PROCESSING CENTER BUILDINGS/FACILITIES UNDER HIBLA FARMING	AS SHOWN	ENGR. LIAN ROBER A. LAGARTO	ENGR. ROMY ALVIN D. DOMINGO	AWEMM ALMA MARIA K, SANTOS	EVELYND. CAGASAN, MM	A1
	DILIMAN, QUEZON CITY	JOSEFINA, ZAMBOANGA DEL SUR		PROFESSION : AGRICULTURAL AND MOSPETEMS ENGINEER PROFESSION : 0011377	PROFESSION : AGRICULTURAL AND BIOSYSTEMS ENGINEER PROLICEINSE # : 0007674	OIC, INTERIM FIBER ENGINEERING DIVISION	OIG, EXECUTIVE DIRECTOR	

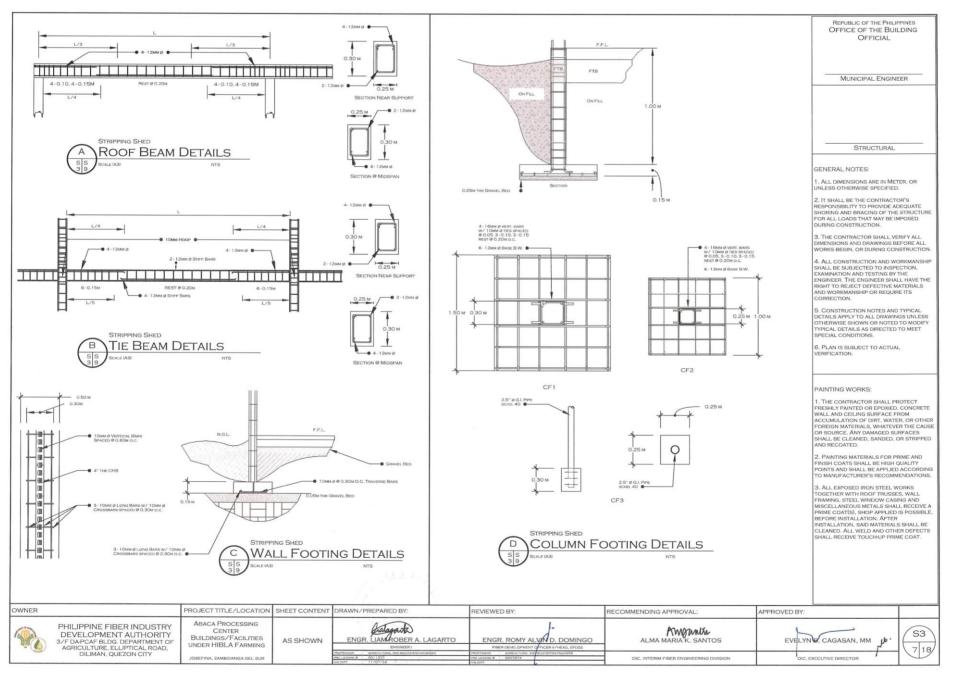


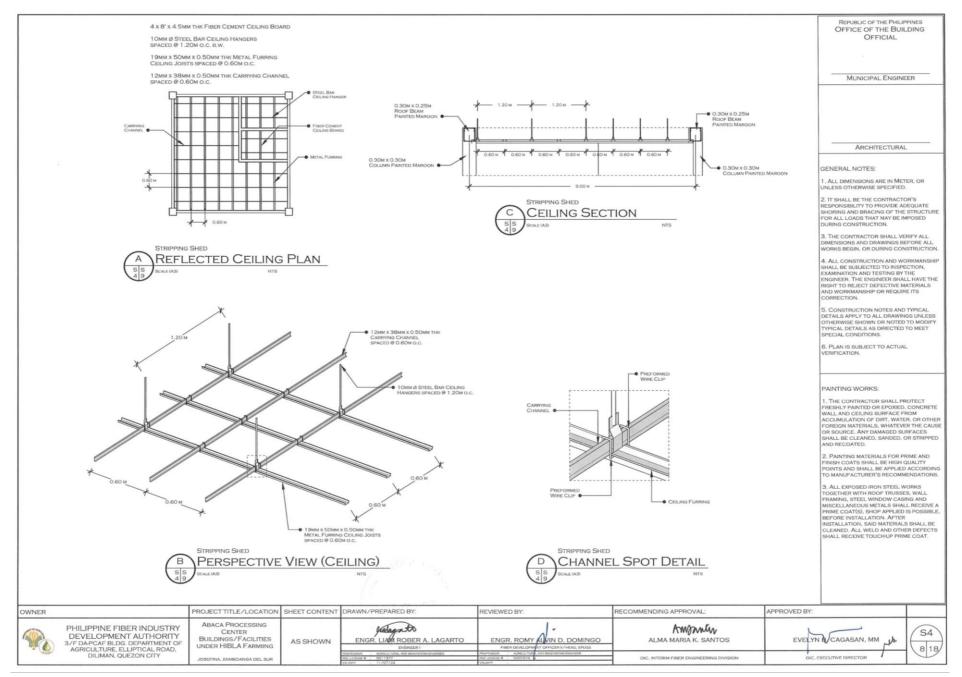


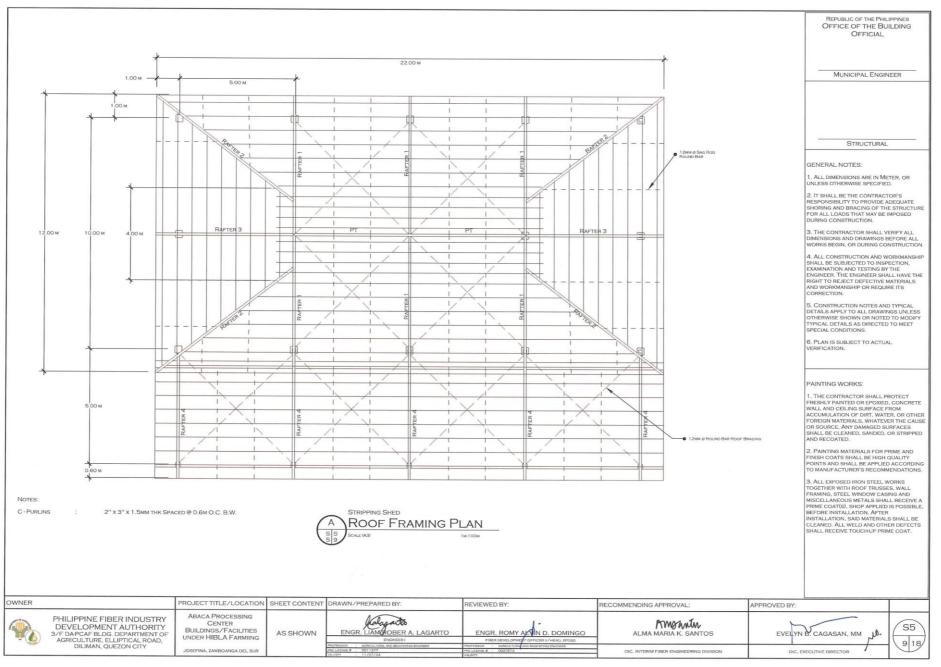


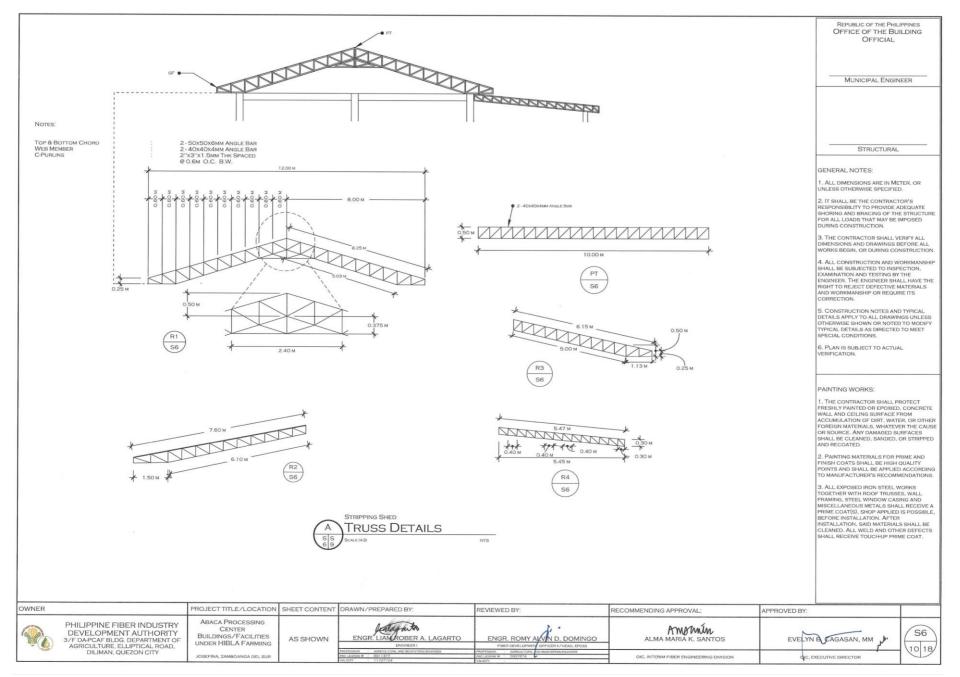


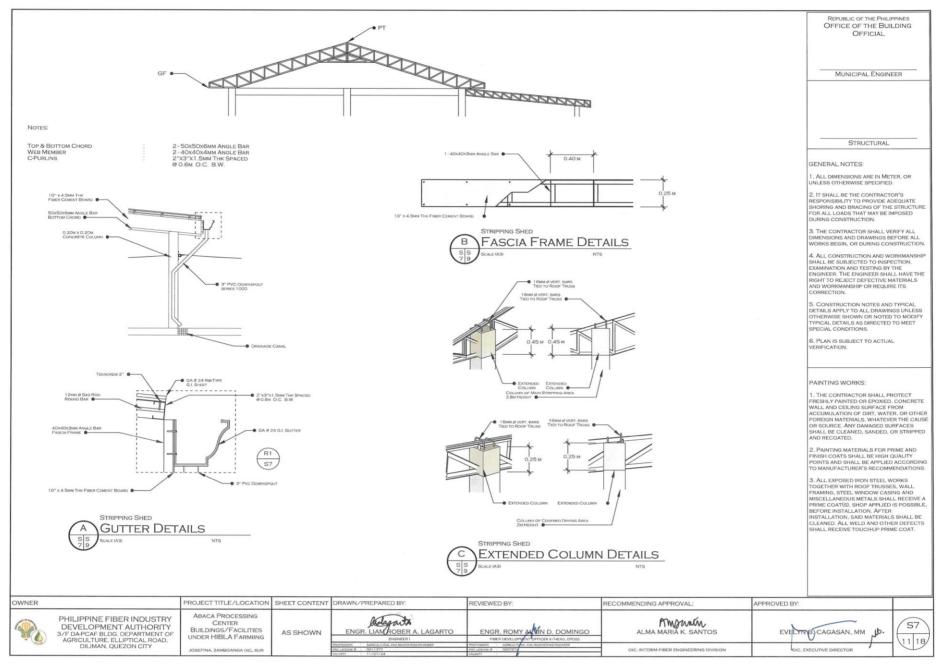


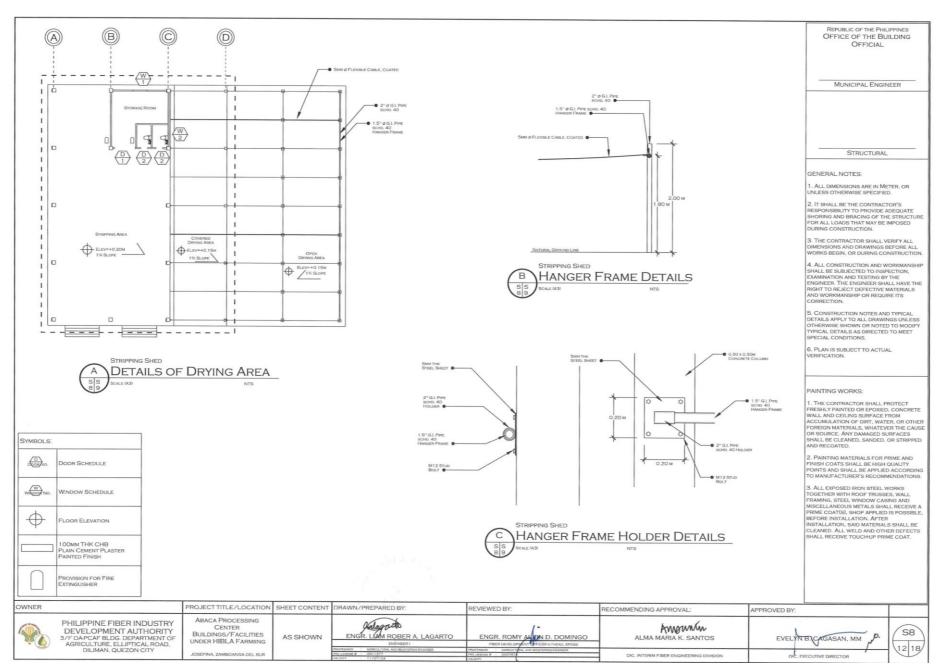


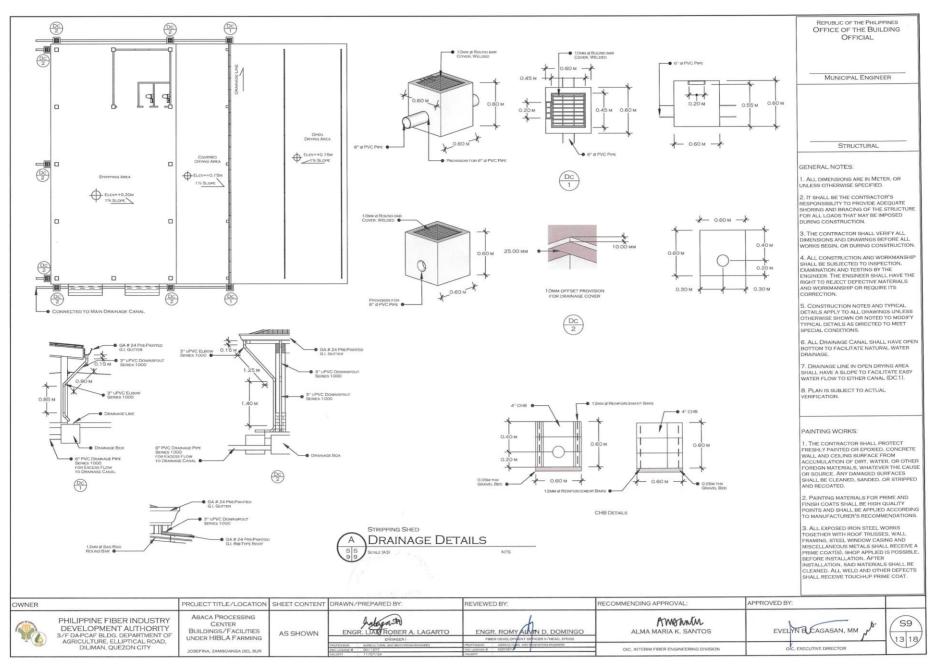


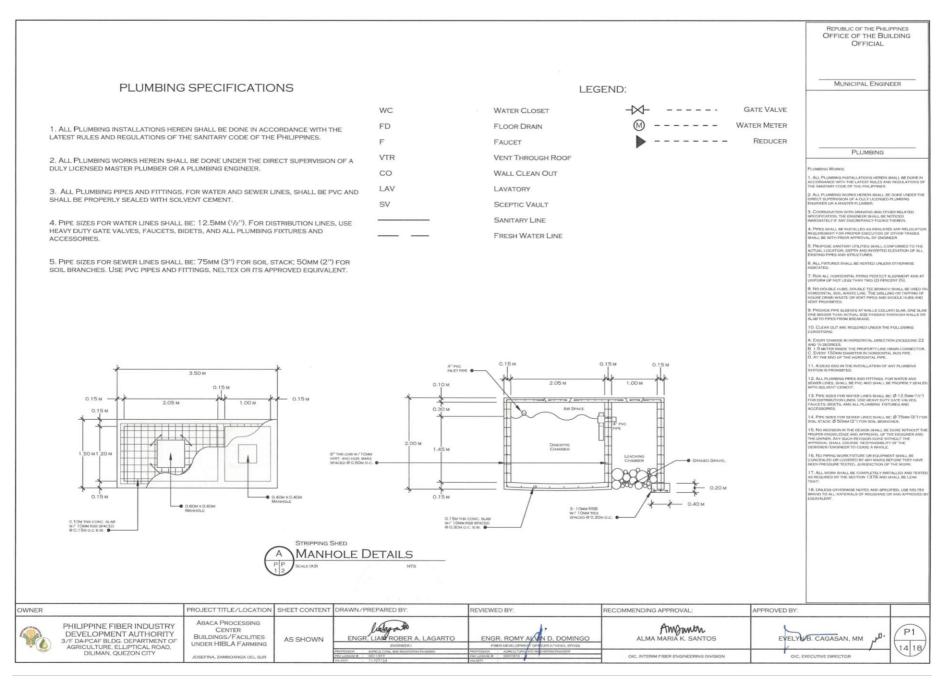


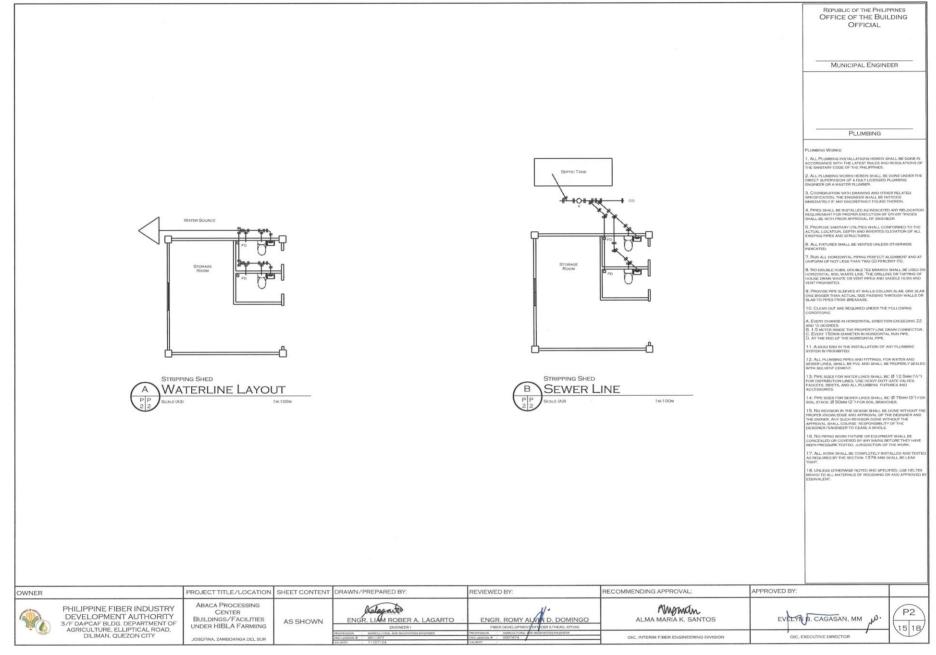












ELECTRICAL SPECIFICATIONS AND LEGEND

REPUBLIC OF THE PHILIPPINES OFFICE OF THE BUILDING OFFICIAL

MUNICIPAL ENGINEER

ELECTRICAL

1. ALL ELECTRICAL WORKS SHALL COMPLY IN ACCORDANCE WITH THESE PLANS AND	
SPECIFICATIONS. THE APPLICABLE PROVISIONS OF THE LATEST EDITION OF THE PHILIPPINE	
ELECTRICAL CODE (PEC). THE RULES AND REGULATIONS OF THE LOCAL ENFORCING AUTHORITY	
AND THE REQUIREMENTS OF THE LOCAL POWER COMPANY. THE ELECTRICAL WORKS SHALL BE	
UNDER IMMEDIATE SUPERVISOR OF A DULY REGISTERED ELECTRICAL ENGINEER.	

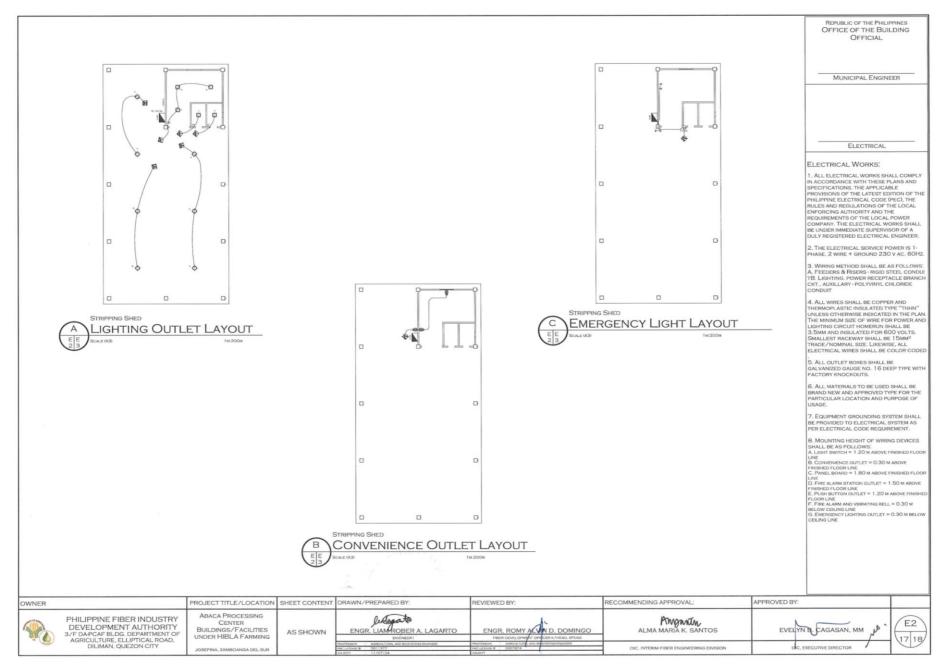
- 2. THE ELECTRICAL SERVICE POWER IS 1-PHASE, 2 WIRE + GROUND 230 V AC, 60Hz.
- 3. WIRING METHOD SHALL BE AS FOLLOWS:
- A. FEEDERS & RISERS RIGID STEEL CONDUIT
- B. LIGHTING, POWER RECEPTACLE BRANCH CKT., AUXILLARY POLYVINYL CHLORIDE CONDUIT
- 4. ALL WIRES SHALL BE COPPER AND THERMOPLASTIC INSULATED TYPE "THHN" UNLESS OTHERWISE INDICATED IN THE PLAN. THE MINIMUM SIZE OF WIRE FOR POWER AND LIGHTING CIRCUIT HOMERUN SHALL BE 3.5MM AND INSULATED FOR 600 VOLTS. SMALLEST RACEWAY SHALL BE 15MM2 TRADE/NOMINAL SIZE. LIKEWISE, ALL ELECTRICAL WIRES SHALL BE COLOR
- 5. ALL OUTLET BOXES SHALL BE GALVANIZED GAUGE NO. 16 DEEP TYPE WITH FACTORY KNOCKOUTS.
- 6. ALL MATERIALS TO BE USED SHALL BE BRAND NEW AND APPROVED TYPE FOR THE PARTICULAR LOCATION AND PURPOSE OF USAGE.
- 7. EQUIPMENT GROUNDING SYSTEM SHALL BE PROVIDED TO ELECTRICAL SYSTEM AS PER ELECTRICAL CODE REQUIREMENT.
- 8. MOUNTING HEIGHT OF WIRING DEVICES SHALL BE AS FOLLOWS:
- A. LIGHT SWITCH = 1.20 M ABOVE FINISHED FLOOR LINE

- A. LIGHT SWITCH = 1,20 M ABOVE FINISHED FLOOR LINE
 C. PANEL BOARD = 1.80 M ABOVE FINISHED FLOOR LINE
 C. PANEL BOARD = 1.80 M ABOVE FINISHED FLOOR LINE
 D. FIRE ALARM STATION OUTLET = 1.50 M ABOVE FINISHED FLOOR LINE
 E. PUSH BUTTON OUTLET = 1.20 M ABOVE FINISHED FLOOR LINE
 F. FIRE ALARM AND VIBRATING BELL = 0.30 M BELOW CEILING LINE
 O.30 M BELOW CEILING
 O.30
- G. EMERGENCY LIGHTING OUTLET = 0.30 M BELOW CEILING LINE

LEGEND:

20W LED LIGHT
10W LED LIGHT
DUPLEX CONVENIENCE OUTLET
PANELBOARD
CIRCUIT BREAKER
SDE 2-GANG SWITCH
CIRCUIT HOMERUN
CIRCUIT RUN

									£
OWNER		PROJECT TITLE/LOCATION	SHEET CONTENT	DRAWN/PREPARED BY:	REVIEWED BY:	RECOMMENDING APPROVAL:	APPROVED BY:		ĺ
	PHILIPPINE FIBER INDUSTRY DEVELOPMENT AUTHORITY 3/F DAPCAF BLDG. DEPARTMENT OF AGRICULTURE, ELLIPTICAL ROAD,	ABACA PROCESSING CENTER BUILDINGS/FACILITIES UNDER HIBLA FARMING	AS SHOWN	ENGR. LIAM ROBER A. LAGARTO	ENGR. ROMY A JIN D. DOMINGO PIBER DEVELOPMENT OFFICER IS HEAD, EPOSS	ALMA MARIA K. SANTOS	EVELYN B. OAGASAN, MM	E1	
	DILIMAN, QUEZON CITY	JOSEFINA, ZAMBOANGA DEL SUR		PROFESSION ASPROLUTURA, AND BIOLYSTEINS ENGINEER PROCLECTIVE B : 0011377	PROFESSION AGRICULTURE. AND BOSYSTEMS ENGINEER PRIC LICENSE # 0007674	OIC, INTERIM FIBER ENGINEERING DIVISION	OIC, EXECUTIVE DIRECTOR	101.9	ı



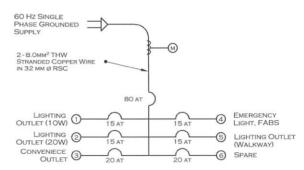
LOAD SCHEDULE

CIRCUIT	Decorporation of Long	VA	Cummum	CIRC	CUIT BREA	KER	CONDUCTOR		CONDUI	г
Number	DESCRIPTION OF LOAD	LOAD	CURRENT	POLE	FRAME	TRIP	Size	TYPE	DIAMETER	TYPE
1	5 x 10W LIGHT	50	0.22	2	50	15 A	2-2.0MM ² & 1-2.0MM ²	THHN	13мм	UPVC
2	7 x 20W LIGHT	140	0.61	2	50	15 A	2-2.0MM ² & 1-2.0MM ²	THHN	13мм	UPVC
3	2-3 x 180W CONVENIENCE OUTLET	1080	4.70	2	50	20 A	2 - 3.5MM ² & 1 - 3.5MM ²	THHN	20мм	UPVC
4	2 x 2-3W LED EMERGENCY LIGHT	12	0.06	2	50	15 A	2 - 2.0MM ² & 1 - 2.0MM ²	THHN	13мм	uPVC
5	8 x 20W LIGHT	160	0.70	2	50	15 A	2-3.5mm ² & 1-3.5mm ²	THHN	13мм	UPVC
6	2-8 x 180W CONVENIENCE OUTLET (SPARE)	2880	12.52	2	50	20 A	2-3.5mm ² & 1-3.5mm ²	THHN	20мм	uPVC
	TOTAL PHASE CURRENT	4322	18.79							

COMPUTATION

 I_T = 4.322 KVA / (230 V) = 18.79 A x 80% DEMAND FACTOR = 15.032 A 2-8.0MM² & 1-5.5MM² THW STRANDED WIRE IN 32 MM Ø RSC





REPUBLIC OF THE PHILIPPINES OFFICE OF THE BUILDING OFFICIAL

MUNICIPAL ENGINEER

ELECTRICAL

ELECTRICAL WORKS:

1. ALL ELECTRICAL WORKS SHALL COMPLY I. ALL ELECTRICAL WORRS SHALE COMPLY
IN ACCORDANCE WITH THESE PLANS AND
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PROVISIONS OF THE LATEST EDITION OF THE
PHILIPPINE ELECTRICAL CODE (PEC). THE RULES AND REGULATIONS OF THE LOCAL ENFORCING AUTHORITY AND THE REQUIREMENTS OF THE LOCAL POWER COMPANY. THE ELECTRICAL WORKS SHALL BE UNDER IMMEDIATE SUPERVISOR OF A DULY REGISTERED ELECTRICAL ENGINEER.

2. THE ELECTRICAL SERVICE POWER IS 1-PHASE, 2 WIRE + GROUND 230 V AC, 60Hz.

3. WIRING METHOD SHALL BE AS FOLLOWS: A FEEDERS & RISERS - RIGID STEEL CONDU TB. LIGHTING, POWER RECEPTACLE BRANCH CKT., AUXILLARY - POLYVINYL CHLORIDE CONDUIT

4. ALL WIRES SHALL BE COPPER AND THERMOPLASTIC INSULATED TYPE "THHN" UNLESS OTHERWISE INDICATED IN THE PLAN THE MINIMUM SIZE OF WIRE FOR POWER AND LIGHTING CIRCUIT HOMERUN SHALL BE 3,5MM AND INSULATED FOR 600 VOLTS. SMALLEST RACEWAY SHALL BE 15MM² TRADE/NOMINAL SIZE. LIKEWISE, ALL ELECTRICAL WIRES SHALL BE COLOR CODE

5. ALL OUTLET BOXES SHALL BE GALVANIZED GAUGE NO. 16 DEEP TYPE WITH FACTORY KNOCKOUTS.

6. ALL MATERIALS TO BE USED SHALL BE BRAND NEW AND APPROVED TYPE FOR THE PARTICULAR LOCATION AND PURPOSE OF USAGE.

7. EQUIPMENT GROUNDING SYSTEM SHALL BE PROVIDED TO ELECTRICAL SYSTEM AS PER ELECTRICAL CODE REQUIREMENT.

8. MOUNTING HEIGHT OF WIRING DEVICES SHALL BE AS FOLLOWS: A. LIGHT SWITCH = 1.20 M ABOVE FINISHED FLOO

LINE

B. CONVENIENCE OUTLET = 0.30 M ABOVE
FINISHED FLOOR LINE
C. PANEL BOARD = 1.80 M ABOVE FINISHED FLOOR

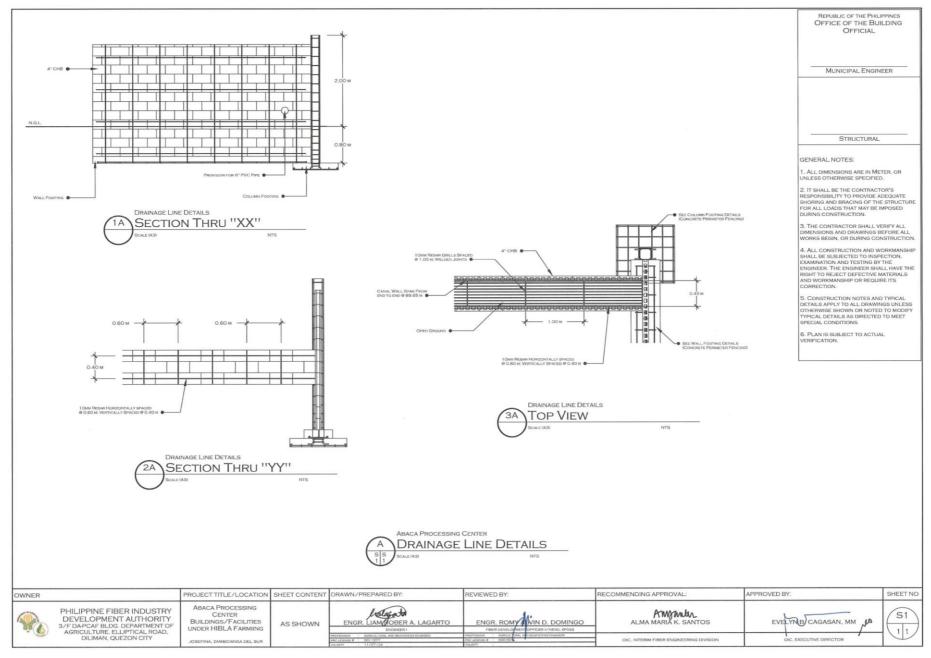
LINE

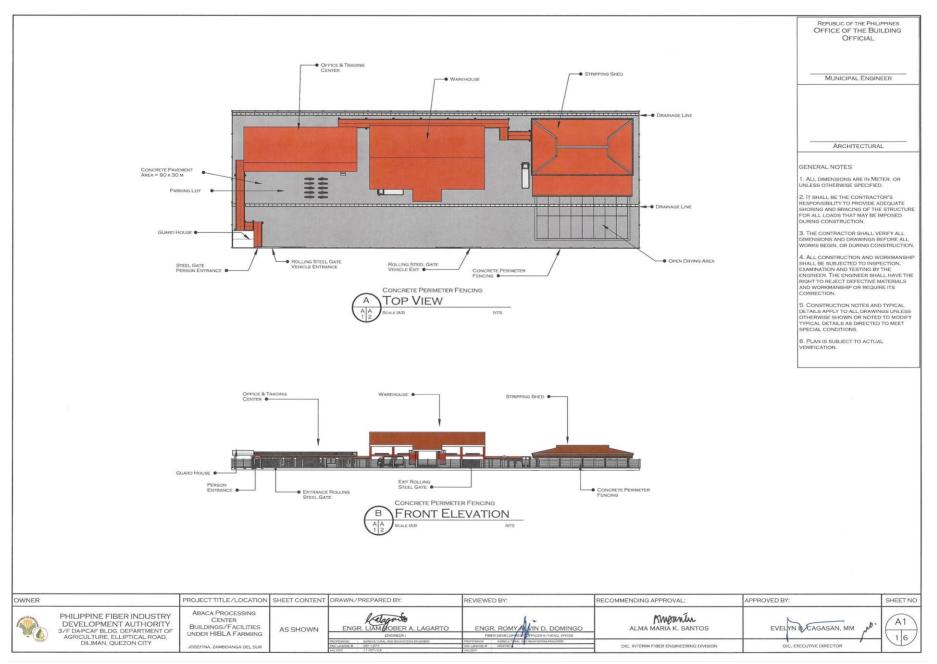
D. FIRE ALARM STATION OUTLET # 1.50 M ABOVE.

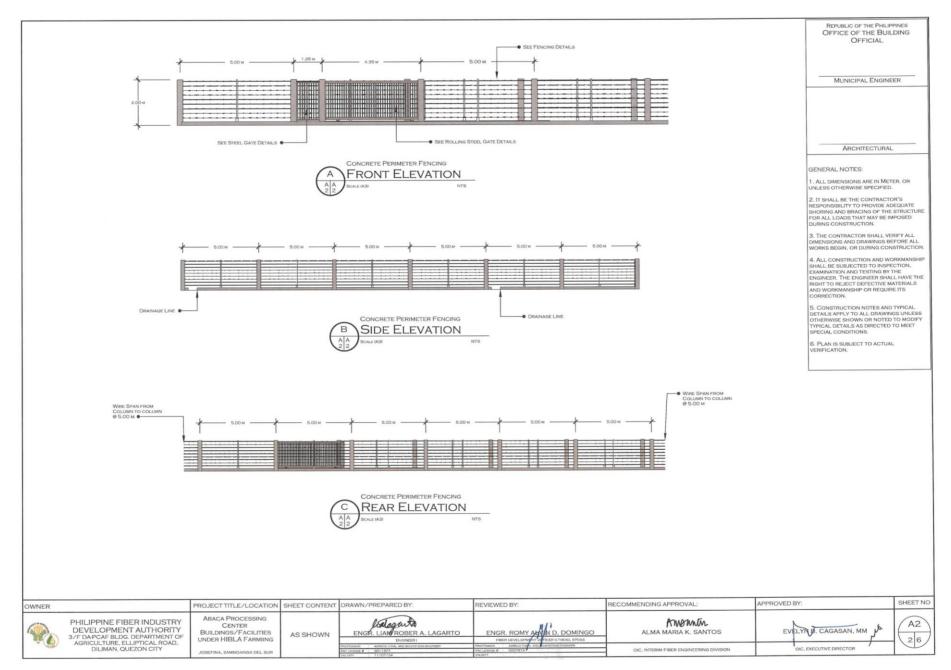
D. FIRE ALARM STATION OUTLET # 1,50 M ABOVE.
FINSHED FLOOR LINE
E. PUSH BUTTON OUTLET # 1,20 M ABOVE FINISHE
FLOOR LINE
F. FIRE ALARM AND VIBRATING BELL # 0,30 M

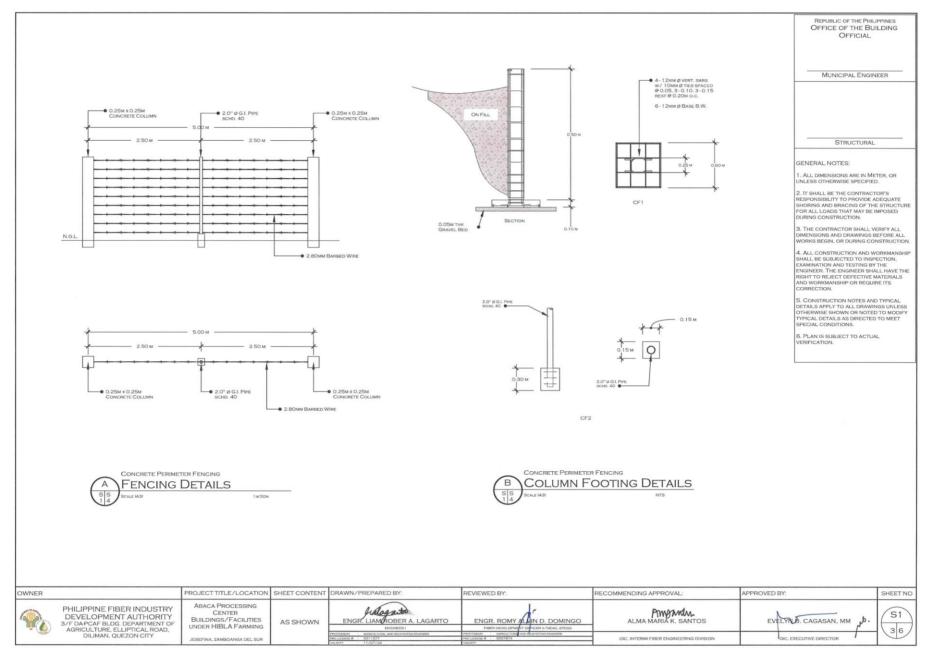
BELOW CEILING LINE G. EMERGENCY LIGHTING OUTLET = 0.30 M BELOW CEILING LINE

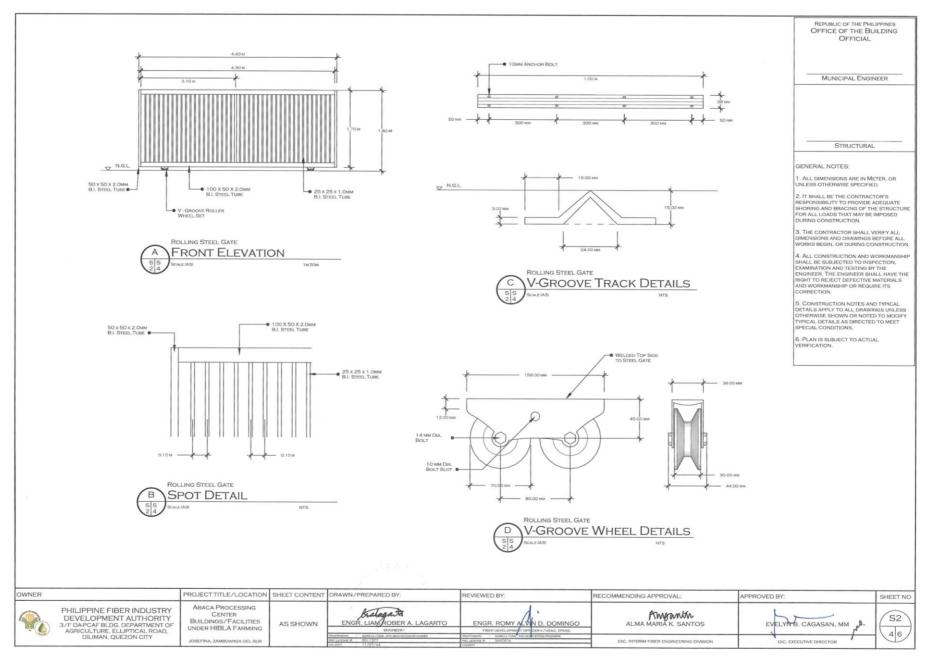


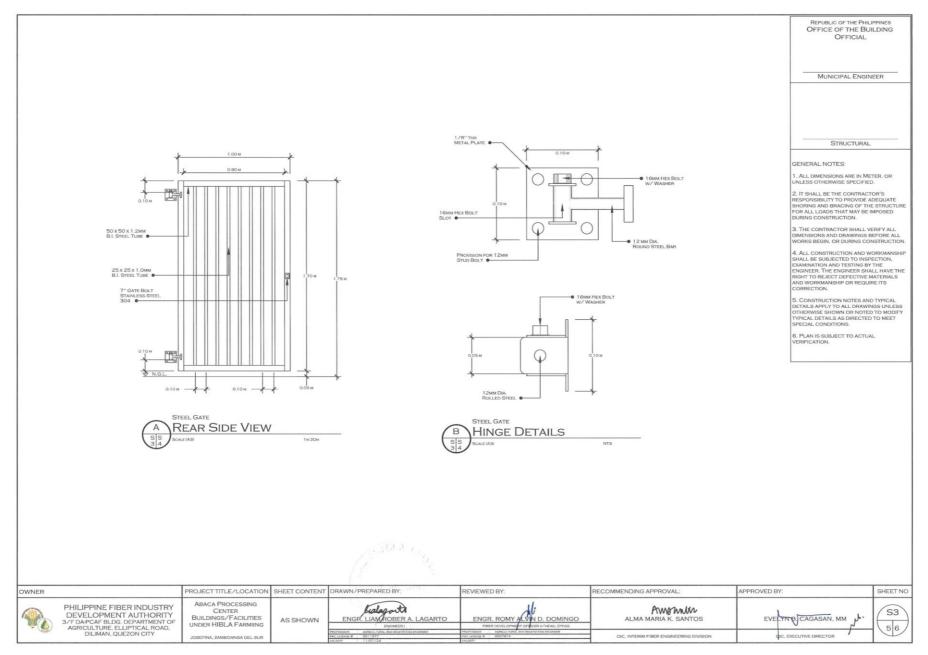


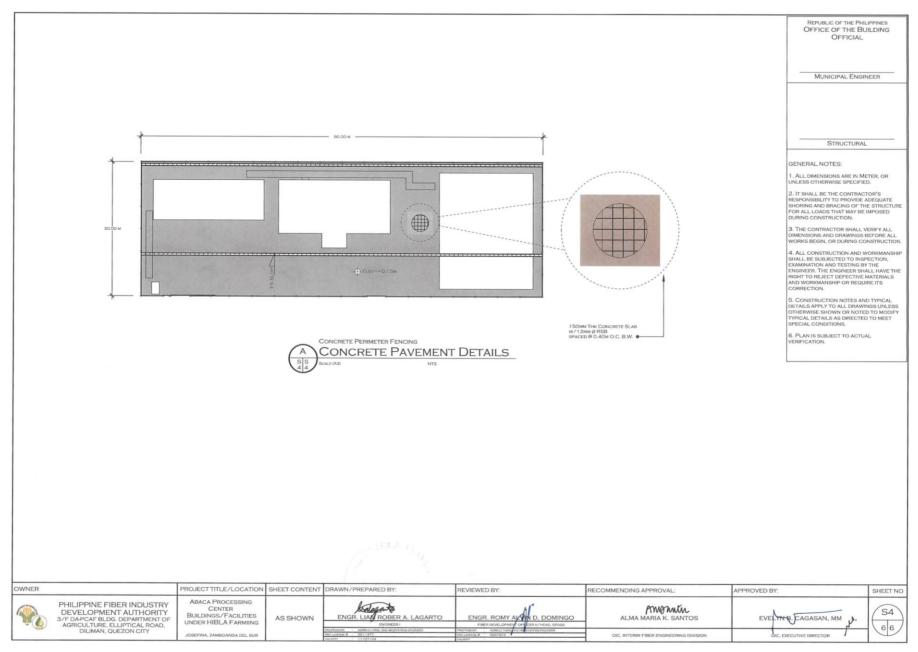


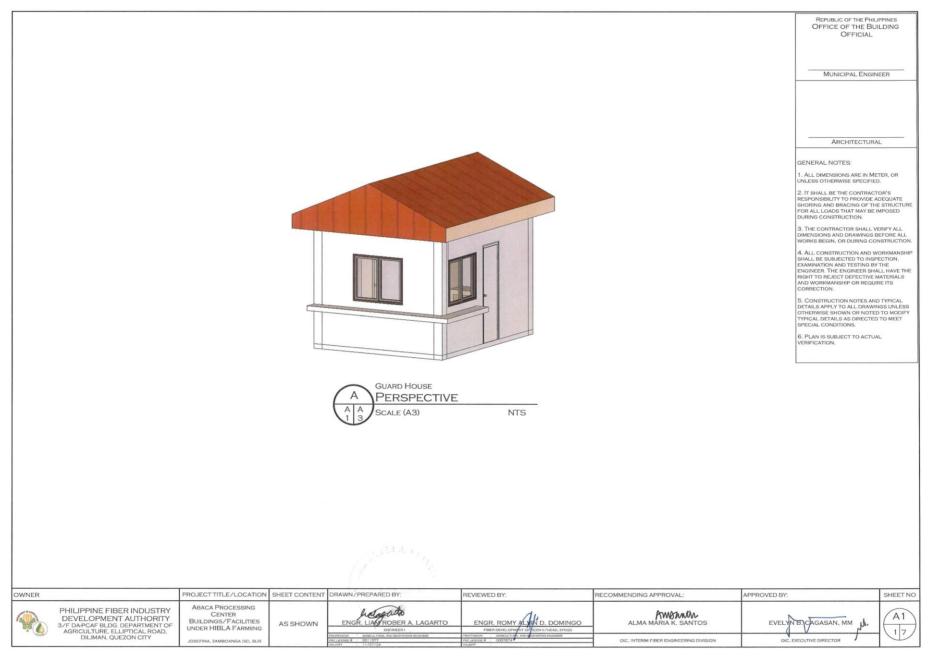


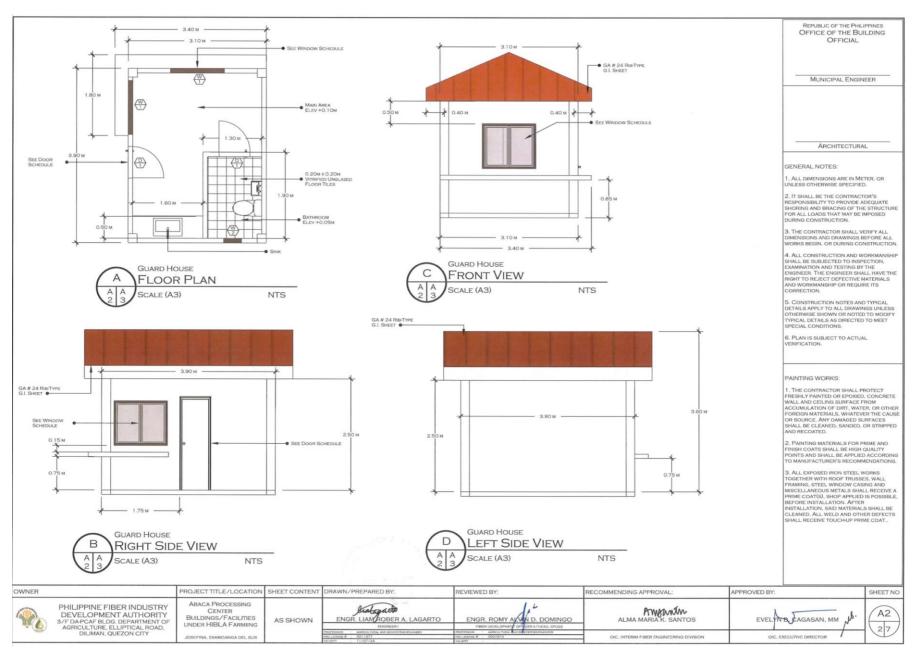


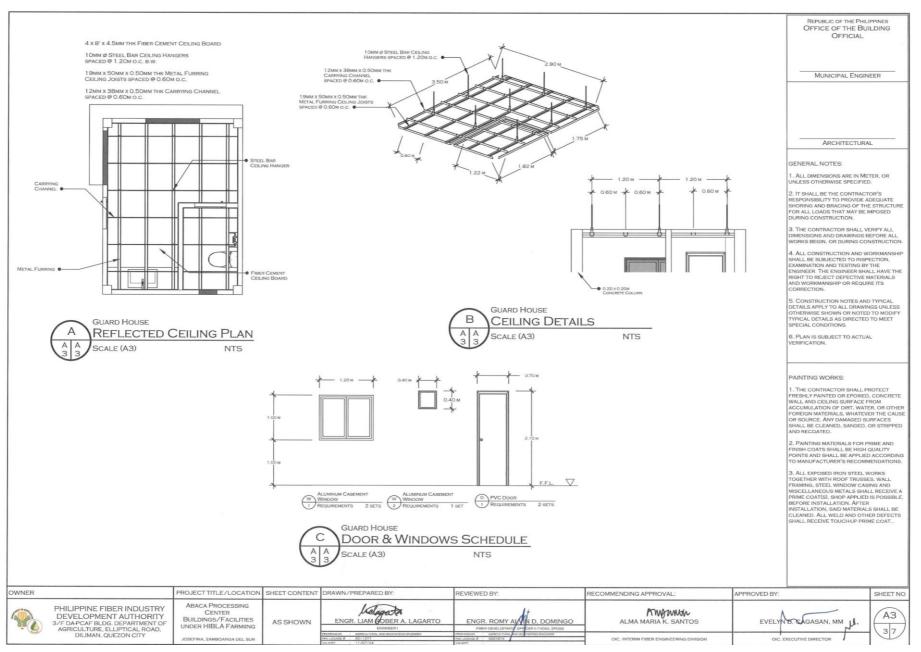


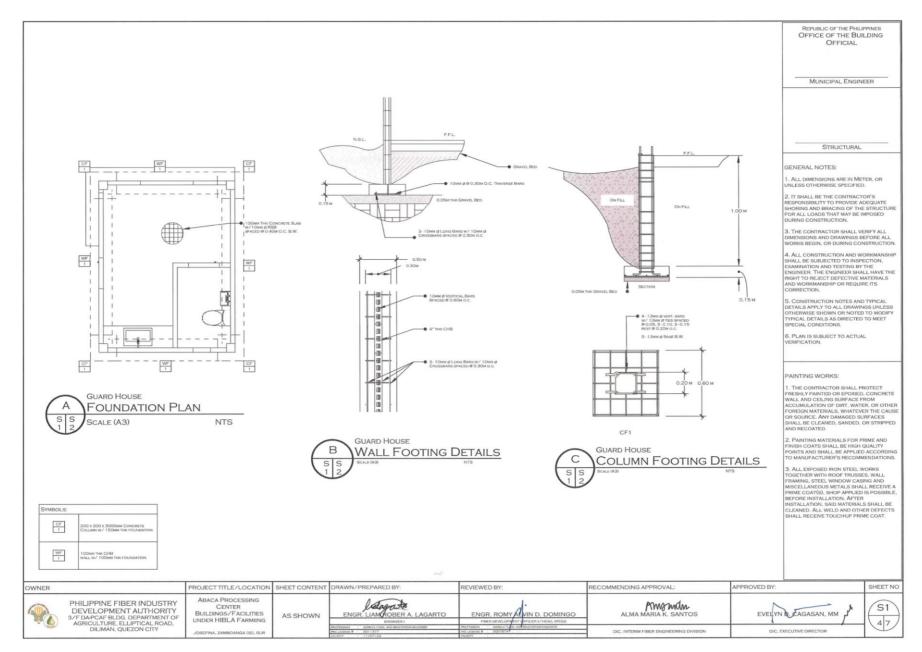


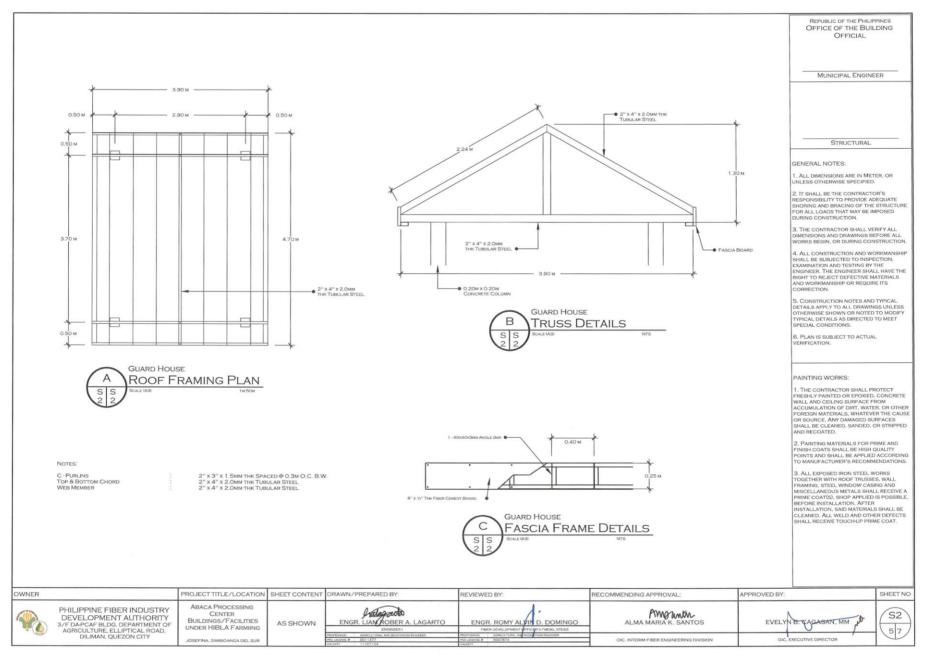












LOAD SCHEDULE

CIRCUIT	DESCRIPTION OF LOAD	VA	CURRENT	CIRC	CUIT BREA	KER	CONDUCTOR		CONDUIT	Г
Number	DESCRIPTION OF LOAD	LOAD	CURRENT	POLE	FRAME	TRIP	SIZE	TYPE	DIAMETER	TYPE
1	4 x 15W LIGHT	60	0.26	2	50	15 A	2 - 2.0MM ² & 1 - 2.0MM ²	THHN	13мм	uPVC
2	3 x 9W Light	27	0.12	2	50	15 A	2 - 2.0MM ² & 1 - 2.0MM ²	THHN	13мм	UPVC
3	5 x 20W LIGHT (WALKWAY)	100	0.43	2	50	15 A	2 - 3.5MM ² & 1 - 3.5MM ²	THHN	13мм	uPVC
4	4-2 x 180W CONVENIENCE OUTLET	1440	6.26	2	50	20 A	2 - 2.0MM ² & 1 - 2.0MM ²	THHN	20мм	uPVC
	TOTAL PHASE CURRENT	1627	7.07							

COMPUTATION

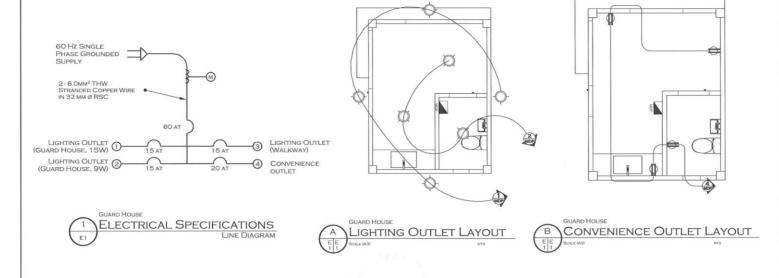
 I_T = 1.627 kVA / (230 V) = 7.07A x 80% DEMAND FACTOR = 5.66 A 2-8.0MM² & 1-5.5MM²THW STRANDED WIRE IN 32 MM Ø RSC REPUBLIC OF THE PHILIPPINES OFFICE OF THE BUILDING OFFICIAL

MUNICIPAL ENGINEER

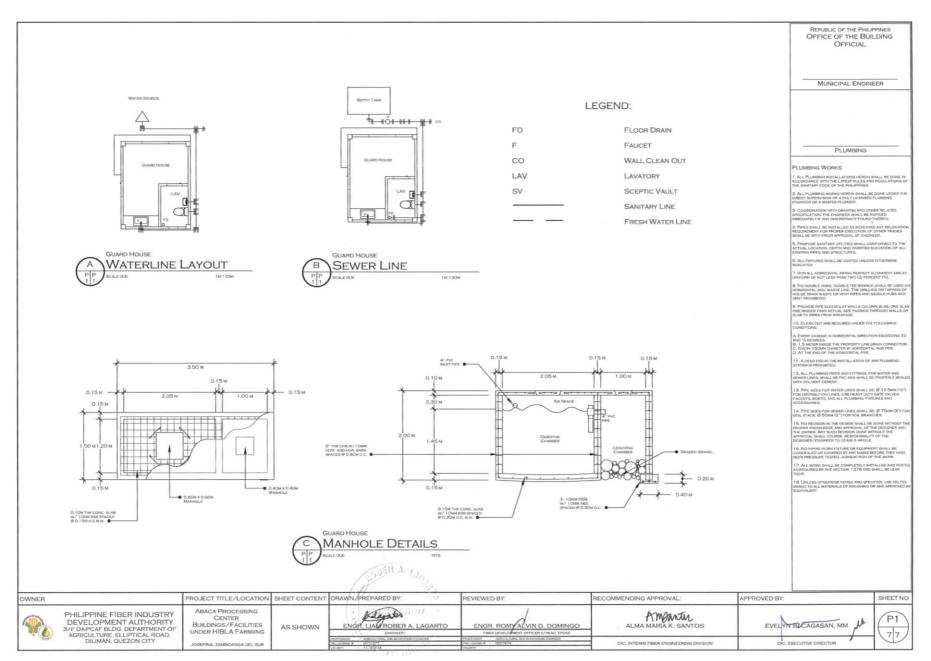
ELECTRICAL

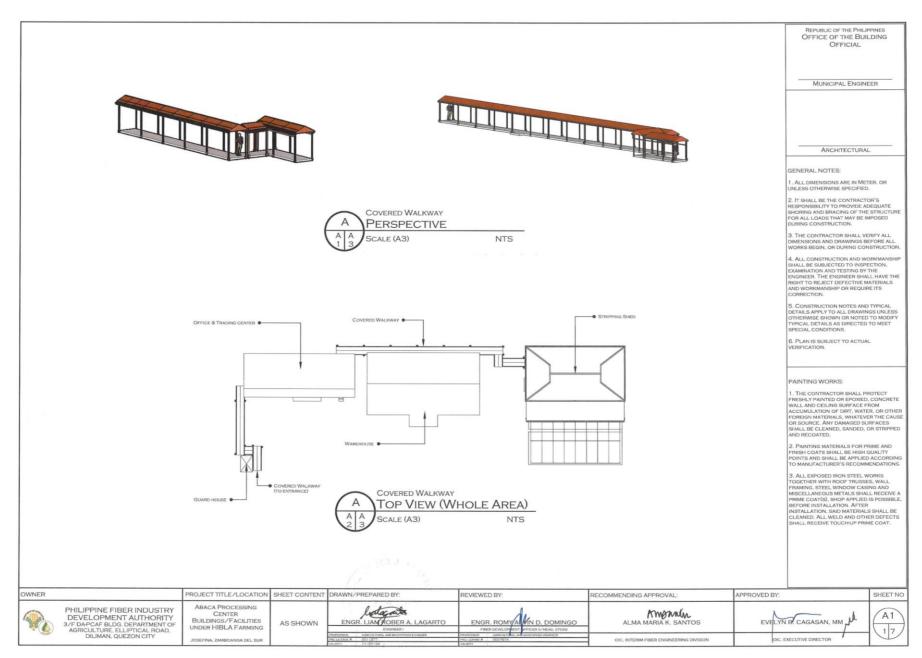
ELECTRICAL WORKS:

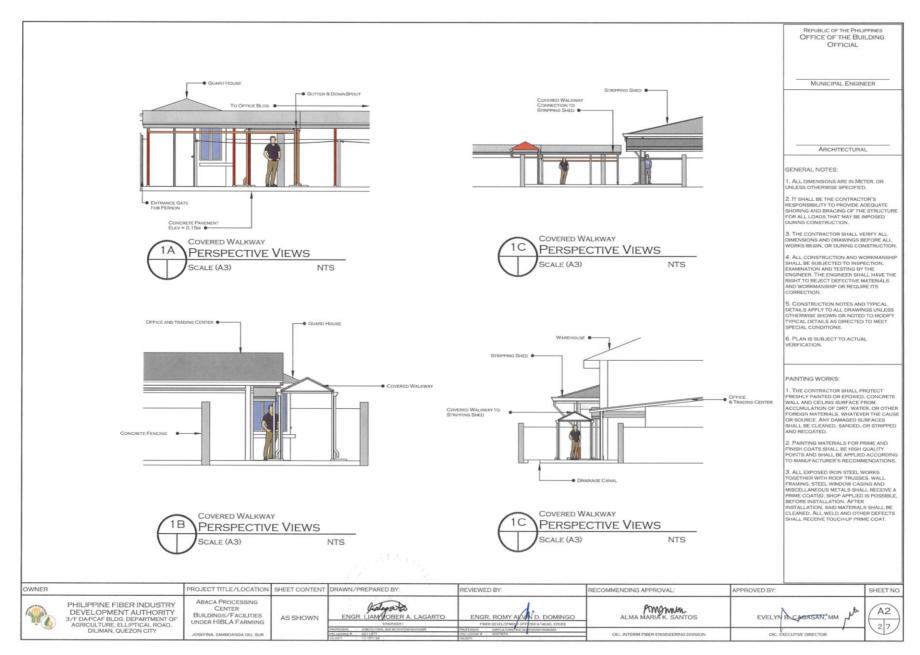
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- MOUNTING HEIGHT OF WIRING DEVICES SHALL BE AS FOLLOWS;
 A. LIGHT SWITCH = 1.20 M ABOVE FINISHED FLOC
- B. CONVENIENCE OUTLET = 0.30 M ABOVE FINISHED FLOOR LINE C. PANEL BOARD = 1.80 M ABOVE FINISHED FLOOR

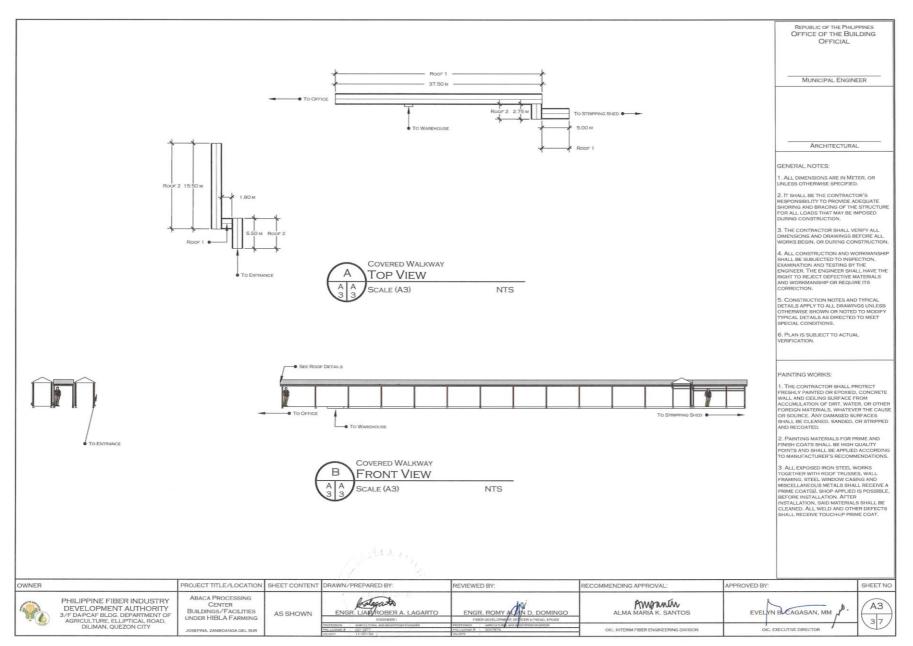


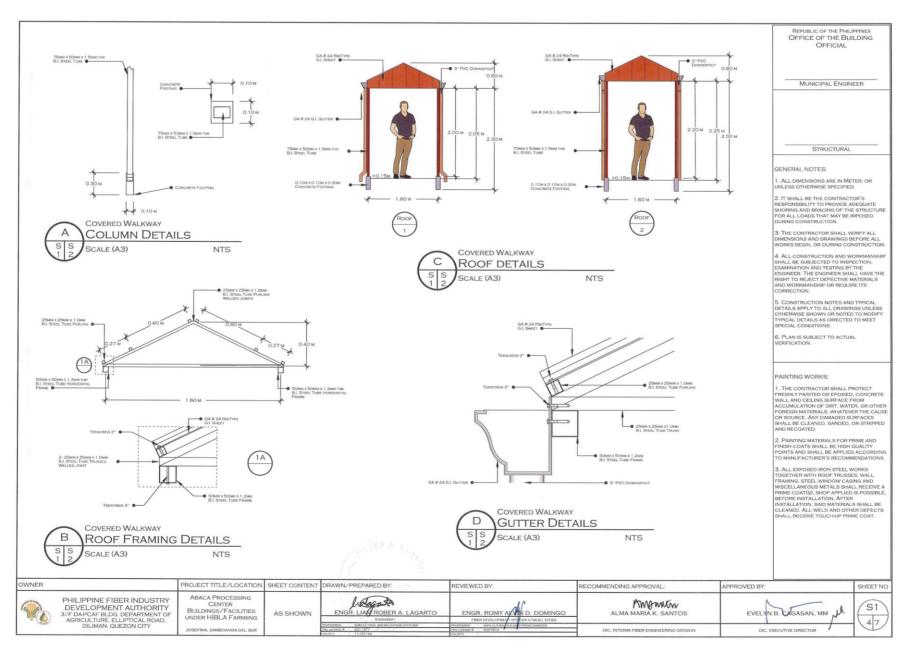
RECOMMENDING APPROVAL: APPROVED BY: SHEET NO OWNER PROJECT TITLE/LOCATION SHEET CONTENT DRAWN/PREPARED BY: REVIEWED BY ABACA PROCESSING PHILIPPINE FIBER INDUSTRY Amgander CENTER
BUILDINGS/FACILITIES E1 DEVELOPMENT AUTHORITY EVELYNB. CAGASAN, MM ENGR. ROMY AND D. DOMINGO AS SHOWN ALMA MARIA K. SANTOS 3/F DA-PCAF BLDG. DEPARTMENT OF AGRICULTURE, ELLIPTICAL ROAD, DILIMAN, QUEZON CITY UNDER HIBLA FARMING 67 OIC, INTERIM FIBER ENGINEERING DIVISION

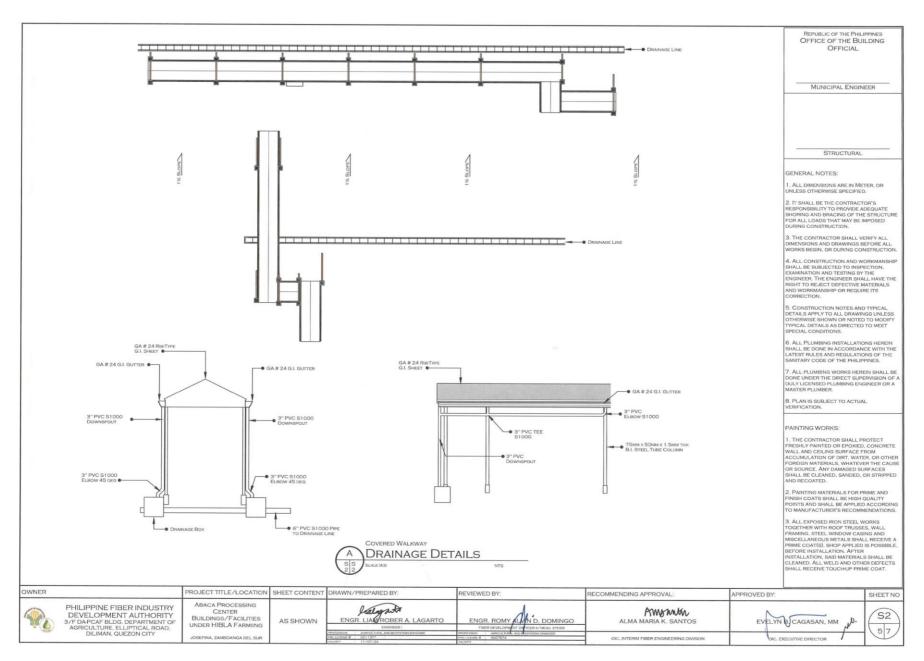


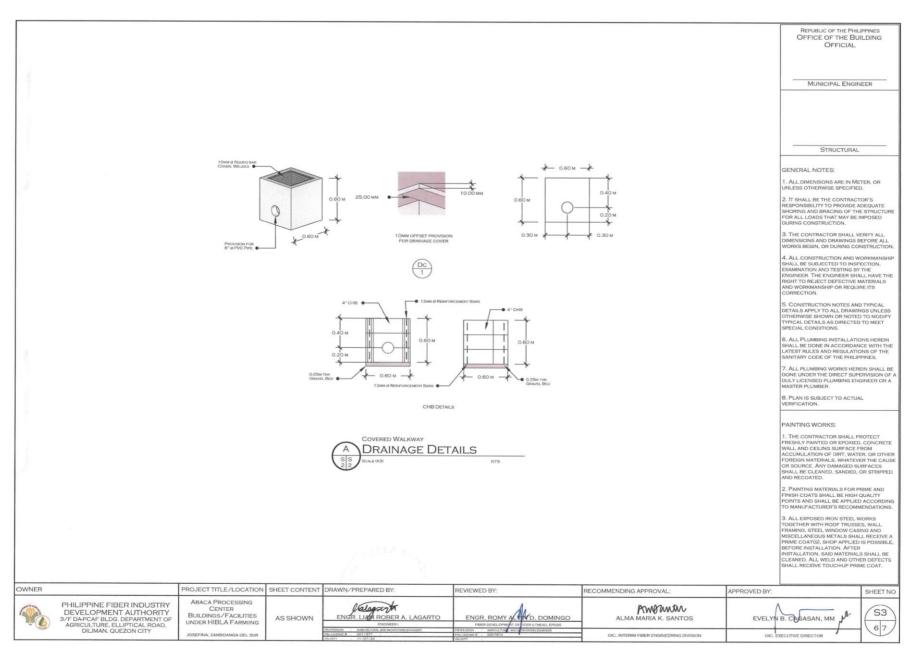


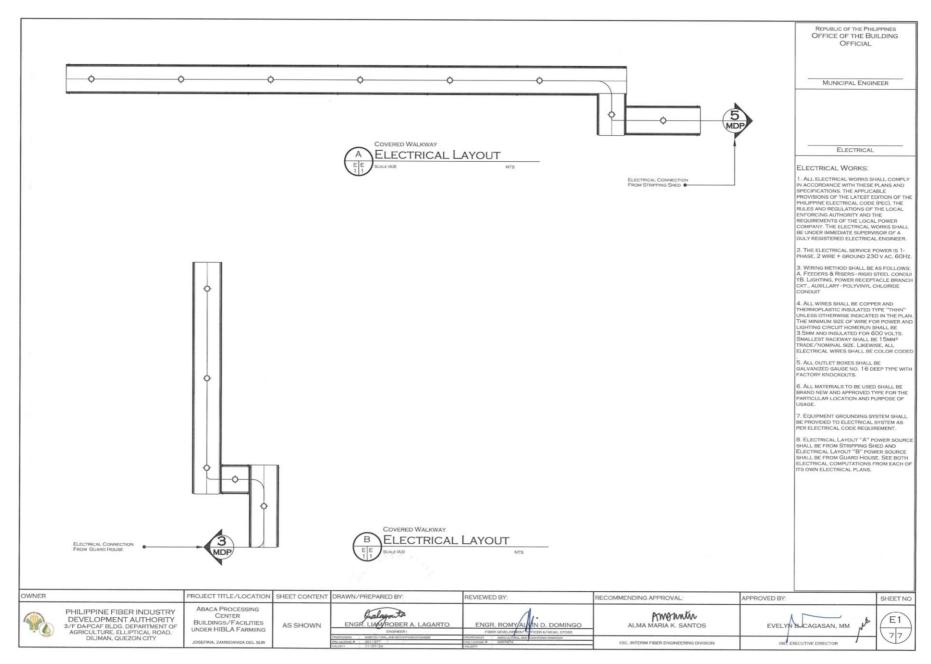












Signature over Printed Name of Bidder's Authorized Representative	Position	Name of Company
_	Date Signed	

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.

