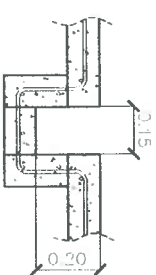
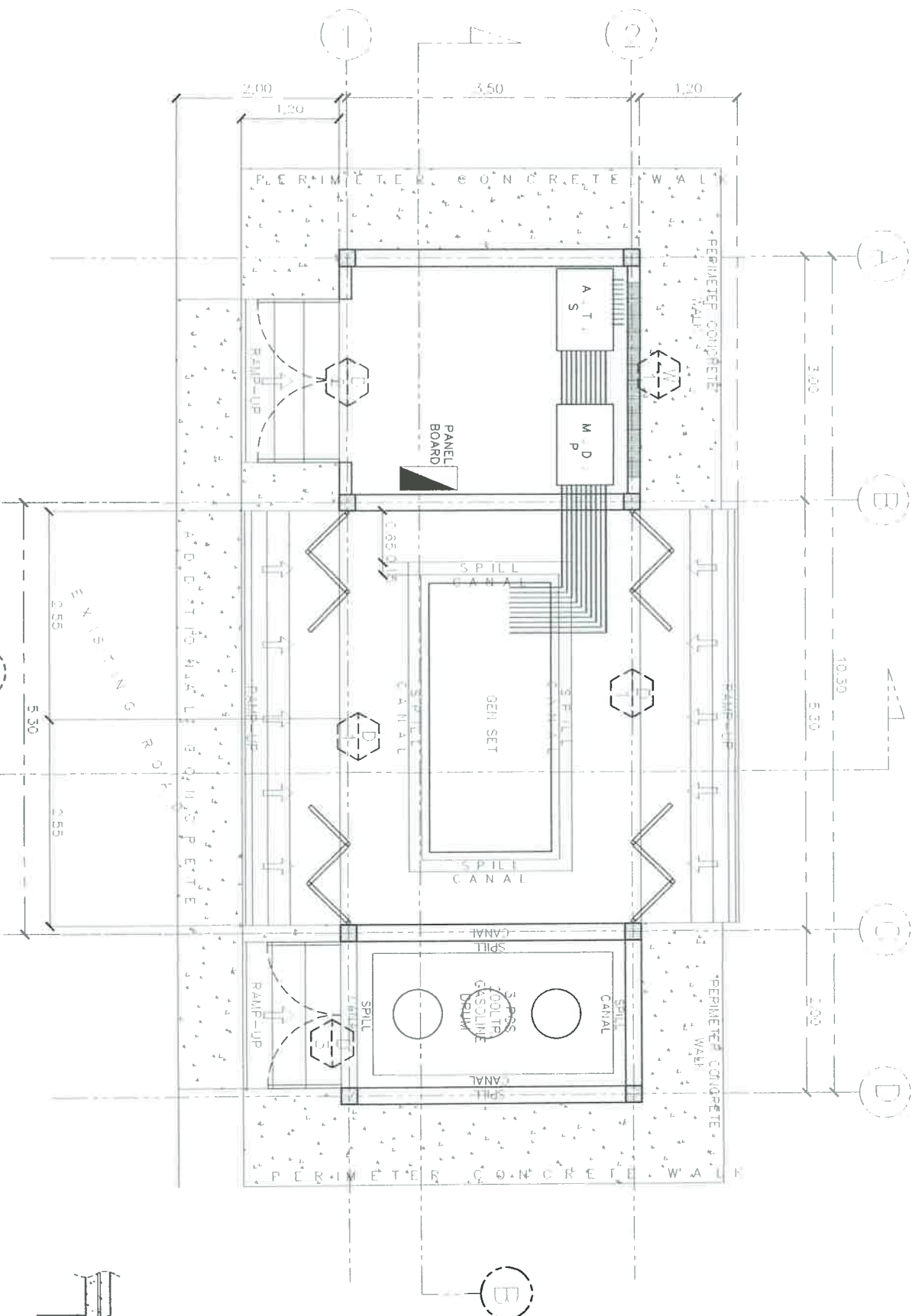




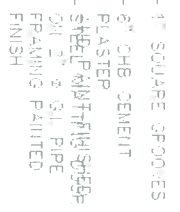
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FLOOR PLAN

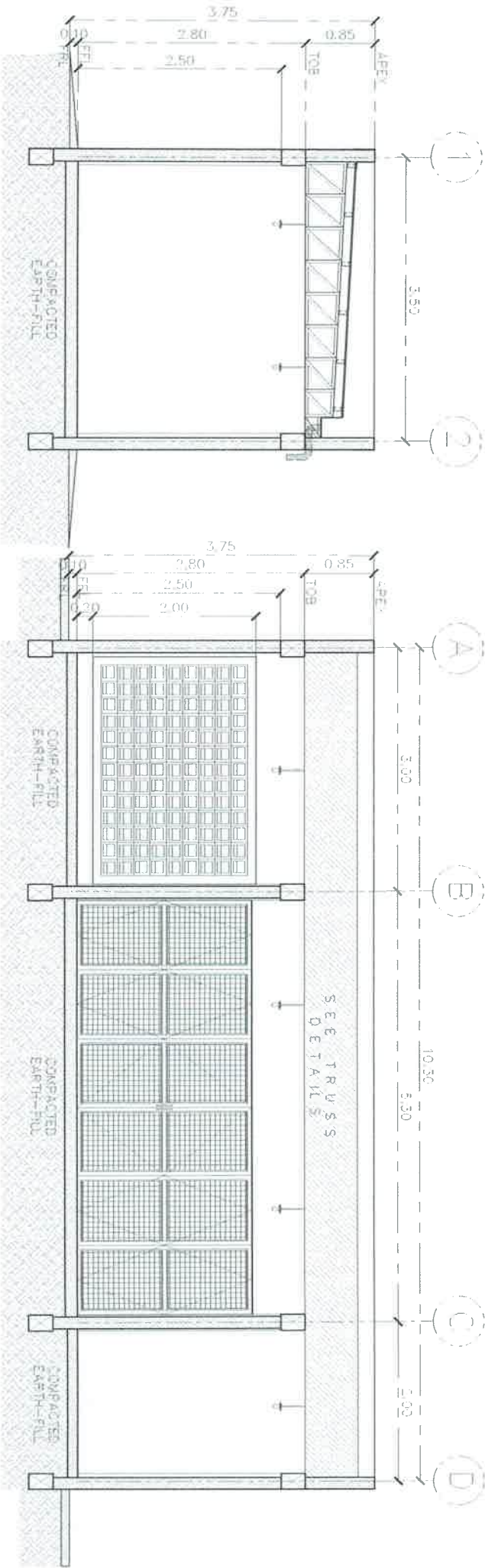
11.50M
A

11.50M
SPILL CANAL DETAILS



PHILRICE PHILIPPINE RICE RESEARCH INSTITUTE VIA SAN ANTONIO CAVITE	DESIGNED AND SPECIFICATIONS BY: APRIL 2014 - ART 1 SECTION 20		PROJECT TITLE: CONSTRUCTION OF POWERHOUSE, EXTENSION OF PRIMARY LINE & RELOCATION OF TRANSFORMER		PHYSICAL PLANT DIVISION INFRASTRUCTURE UNIT SCIENCE CITY OF MUNOZ, NEVIA ECUA		DESIGNER: MDR & BAY PRO. NO. 100		DRAWN: C. NOLA PROJECT - CIVIL		APPROVED: ARMANDO MONTAÑO PROJECT - CIVIL		APPROVED: JOHN C. DE LEON OFFICE - CIVIL		DATE: 04/01/14		SHEET NUMBER: A2	
	DRAWING AND SPECIFICATIONS BY: APRIL 2014 - ART 1 SECTION 20		PROJECT TITLE: CONSTRUCTION OF POWERHOUSE, EXTENSION OF PRIMARY LINE & RELOCATION OF TRANSFORMER		PHYSICAL PLANT DIVISION INFRASTRUCTURE UNIT SCIENCE CITY OF MUNOZ, NEVIA ECUA		DESIGNER: MDR & BAY PRO. NO. 100		DRAWN: C. NOLA PROJECT - CIVIL		APPROVED: ARMANDO MONTAÑO PROJECT - CIVIL		APPROVED: JOHN C. DE LEON OFFICE - CIVIL		DATE: 04/01/14		SHEET NUMBER: A2	

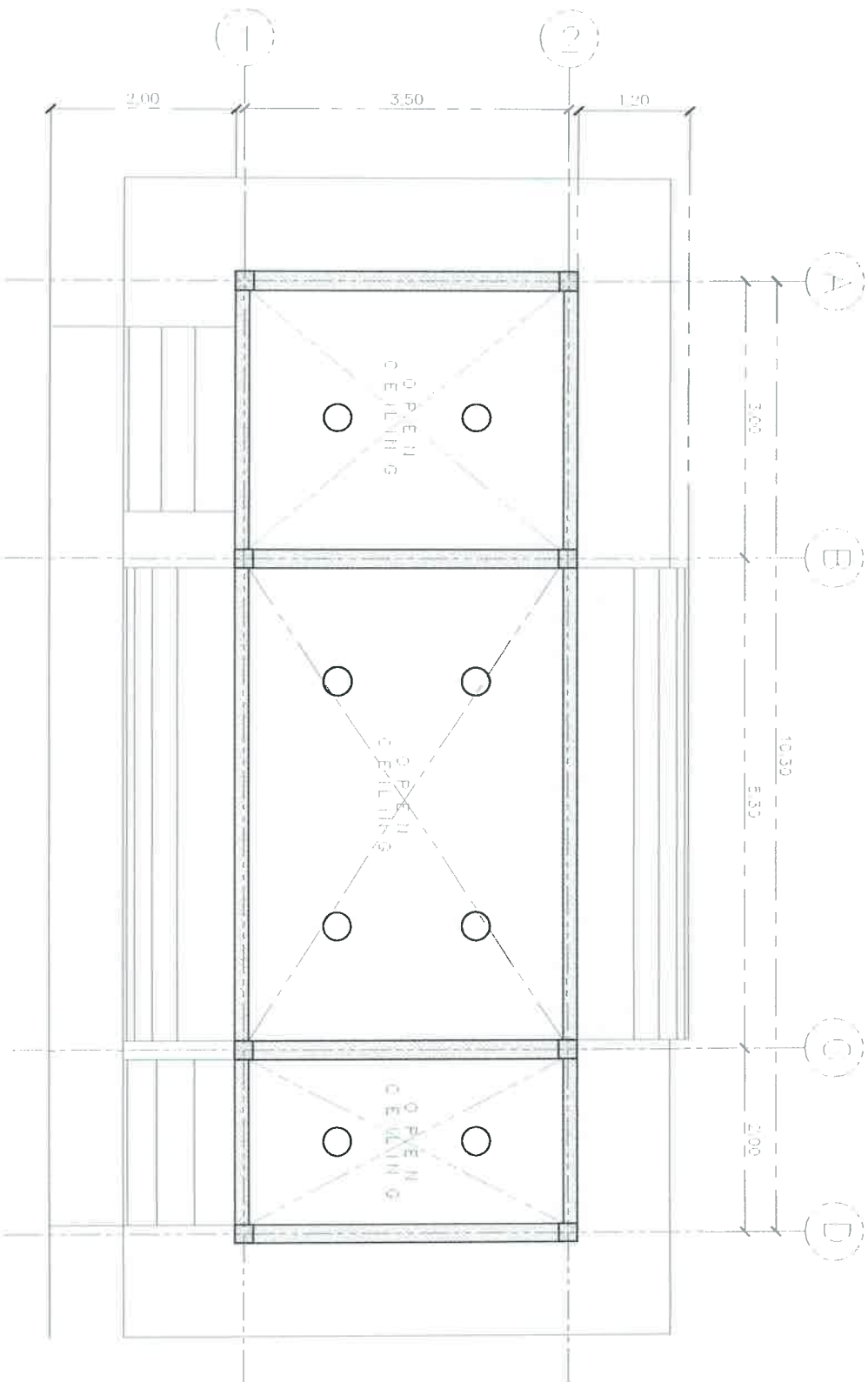




CROSS SECTION
SCALE
1:50M

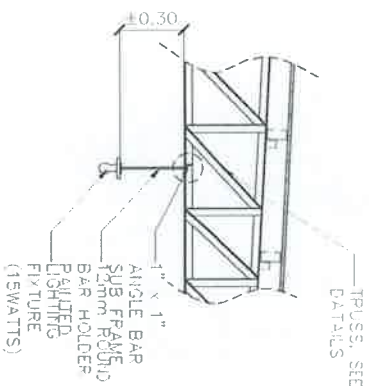
LONGITUDINAL SECTION
SCALE
1:50M

PHILRICE PHILIPPINE RICE RESEARCH INSTITUTE CARRIAGE LANE, LOS BAÑOS, CAVITE		DRAWING AND SPECIFICATIONS DIVISION DESIGNED BY: [NAME] CHECKED BY: [NAME] APPROVED BY: [NAME]		PROJECT TITLE CONSTRUCTION OF POWERHOUSE, EXTENSION OF PRIMARY LINE & RELOCATION OF TRANSFORMER		PHYSICAL PLANT DIVISION INFRASTRUCTURE UNIT SCIENCE CITY OF MUÑOZ, NUEVA ECUA		DESIGN BY: [NAME] CHECKED BY: [NAME] APPROVED BY: [NAME]		DESIGN BY: [NAME] CHECKED BY: [NAME] APPROVED BY: [NAME]		SHEET NUMBER A5 5 19	
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LEGEND:

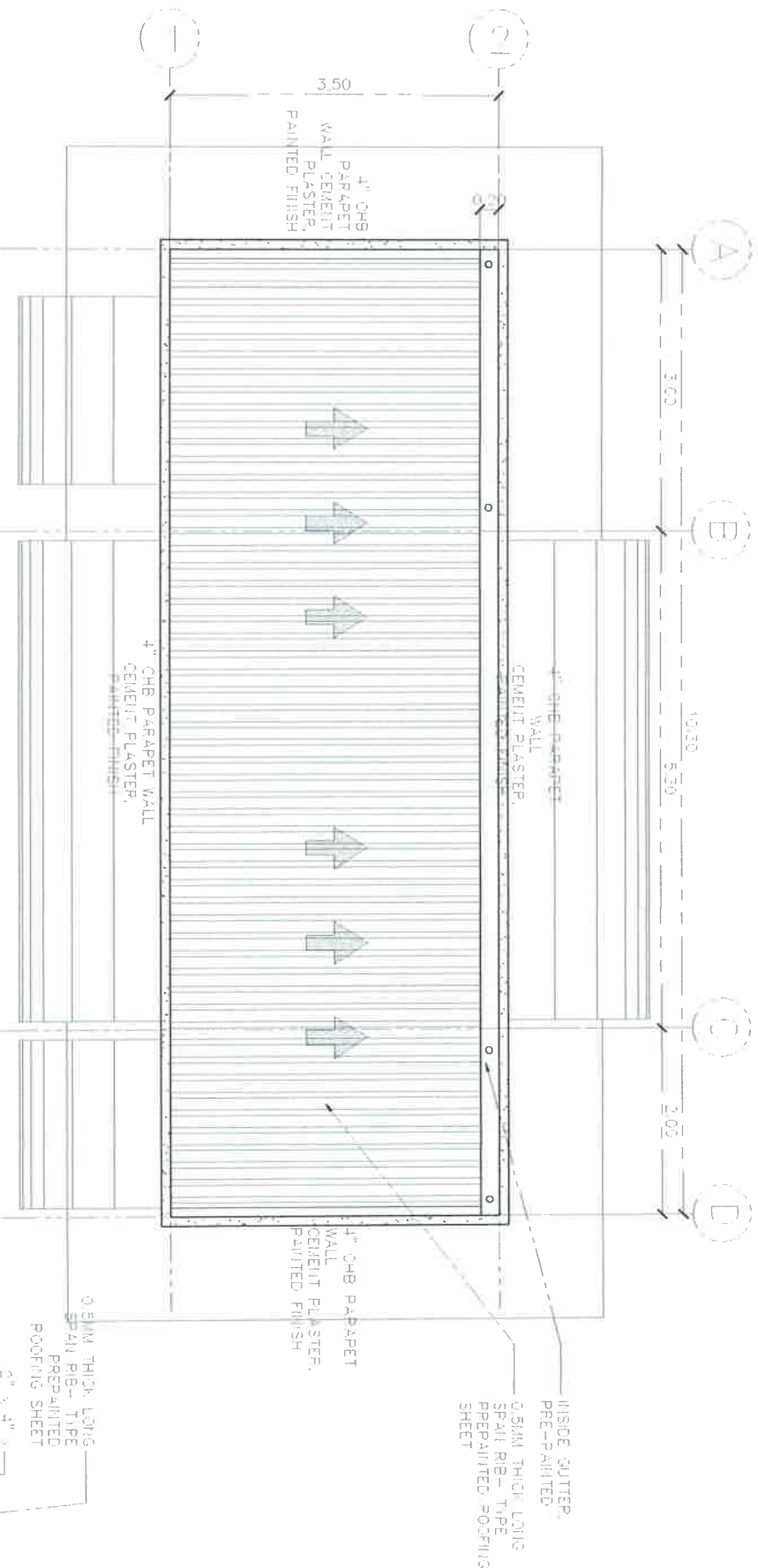
15 WATTS LED
LIGHTING ON
RECEPTACLE



REFLECTED CEILING PLAN
Scale 1:50M

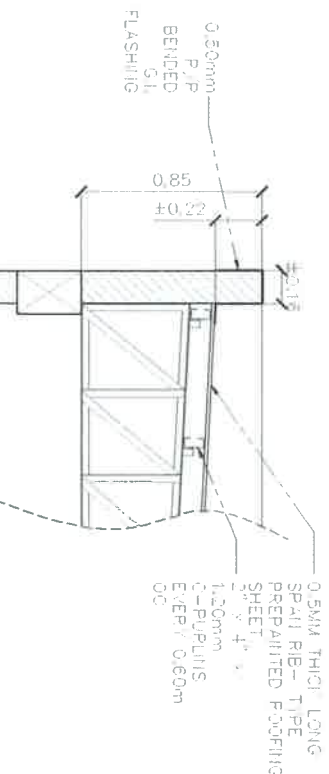
DETAIL OF LIGHTING FIXTURE
Scale 1:50M

PHILRICE PHILIPPINE RICE RESEARCH INSTITUTE 16000, DAVAO DEL SUR, PHILIPPINES	Drawings and Specifications duly signed, stamped or marked as instruments of service and shall be the property of the Institute. They are made in association or not, it shall be the responsibility of the architect or author of said documents to duplicate or to make copies of said documents for use by the recipient at their risk.		PROJECT TITLE:		PRODUCED BY:		DESIGN BY:		JOB NUMBER:		REVISIONS:		APPROVED BY:		SHEET NUMBER:	
	CONSTRUCTION OF POWERHOUSE, EXTENSION OF PRIMARY LINE & RELOCATION OF TRANSFORMER		PHYSICAL PLANT DIVISION INFRASTRUCTURE UNIT PHILRICE SCIENCE CITY OF MUNOZ, NUEVA ECUA		ABDUL B. BALIT PDD HOD		GONNEL C. NOLAN PHILRICE - CHD		ABDUL B. BALIT PHILRICE		JOHN C. DE LEON EDD PHILRICE		DATE: COORD BY: DATE:		A6 6 19	

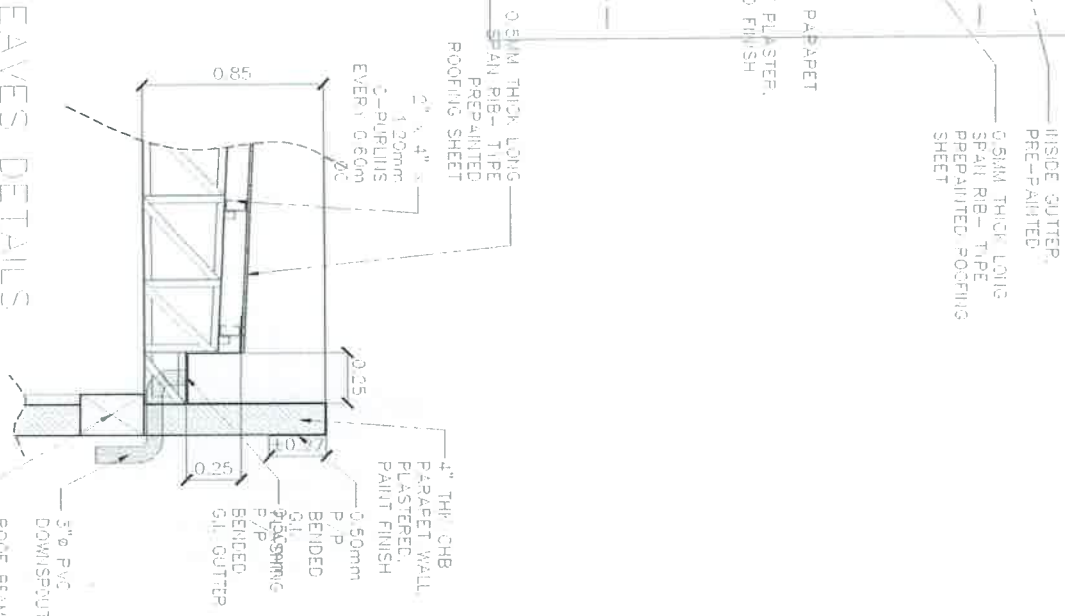


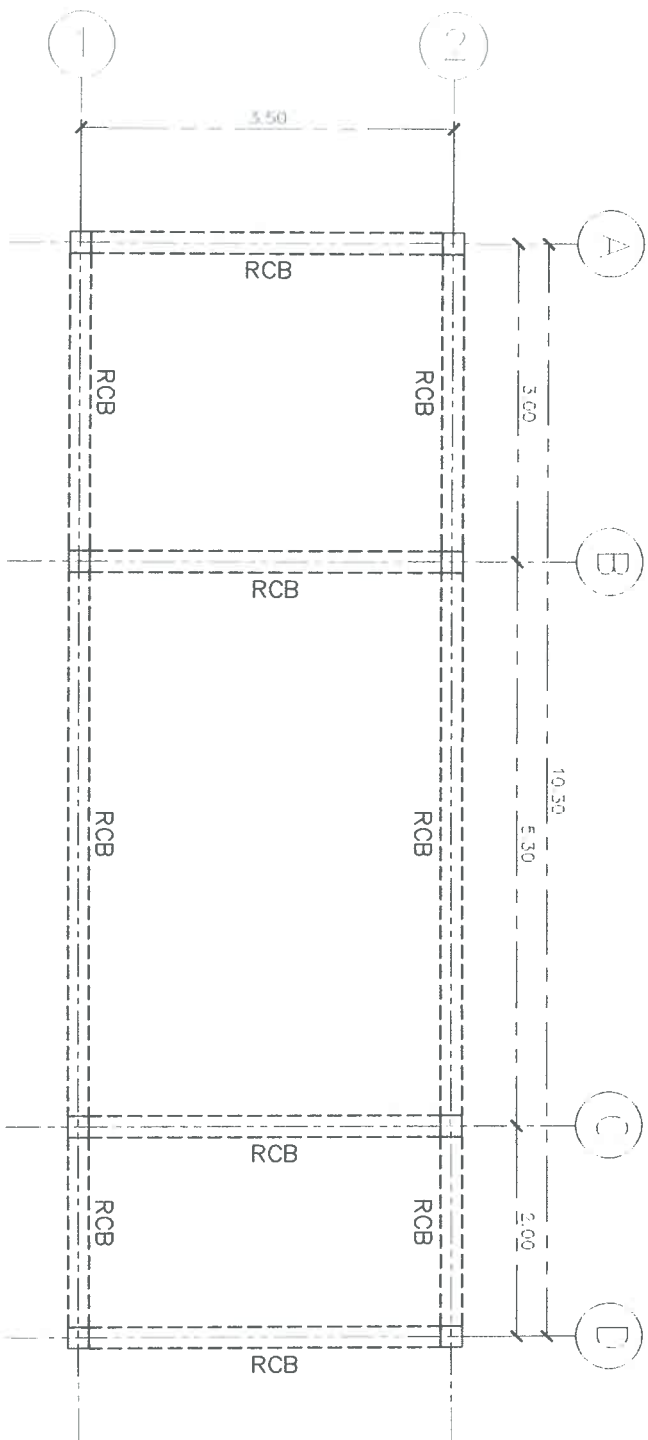
ROOF PLAN
SCALE 1:50M

ROOF APEX DETAILS
SCALE 1:50M

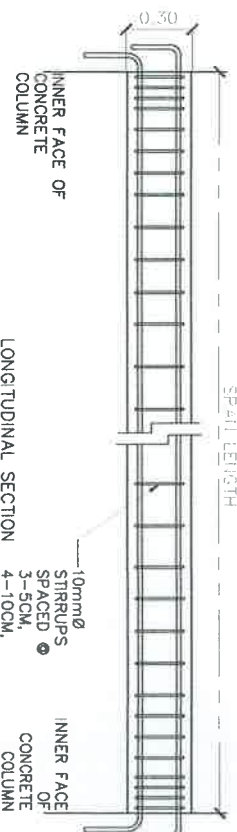
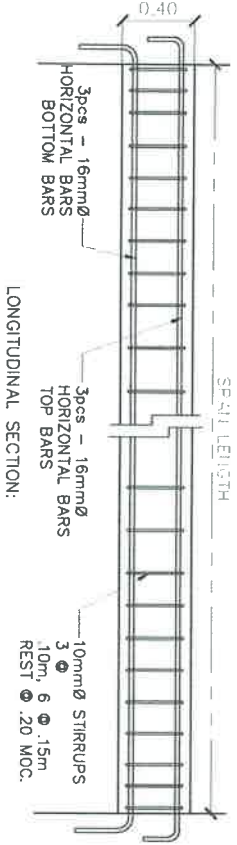
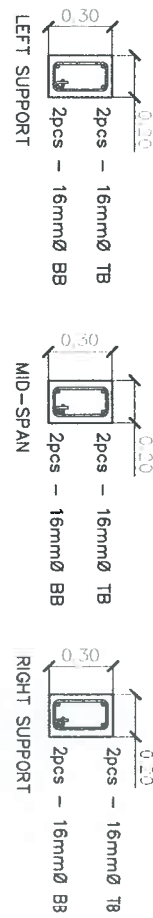
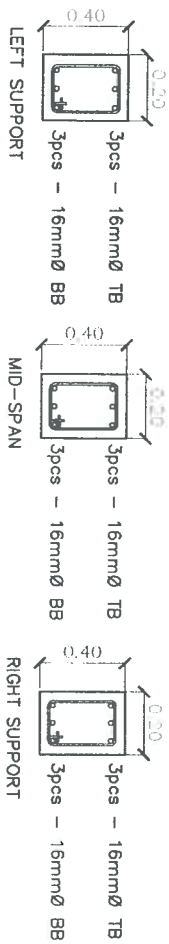


ROOF EAVES DETAILS
SCALE 1:50M





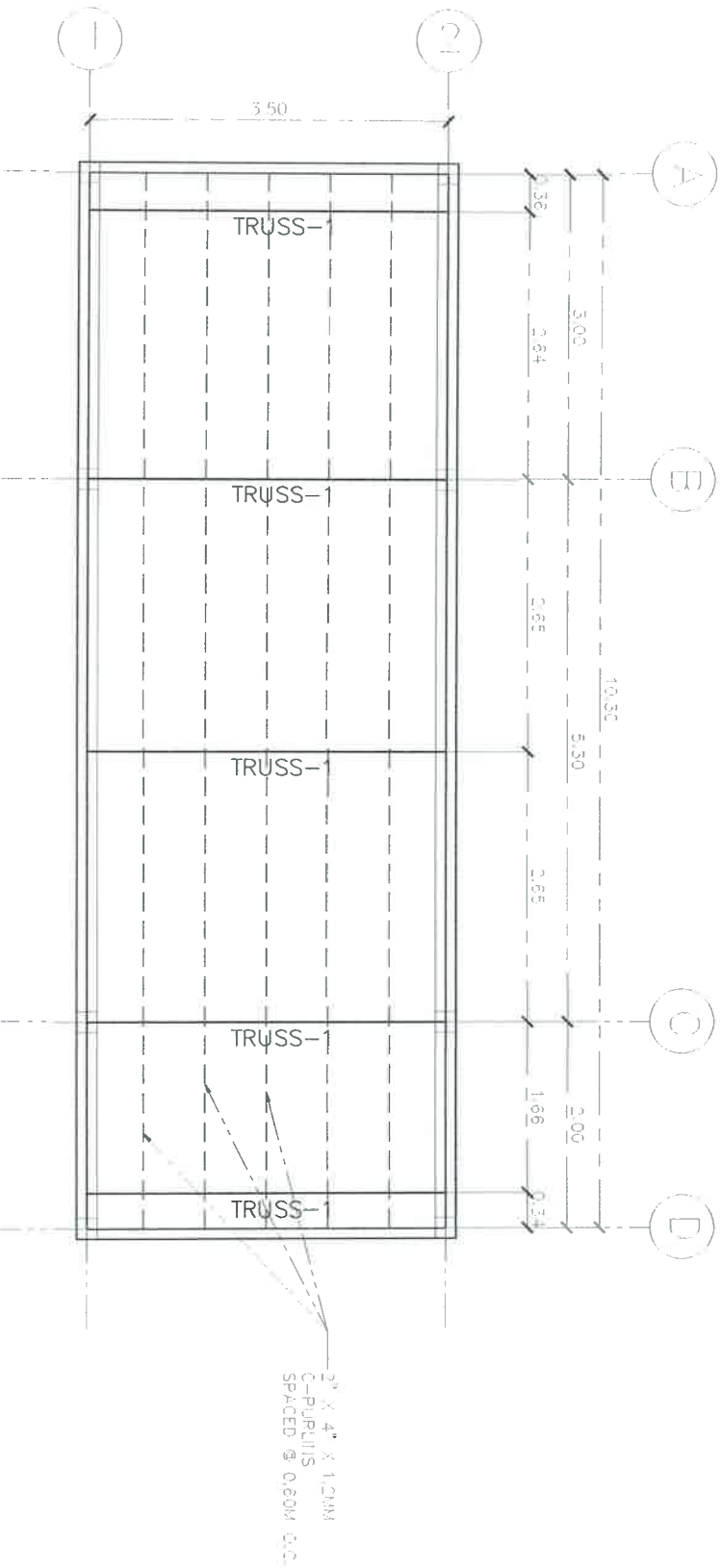
Roof Beam Layout



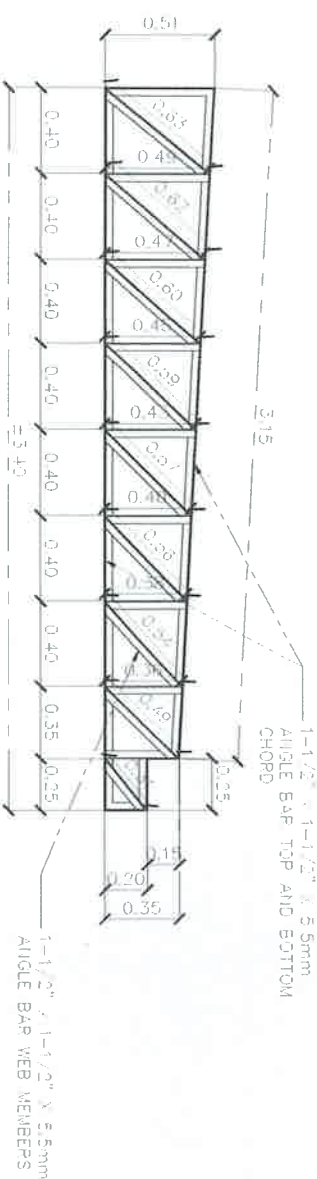
FTB DETAILS

Roof Beam (RCB) Details

PHILRICE PHILIPPINE RICE RESEARCH INSTITUTE CITY OF PASIG, RIZAL		PROJECT TITLE		DESIGNED BY		CHECKED BY		APPROVED BY		DATE		SHEET NUMBER	
CONSTRUCTION OF POWERHOUSE, EXTENSION OF PRIMARY LINE & RELOCATION OF TRANSFORMER		PHYSICAL PLANT DIVISION, INFRASTRUCTURE UNIT, SCIENCE CHIEF, NIEVA ECIA		ARMANDO T. MANUEL, CIVIL ENGINEER		REGATO B. BAUT, PPD HEAD		DONNEL C. NOVA, STATION MASTER, PASIG - SUD		ARMAR T. MONTICANO, DED FOR AS, PASIG		JOHN C. DE LUNA, EXECUTIVE DIRECTOR, PASIG	
S2		10		19									

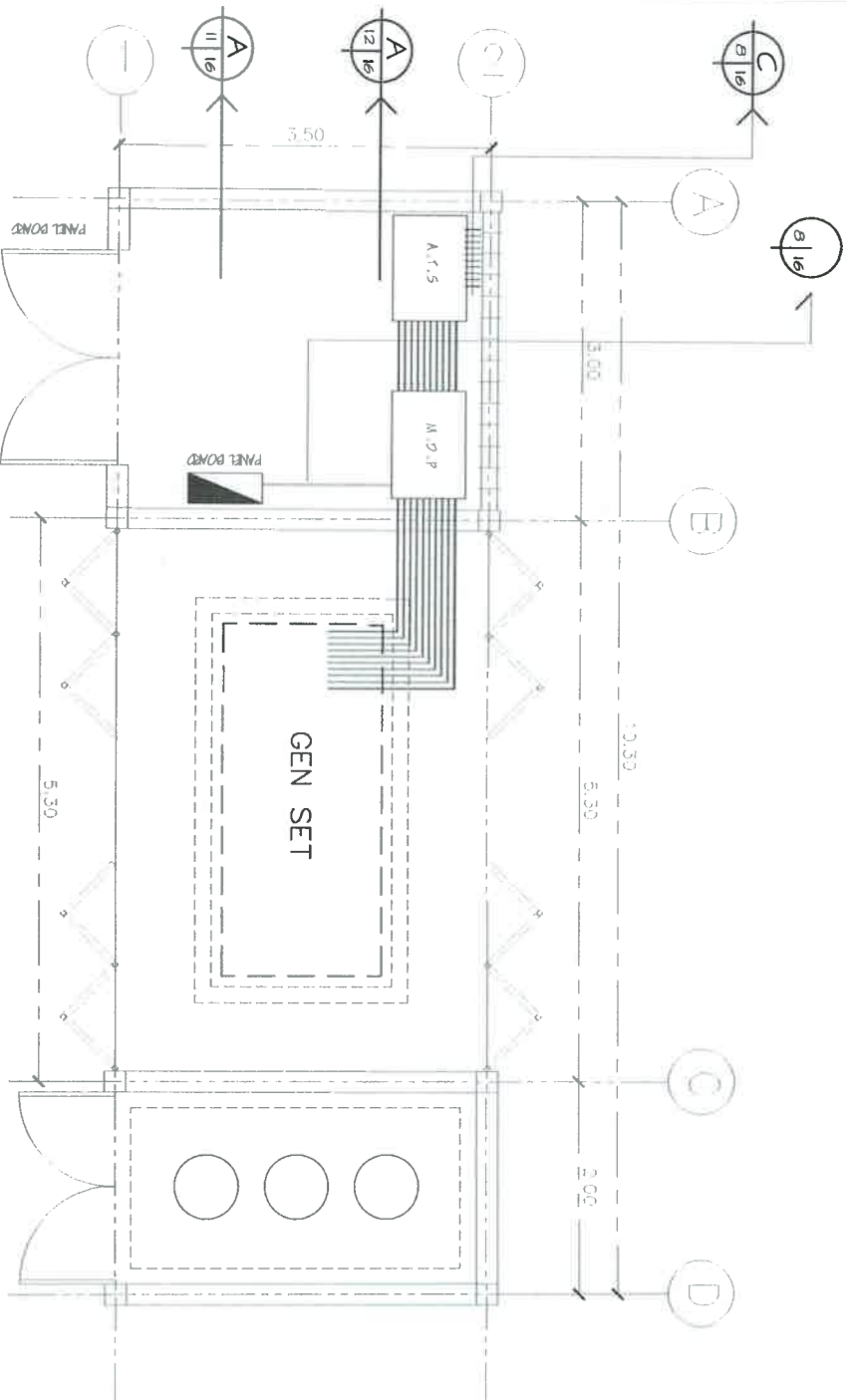


ROOF FRAMING PLAN
SCALE 1:150M

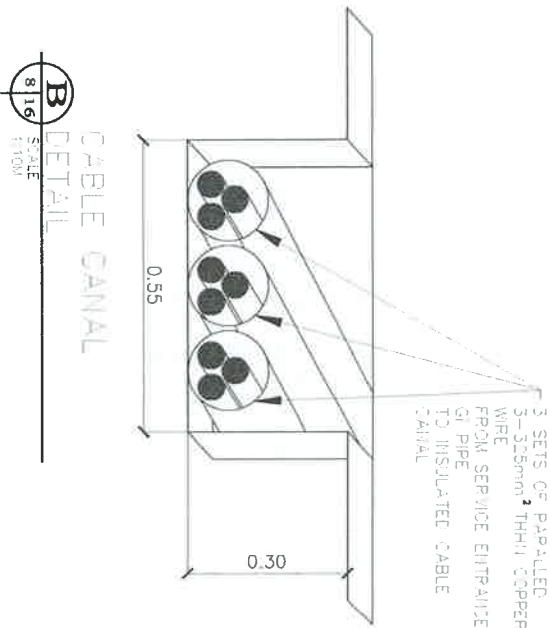


TRUSS-1 DETAILS
SCALE 1:50M

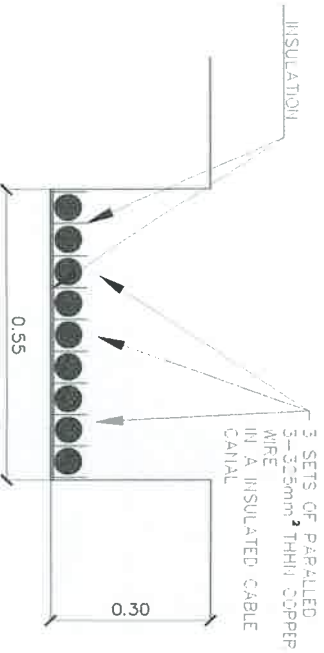
PHILRICE PHILIPPINE RICE RESEARCH INSTITUTE CARMELITE DRIVE, LOS BAYAN, MARIKINA CITY, CAVITE	DESIGNED BY J. A. BERNAL - JR., S. BERNAL JR.	PROJECT TITLE CONSTRUCTION OF POWERHOUSE, EXTENSION OF PRIMARY LINE & RELOCATION OF TRANSFORMER	PROJECTED BY PHYSICAL PLANT DIVISION INFRASTRUCTURE UNIT SCIENCE PHILICE NUEVA ECUA	DESIGN BY RAYMUND T. RAJARELO CIVIL ENGINEER	NOTED BY REYNALDO E. BAYAT PROJ. HEAD	DATE JAN 15, 2024	REVIEWED BY JOHN C. DE LEON EXECUTIVE DIRECTOR	DATE JAN 15, 2024	SHEET NUMBER 11 OF 19



E
ELECTRICAL LAYOUT PLAN
8 17 11.50M

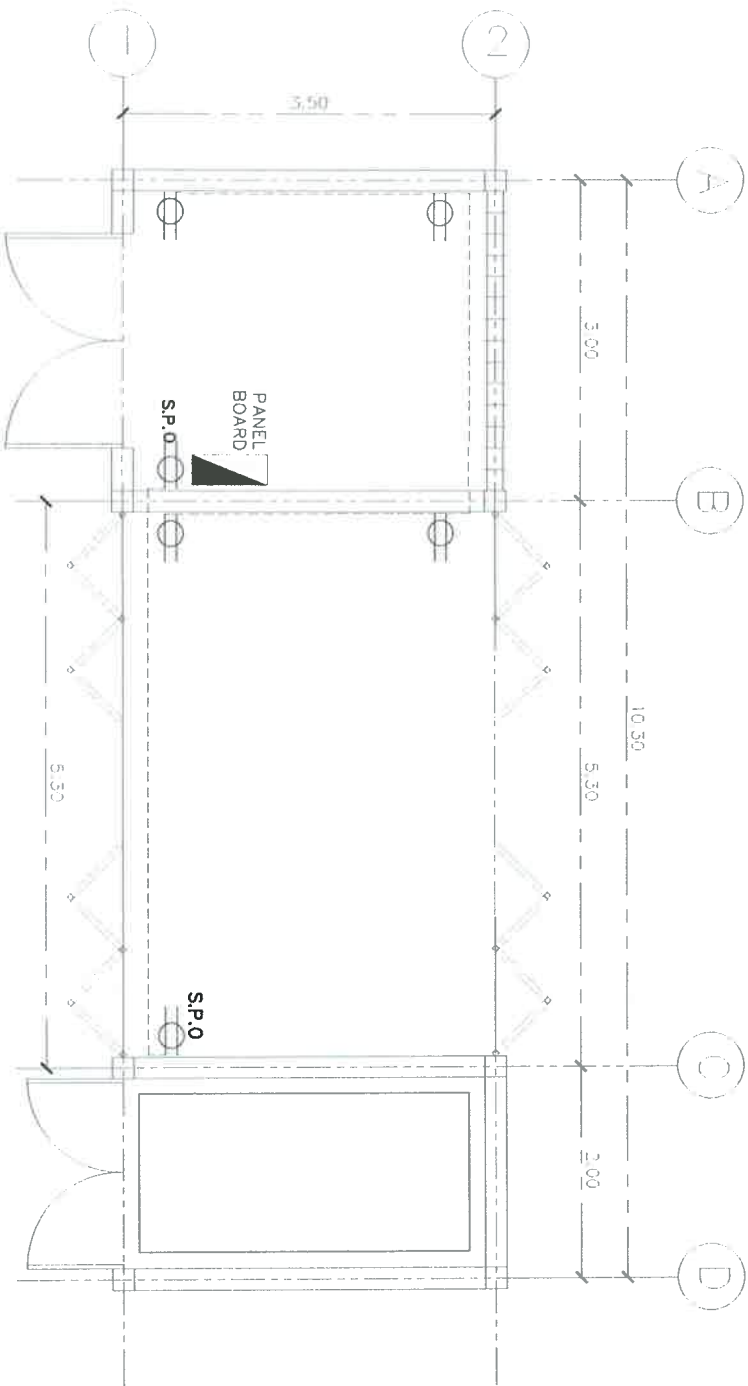


B
CABLE CANAL
DETAIL
8 16 11.00M



C
CABLE CANAL
DETAIL
8 16 11.00M

PHILRICE PHILIPPINE RICE RESEARCH INSTITUTE CAMPUS, CORDOBA, CAVITE CAMPUS, CORDOBA, CAVITE	Drawing and Specifications duly signed, stamped or sealed, as instruments of service, and shall be the property of the Institute. They are made in accordance with the object for which they are made and shall not be used for any other purpose without the written consent of the Institute. To duplicate or to make copies of said documents is prohibited.		PROJECT TITLE		PROJECTED BY		REVIEWED BY		CHECKED BY		DESIGNED BY		RECOMMENDED BY		APPROVED BY		SHEET NUMBER	
	CONSTRUCTION OF POWERHOUSE, EXTENSION OF PRIMARY LINE & RELOCATION OF TRANSFORMER		PHYSICAL PLANT DIVISION INFRASTRUCTURE UNIT SCIENCE CITY OF NUEVA ECUA		JOY E. ANTONIO ELECTRICAL ENGINEER DEC. NO. 1999		REYNOLD E. BAYAT PPE HEAD		DONNEL C. MOA STATION MANAGER FEBRUARY - 2001		ABNER T. MONTOLIVO DES. FOR. ASST. FEBRUARY		JOHN C. DE LUNA EXECUTIVE DIRECTOR, FEBRUARY		DATE DRAWN BY CHECKED BY		E1 12 19	



POWER LAYOUT PLAN
1:50M

 PHILRICE PHILIPPINE RICE RESEARCH INSTITUTE CIRAD, STAGUE 77000 LAOAG, ILOCOS SUR, PHILIPPINES	Drawings and Specifications duly signed, stamped or sealed as instruments of service shall be the property of the Institute and shall remain the property of the Institute, whether the object for which they are made is executed or not. It shall be the responsibility of the architect or engineer to protect the Institute from any and all claims for duplication or to make copies of said documents for the Institute at any time.	PROJECT TITLE: CONSTRUCTION OF POWERHOUSE, EXTENSION OF PRIMARY LINE & RELOCATION OF TRANSFORMER	PROJECTED BY: PHYSICAL PLANT DIVISION INFRASTRUCTURE UNIT PHILRICE CITY OF MUNOZ, NUENA ECIA	PROJECTED BY: ENR. J. J. J. J. ENR. J. J. J. J. LIC. NO. 37370	WRITTEN BY: RENO B. B. B. B. 1791 10/20	DATE USED: 2020.12.10 PHILRICE - CNU	RECOMMENDING: J. J. J. J. J. J. J. J. PHILRICE	APPROVED BY: J. J. J. J. J. J. J. J. PHILRICE	DESIGN BY: DATE: CADD BY: DATE: CHECKED BY: DATE:	SHEET NUMBER: E3 14 19
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ELECTRICAL SPECIFICATIONS

1. ALL ELECTRICAL WORKS SHALL COMPLY WITH THE PROVISIONS OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE WITH THE RULES AND REGULATION OF THE OF THE NATIONAL AND LOCAL AUTHORITIES CONCERNED IN THE ENFORCEMENT OF THE ELECTRICAL LAWS AND REGULATIONS OF THE UTILITIES COMPANIES CONCERNED.
2. SERVICE ENTRANCE VOLTAGE TO THE BUILDING SHALL BE 240 VOLTS, 60 HERTZ, THREE PHASE.
3. THE CONDUCTOR SHALL BE RATED AND ORIENT THE ACTUAL LOCATION OF CONCRETE TERMINAL POLE FOR CONNECTION TO THE POWER SUPPLY AND TELEPHONE.
4. ALL INSTALLATION CONCEALED FROM VIEW WIRING SHALL BE IN CASE OF POLYVINYL CHLORIDE (PVC) SCHEDULE 40 EIGHT POWER AND TELEPHONE SERVICE WHICH SHALL BE RIGID STEEL CONDUIT (RSC) OR OTHER WISE NOTED.
5. PULL BOXES OF APPROPRIATE SIZE SHALL BE PROVIDED, EVEN IF NOT INDICATED IN THE DRAWINGS TO ACCOMMODATE THE NUMBER OF SPLICES OF WIRE.
6. ALL MATERIALS TO BE USED SHALL BE BRAID NEW AND APPROVED TYPE APPROPRIATE FOR BOTH LOCATION AND INTENDED USE.
7. ELECTRICAL INSTALLATION SHALL BE UNDER DIRECT SUPERVISION OF A duly REGISTERED ELECTRICAL ENGINEER OR A REGISTERED MASTER ELECTRICIAN.
8. NO PERSON IN THE DESIGN SHALL BE DONE WITHOUT THE PRIOR KNOWLEDGE AND APPROVAL OF THE DESIGNER AND THE OWNER. ANY SUCH PERSONS DONE WITHOUT APPROVAL SHALL BE CAUSE RESPONSIBILITY OF THE DESIGNER TO CEASE THE WHOLE.
9. MOUNTING SHALL BE AS FOLLOWS:
 - LIGHTING SWITCHES SHALL BE 1.40 METERS ABOVE FINISH FLOOR LINE.
 - CONVENIENCE OUTLETS SHALL BE 0.30 METERS ABOVE FINISH FLOOR LINE.
 - TABLE OUTLETS SHALL BE 0.45 METERS ABOVE COUNTER ON THE CENTER.
 - CABINET PANELBOARD SHALL BE 1.40 METER ABOVE FLOOR FINISH UNLESS OTHERWISE DIRECTED.

POWERHOUSE DISTRIBUTION

CMT NO.	LOAD DESCRIPTION	QTY.	VOLTAGE	TOTAL VA	AMP/OUT	TOTAL AMP/OUT	CMT PROTECTION			WIRE	CONDUIT	
							AT	AF	mm sq		TYPE	mm
1	LIGHTING OUTLET	8	230	800	3.48	3.48	18	50	3 -	THHN	20	PVC
2	CONVENIENCE OUTLET	4	230	1440	6.26	6.26	20	50	3 -	THHN	20	PVC
3	SPECIAL PURPOSE	2	230	2000	8.69	8.69	20	50	3 -	THHN	20	PVC
4	SPARE (SPO)		230	2000	8.69	8.69	20	50	3 -	THHN	20	PVC
TOTAL					27.12 A	27.12 A	3.5					

LINE CURRENT = 27.12 A

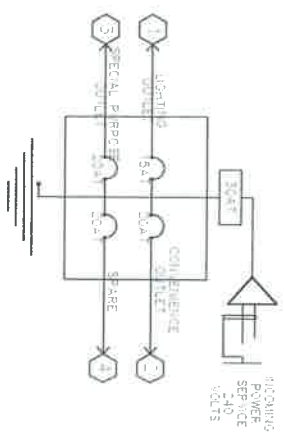
FOR FEEDER CONDUCTOR

1.25 * 27.12 A = 33.9 A

USE 3-5.5mm sq THHN CU WIRE III 25mm PVC PIPE

FOR FEEDER PROTECTION:

USE 30AT, 30AT SINGLE PHASE 240V, 60HZ, MOCB BOLT ON TYPE



PANEL BOARD
DIAGRAM

 HILRICE THE RICE RESEARCH INSTITUTE MORONG, RIZAL, PHILIPPINES	PROJECT TITLE		PROPOSED BY		REVIEWED BY		NOTED BY		DATE		SHEET NUMBER		
	CONSTRUCTION OF POWERHOUSE, EXTENSION OF PRIMARY LINE & RELOCATION OF TRANSFORMER		PHYSICAL PLANT DIVISION INFRASTRUCTURE UNIT PILGRICE CITY OF MUNOZ, NUEVA ECUA		JOY B. TAYO ELECTRICAL ENGINEER LIC. NO. 57970		BOJANG B. BAYAT PRO. HEAD		DONNEL S. LUNA STATION MANAGER PILGRICE - CNU		APPROVED BY		
DATE		DATE		DATE		DATE		DATE		DATE		DATE	
E4		15		19									

ELECTRICAL SPECIFICATIONS

1. ALL ELECTRICAL WORKS SHALL COMPLY WITH THE PROVISIONS OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE WITH THE RULES AND REGULATIONS OF THE CP THE NATIONAL AND LOCAL AUTHORITIES CONCERN IN THE ENFORCEMENT OF THE ELECTRICAL LAWS AND REGULATIONS OF THE UTILITIES COMPANIES CONCERN.
2. SERVICE ENTRANCE VOLTAGE TO THE BUILDING SHALL BE 240VOLTS, 60 HERTZ, THREE PHASE.
3. THE CONTRACTOR SHALL VERIFY AND CORRECT THE ACTUAL LOCATION OF CONCRETE TERMINAL POLE FOR CONNECTION TO THE POWER SUPPLY AND TELEPHONE.
4. ALL INSTALLATION CONCEALED FROM VIEW WRIRING SHALL BE IN USE OF POLYVINYL CHLORIDE (PVC) SCHEDULE 40 EMBEDED POWER AND TELEPHONE SERVICE WHICH SHALL BE RIGID STEEL CONDUIT (RSC) OR OTHERWISE NOTED
5. PULL BOXES OF APPROPRIATE SIZE SHALL BE PROVIDED, EVEN IF NOT INDICATED IN THE DRAWING TO ACCOMMODATE THE NUMBER OF SPURCES OF WIRE
6. ALL MATERIALS TO BE USED SHALL BE BRAID NEW AND APPROVED TYPE APPROPRIATE FOR BOTH LOCATION AND INTENDED USE
7. ELECTRICAL INSTALLATION SHALL BE UNDER DIRECT SUPERVISION OF A FULLY REGISTERED ELECTRICAL ENGINEER OR A REGISTERED MASTER ELECTRICIAN.
8. NO WORK IN THE DESIGN SHALL BE DONE WITHOUT THE PRIOR KNOWLEDGE AND APPROVAL OF THE DESIGNER AND THE OWNER. ANY SUCH REVISIONS DONE WITHOUT APPROVAL SHALL BE CAUSE RESPONSIBILITY OF THE DESIGNER TO CEASE THE WORK.
9. MOUNTING SHALL BE AS FOLLOWS:
 - LIGHTING FIXTURES SHALL BE 1.40 METERS ABOVE FINISH FLOOR LINE
 - CONVENIENCE OUTLETS SHALL BE 0.30 METERS ABOVE FINISH FLOOR LINE
 - TABLE OUTLETS SHALL BE 0.45 METERS ABOVE COUNTER ON THE CENTER
 - CABINET PANELBOARD SHALL BE 1.40 METER ABOVE FLOOR FINISH UNLESS OTHERWISE DIRECTED.

MAIN DISTRIBUTION PANEL

CMT. NO.	LOAD DESCRIPTION	CMT. VOLTAGE	TOTAL VA	FLC	TOTAL AMP/PHASE				CMT PROTECTION		WIRE		CONDUIT	
					AB	BC	CA	AT	AF	mm. sq	TYPE	mm	TYPE	
1	ADMIN BUILDING /	240		140	140	140	140	250	500	3 - 200	THHN	100	PVC	
2	SEEDS REPAIRHOUSE	240		140	140	140	140	250	500	3 - 150	THHN	90	PVC	
3	SPARE	240		140	140	140	140	250	500		THHN	90	PVC	
4	SPARE	240		140	140	140	140	250	500		THHN	90	PVC	
5	SPARE	240		50	50	50	50	100	200		THHN	90	PVC	
6	SPARE	240		50	50	50	50	100	200		THHN	90	PVC	

LINE CURRENT = $660 \times 1.73 \text{ A}$
= 1,141.8 A

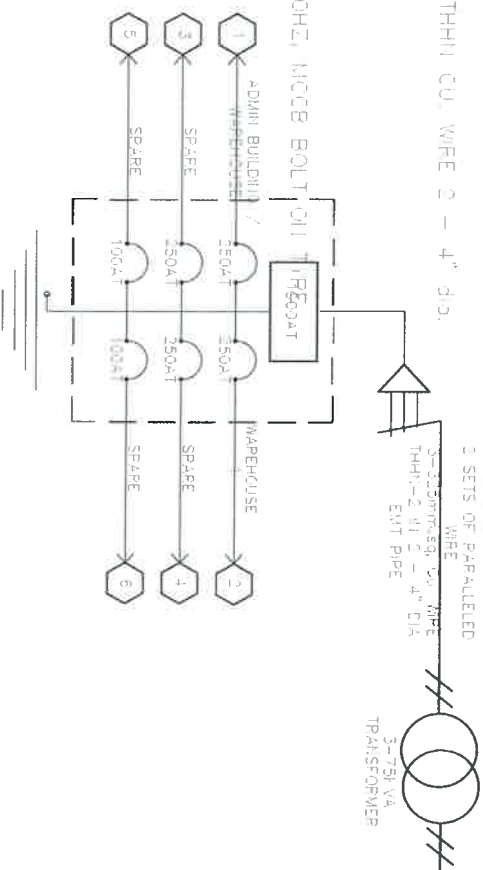
DEMAND LOAD = $1,141.8 \text{ A} \times 75\%$
= 856.35 A

FOR FEEDER CONDUCTOR

$1.25 \times 856.35 \text{ A} = 1,070.44 \text{ A}$
USE 2 SETS OF PARALLELED 3-35mm²sq. THHN CU. WIRE 2 - 4" dia.
EMT PIPE

FOR FEEDER PROTECTION

USE 1000A, 1000AT THREE PHASE 240V, 60HZ, MCCB BOLT ON TRIPCOAT



1A. FINAL - JUNE 5, 2020

PROJECT FILE

PROPOSED BY

PROPOSED BY

NOTED BY

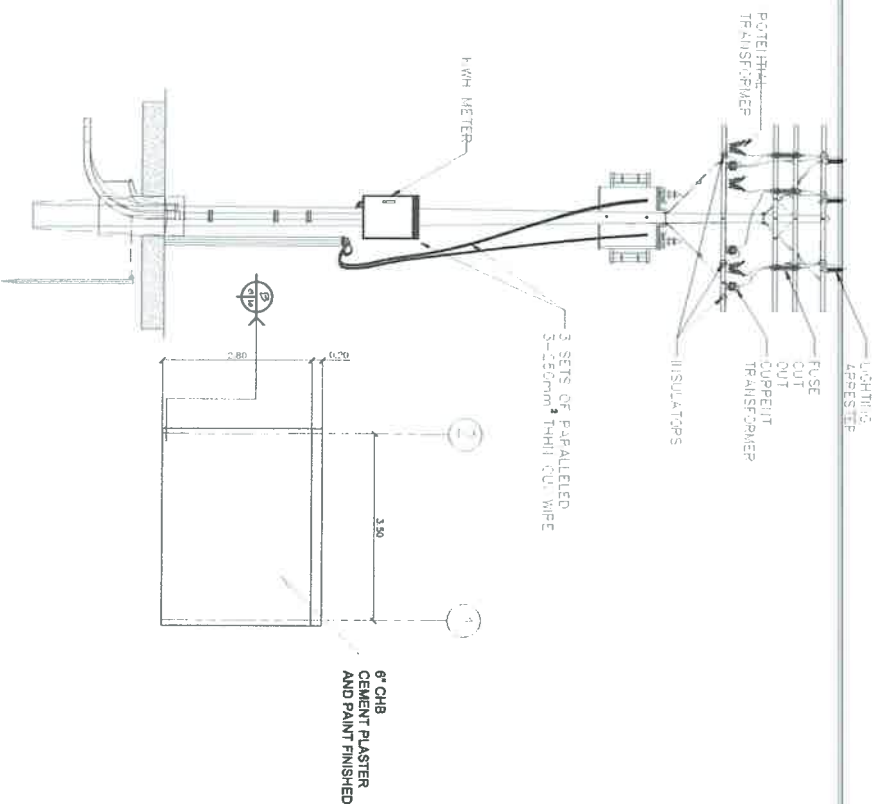
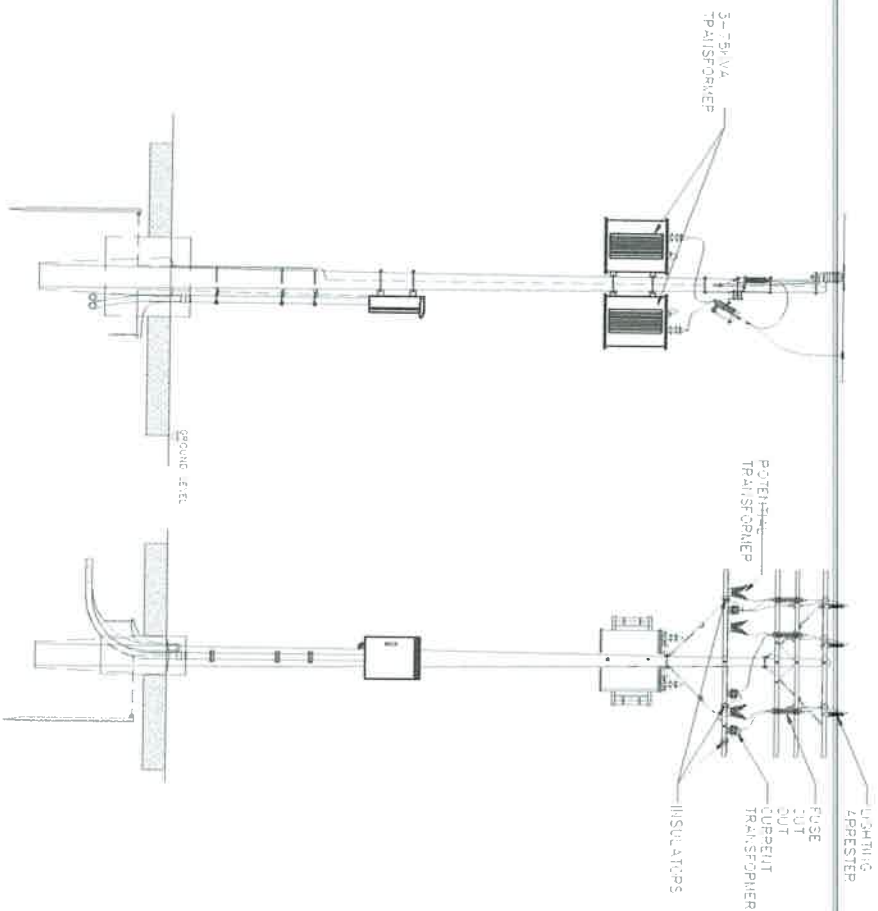
DATE

REVISIONS

APPROVED BY

DESIGN BY

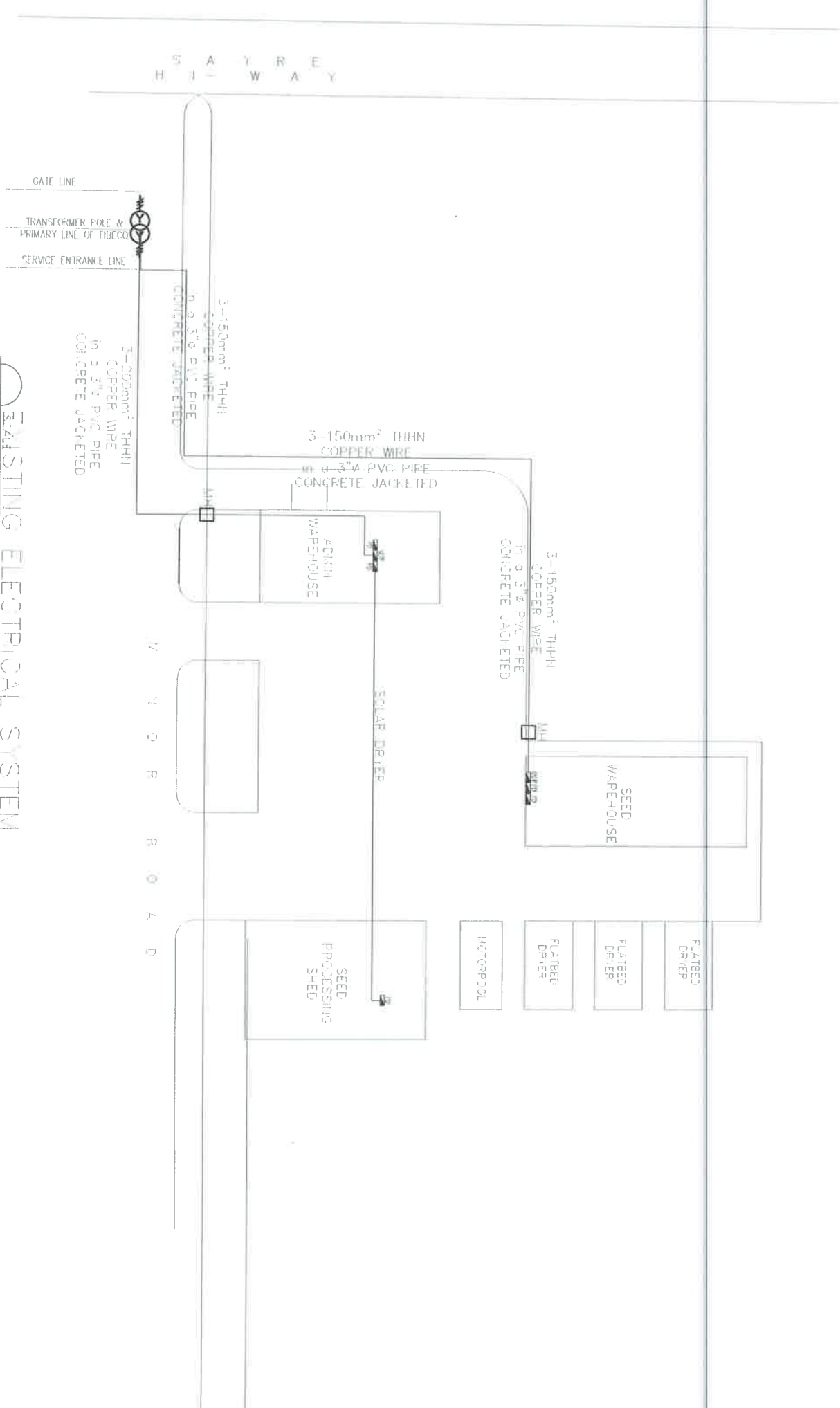
SHEET NUMBER



TRANSFORMER POLE LAYOUT PLAN

TRANSFORMER POLE LAYOUT PLAN

1:1000



EXISTING ELECTRICAL SYSTEM
1500M

PHILRICE PHILIPPINE RICE RESEARCH INSTITUTE M. C. JAVAR & SONS, INC.	P.R. 2014 - APR. 3, SECTION 20		PROJECT TITLE		DESIGNED BY		CHECKED BY		APPROVED BY		DATE		SHEET NUMBER						
	CONSTRUCTION OF POWERHOUSE, EXTENSION OF PRIMARY LINE & RELOCATION OF TRANSFORMER				PHYSICAL PLANT DIVISION INFRASTRUCTURE UNIT SCIENCE CITY OF MUNOZ, NUEVA ECUA		JOY R. ANTONIO ELECTRICAL ENGINEER LAP NO. 5795		REYNALDO E. BLAT PRO. HEAD		DONALD S. HOLA STATION MANAGER PALABOC - CAD		ALBERTO T. MONTESANO DED FOR ASST. PALABOC		JOHN C. DEL ROSA DEPUTY DIRECTOR, PALABOC		DATE DUE BY DATE DESIGNED BY		E7 18 19

