







CONSTRUCTION OF FOOD SCIENCE LABORATORY ELECTRICAL DRAWING

PROJECT:PROPOSED FACILITIES AT COLLEGE OF NATURAL RESOURCES IN THE 12TH FIVE YEAR PLAN						NORTH		NOTES	DATE	SCALE	DRAWING NO
FUNDED BY:GOVERNEMENT OF INDIA / GNH COMMISSION.			COLLEGE OF NATURAL RESOURCES www.cnr.edu.bt www.rub.edu.bt		DESIGNED AND DRAWN BY: YADAV DHUNGANA Email: yadav00716@cnr.edu.bt Phone:17525923	ENDORSED BY: PRESIDENT COLLEGE OF NATURAL RESOURCES, ROYAL UNIVERSITY OF BHUTAN, LOBEYSA		APPROVED BY: PUNAKHA DZONGKHAG	 PLOT NO: THARM NO:	1:1	DRAWING TITLE: COVER PAGE - ELECTRICAL
DRAWING NAME: FOOD SCIENCE LABORATORY											
LOCATION: LOBEYSA, PUNAKHA, BHUTAN.											

LEGENDS


SYMBOLS	DESCRIPTION
	6A Modular switches (MK make/eqvt).
	4' 2X18/20W LED tubelight .
	Slim panel downlight 18W.
	Ceiling fan 1200 sweep, 60W.
	6/16A switch socket combined with indicator (Round Pin) modular type.
TS	Telephone socket outlet point, MK make or eqvt.
MDB	Main distribution board.
SDB	Sub distribution board.

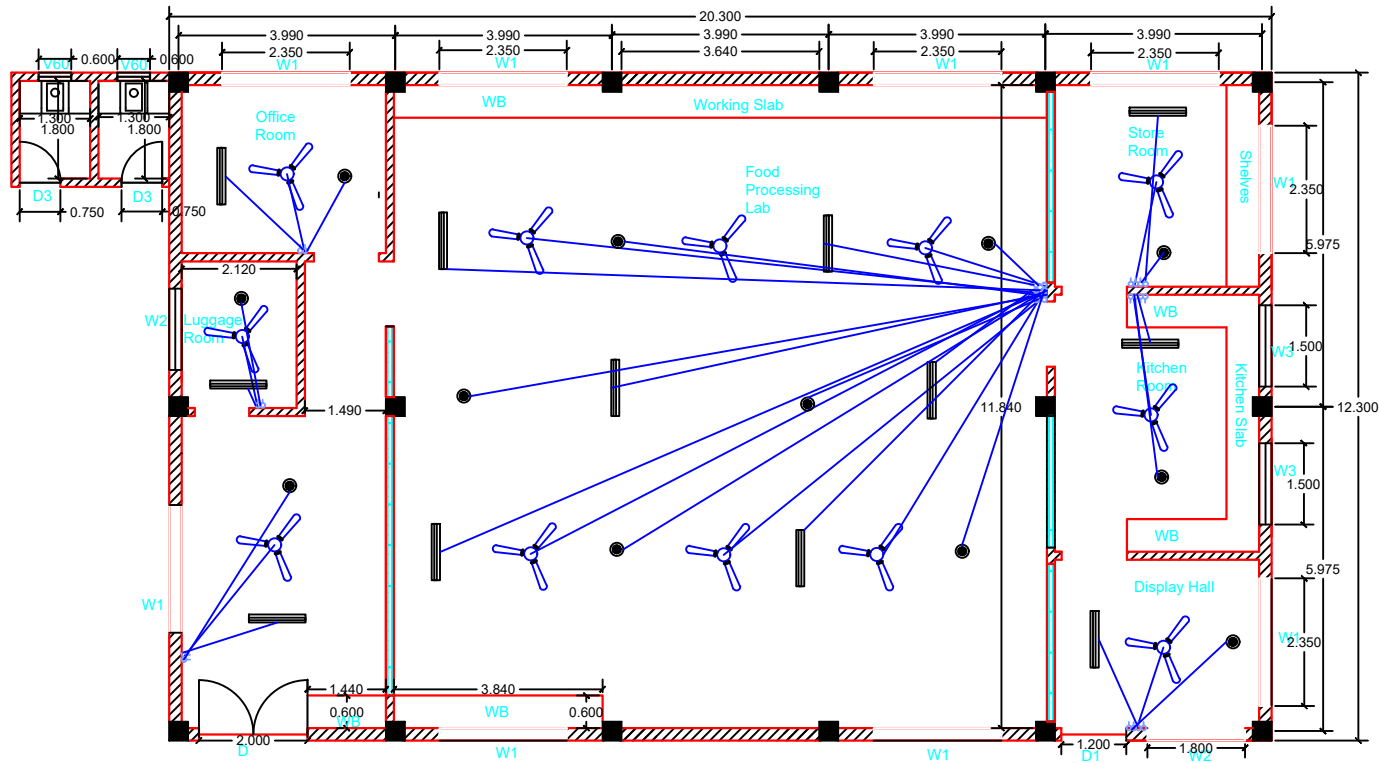
Notes 1:

1. Light points wiring shall be with 1.5sq.mm PVC insulated copper conductor
2. Light supply circuit shall be done with 2.5sq.mm PVC insulated copper conductor
3. Power circuits shall be done with 4sq.mm PVC insulated copper conductor.
4. Different conduit lines shall be used for wiring with different phases.
5. Power points wiring below window shall not be dropped from above but supplied from below the window seal level.
6. Light switchboards shall be 1400mm from finished floor level to top.
7. Power sockets shall be 400mm from finished floor level to top except in Kitchen or toilets/bathrooms (wet area) where the height shall be 1400mm from floor to bottom.
8. No power point shall be looped.
9. Mainswitchboards are to be flushed in the wall 230mm below the ceiling level.


Notes 2:

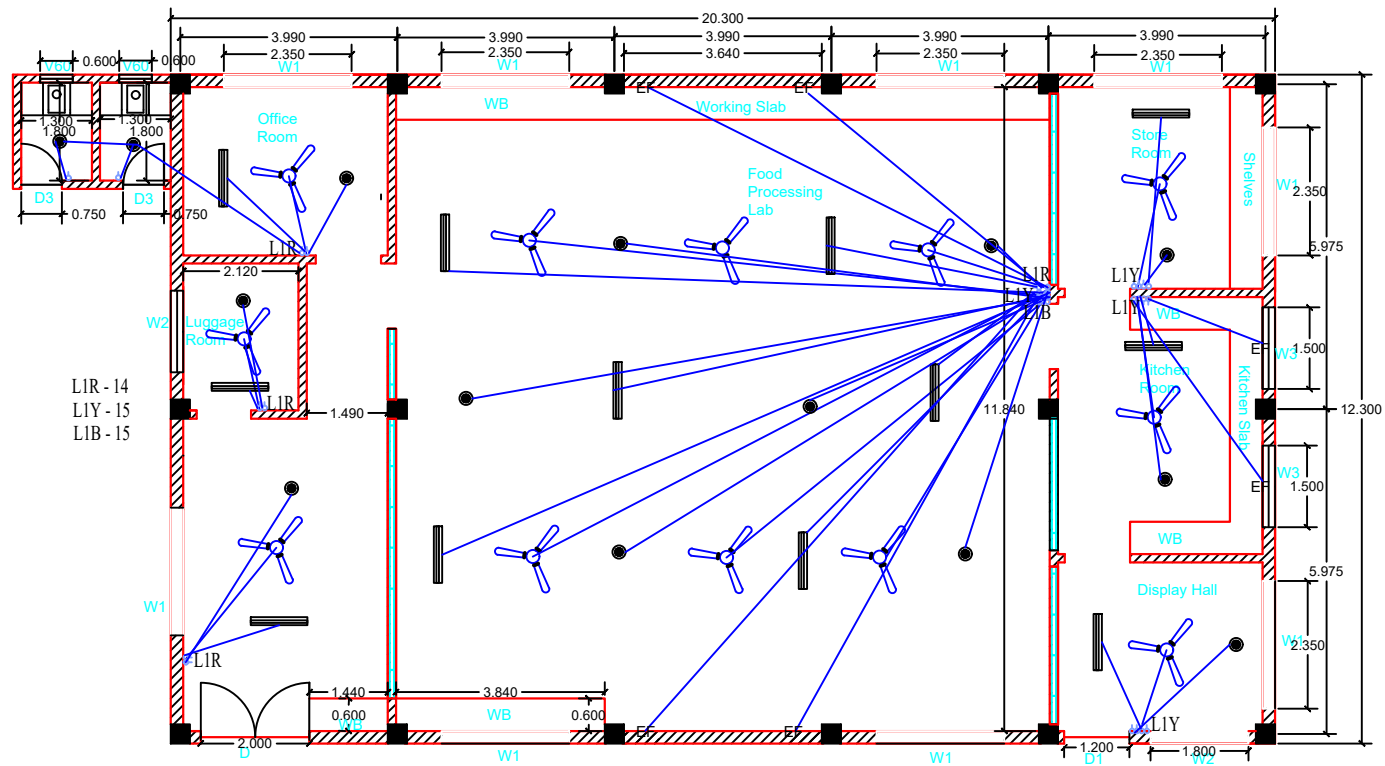
1. Telephone wiring shall be with 0.5Sq.mm PVC insulated and sheathed copper conductor.
2. Ducting to be at least 500mm away from electrical cable routes.
3. To provide bridging where telephone and electric cables cross.
4. Telephone terminal cabinet shall be 300x300x150mm with hole punches to receive 25mm dia conduit on all four sides and mounted at 2500mm above floor level.
5. Cable ducting shall be provided with 25mm dia PVC conduit and shall be common for drawing of TV cables.
6. RJ-11 sockets shall be provided for telephone points.
7. To supply direct lines for all the rooms where points are marked, from the terminal cabinet.
8. The incoming lines shall be brought and connected to incoming side of the terminal cabinet from where lines to all the rooms commence


PROJECT:PROPOSED FACILITIES AT COLLEGE OF NATURAL RESOURCES IN THE 12TH FIVE YEAR PLAN						NORTH	NOTES	DATE	SCALE	DRAWING NO
FUNDED BY:GOVERNEMENT OF INDIA / GNH COMMISSION.		COLLEGE OF NATURAL RESOURCES www.cnr.edu.bt www.rub.edu.bt	DESIGNED AND DRAWN BY: YADAV DHUNGANA Email: yadav4078@cnr.edu.bt Phone:17525823	ENDORSED BY: PRESIDENT COLLEGE OF NATURAL RESOURCES, ROYAL UNIVERSITY OF BHUTAN, LOBEYSA	APPROVED BY: PUNAKHA DZONGKHAG		-ALL DIMENSIONS ARE IN MILLIMETERS UNLESS SPECIFIED OTHERWISE -ALL RELATIVE LEVELS ARE IN METERS UNLESS SPECIFIED OTHERWISE -ALL DIMENSIONS MEASURE UNFINISHED SURFACES UNLESS SPECIFIED OTHERWISE -ALL DIMENSIONS ARE TO BE READ AND NOT SCALED OFF -ANY DISCREPANCY IN DRAWING IS TO BE BROUGHT TO THE IMMEDIATE NOTICE OF THE CONSULTANTS/SUPERVISION TEAM -MINOR ADJUSTMENTS NEED TO BE CARRIED OUT ON SITE TO MATCH WITH EXISTING BUILDING	DRAWING TITLE: LEGENDS	1:1	E-00
DRAWING NAME: FOOD SCIENCE LABORATORY					PLOT NO:					
LOCATION: LOBEYSA, PUNAKHA, BHUTAN.					THARM NO:					

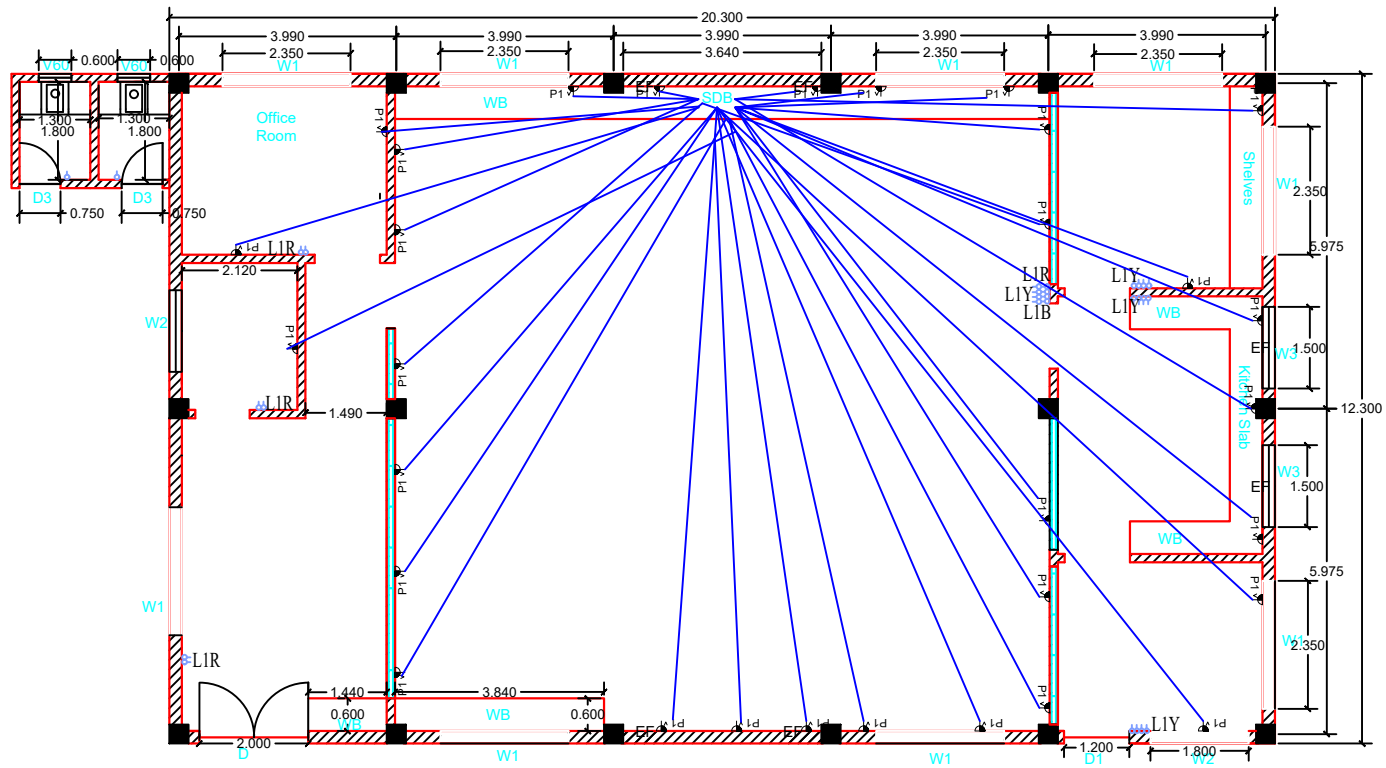



FAN AND LIGHT POINT LAYOUT

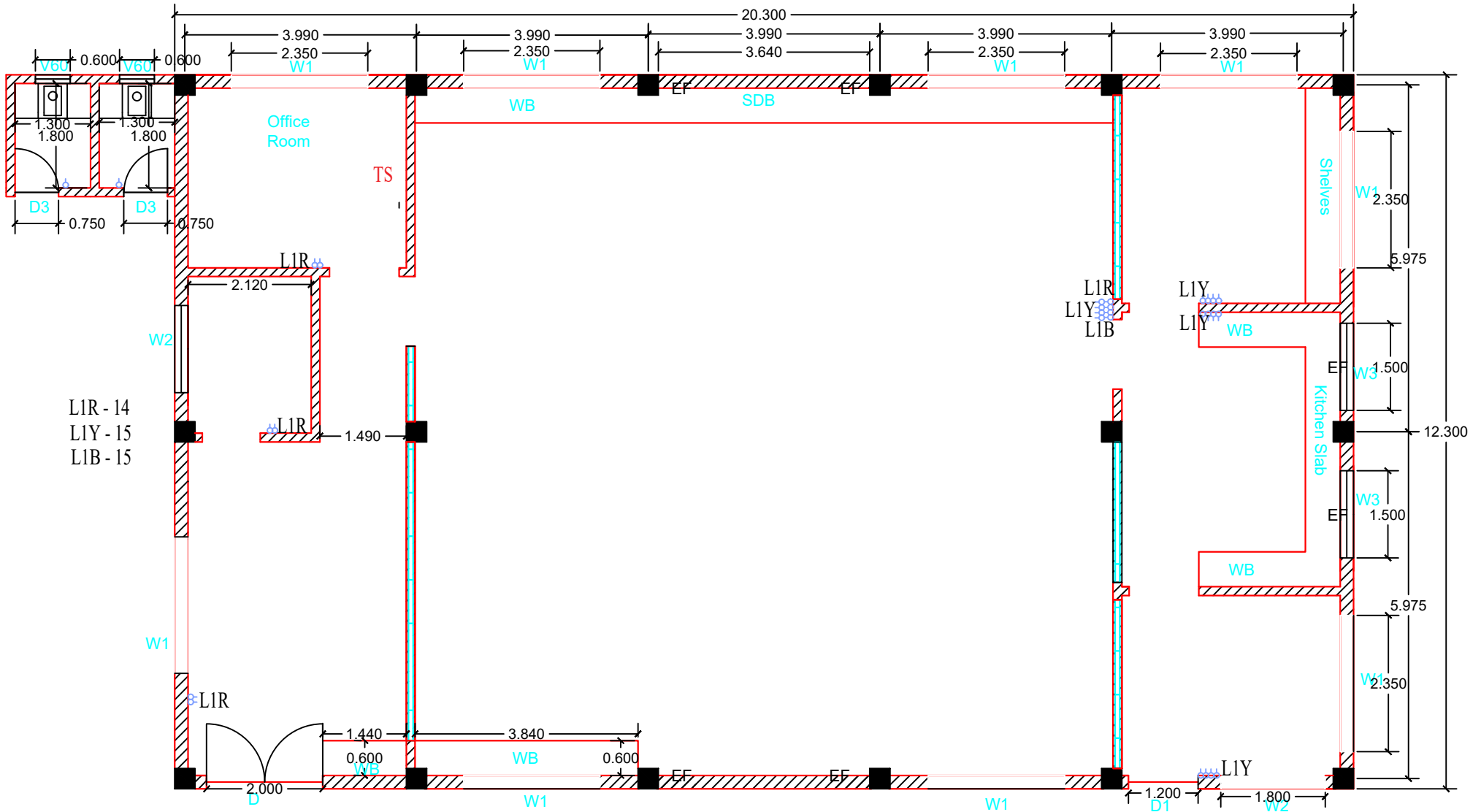
PROJECT:PROPOSED FACILITIES AT COLLEGE OF NATURAL RESOURCES IN THE 12TH FIVE YEAR PLAN					NORTH		NOTES	DATE	SCALE	DRAWING NO
FUNDED BY:GOVERNEMENT OF INDIA / GNH COMMISSION.	COLLEGE OF NATURAL RESOURCES www.cnr.edu.bt www.rub.edu.bt	DESIGNED AND DRAWN BY:	ENDORSED BY:	APPROVED BY:		PLOT NO: THARM NO:	-ALL DIMENSIONS ARE IN MILLIMETERS UNLESS SPECIFIED OTHERWISE -ALL RELATIVE LEVELS ARE IN METERS UNLESS SPECIFIED OTHERWISE -ALL DIMENSIONS MEASURE UNFINISHED SURFACES UNLESS SPECIFIED OTHERWISE -ALL DIMENSIONS ARE TO BE READ AND NOT SCALED OFF -ANY DISCREPANCY IN DRAWING IS TO BE BROUGHT TO THE IMMEDIATE NOTICE OF THE CONSULTANTS/SUPERVISION TEAM -MINOR ADJUSTMENTS NEED TO BE CARRIED OUT ON SITE TO MATCH WITH EXISTING BUILDING	DRAWING TITLE: FAN AND LIGHT POINT LAYOUT	1:1	E-01
DRAWING NAME: FOOD SCIENCE LABORATORY		YADAV DHUNGANA Email: yadav0718@cnr.edu.bt Phone:17525823	PRESIDENT COLLEGE OF NATURAL RESOURCES, ROYAL UNIVERSITY OF BHUTAN, LOBEYSA	PUNAKHA DZONGKHAG						
LOCATION: LOBEYSA, PUNAKHA, BHUTAN.										




PROJECT:PROPOSED FACILITIES AT COLLEGE OF NATURAL RESOURCES IN THE 12TH FIVE YEAR PLAN						NORTH	NOTES	DATE	SCALE	DRAWING NO
FUNDED BY:GOVERNEMENT OF INDIA / GNH COMMISSION.	COLLEGE OF NATURAL RESOURCES www.cnr.edu.bt www.rub.edu.bt	DESIGNED AND DRAWN BY: YADAV DHUNGANA Email: yadav0718@cnr.edu.bt Phone:17525823	ENDORSED BY: PRESIDENT COLLEGE OF NATURAL RESOURCES, ROYAL UNIVERSITY OF BHUTAN, LOBEYSA	APPROVED BY: PUNAKHA DZONGKHAG		- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS SPECIFIED OTHERWISE - ALL RELATIVE LEVELS ARE IN METERS UNLESS SPECIFIED OTHERWISE - ALL DIMENSIONS MEASURE UNFINISHED SURFACES UNLESS SPECIFIED OTHERWISE - ALL DIMENSIONS ARE TO BE READ AND NOT SCALED OFF - ANY DISCREPANCY IN DRAWING IS TO BE BROUGHT TO THE IMMEDIATE NOTICE OF THE CONSULTANTS/SUPERVISION TEAM - MINOR ADJUSTMENTS NEED TO BE CARRIED OUT ON SITE TO MATCH WITH EXISTING BUILDING		1:1	E-02	
DRAWING NAME: FOOD SCIENCE LABORATORY							DRAWING TITLE: LOAD DISTRIBUTION POINT LAYOUT			
LOCATION: LOBEYSA, PUNAKHA, BHUTAN.							PLOT NO:			
						THARM NO:				

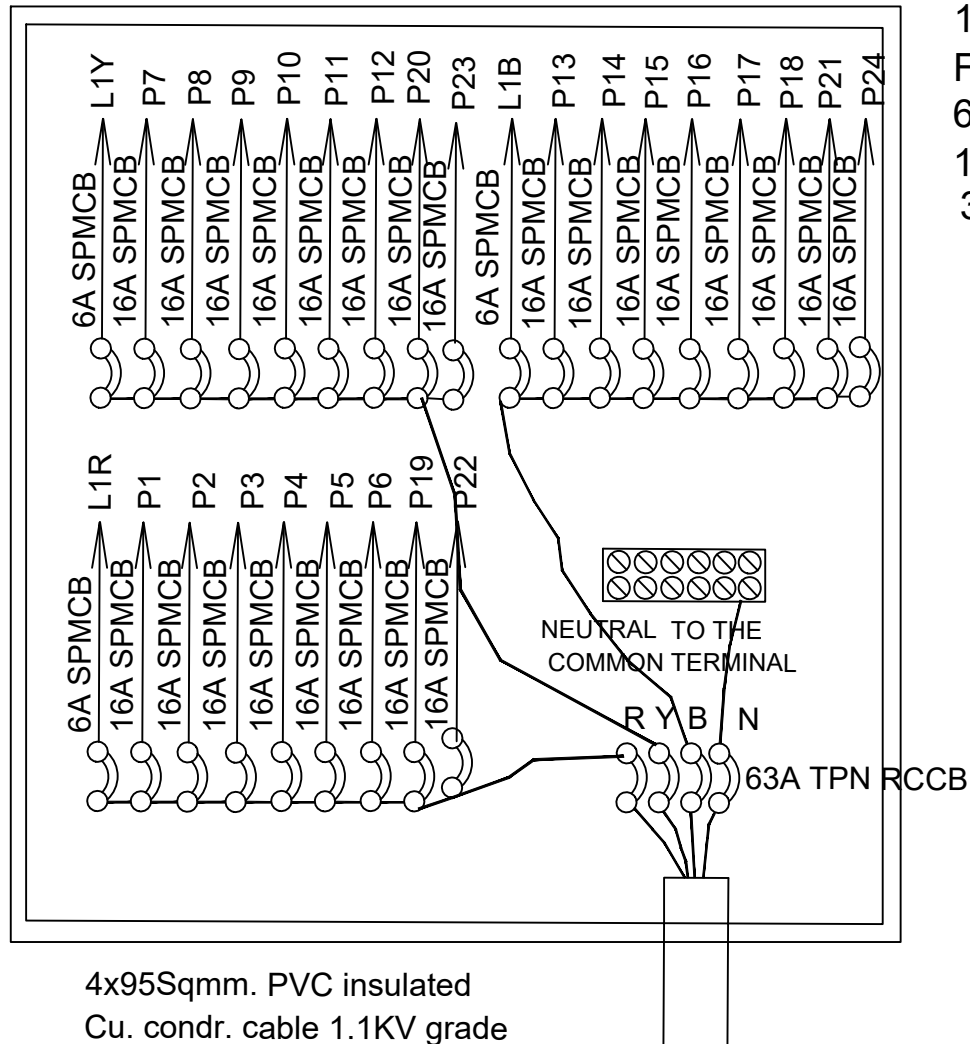


PROJECT:PROPOSED FACILITIES AT COLLEGE OF NATURAL RESOURCES IN THE 12TH FIVE YEAR PLAN							NORTH	NOTES	DATE	SCALE	DRAWING NO
FUNDED BY:GOVERNEMENT OF INDIA / GNH COMMISSION.		COLLEGE OF NATURAL RESOURCES www.cnr.edu.bt www.rub.edu.bt	DESIGNED AND DRAWN BY: YADAV DHUNGANA Email: yadav0718@cnr.edu.bt Phone:17525823	ENDORSED BY: PRESIDENT COLLEGE OF NATURAL RESOURCES, ROYAL UNIVERSITY OF BHUTAN, LOBEYSA	APPROVED BY: PUNAKHA DZONGKHAG			-ALL DIMENSIONS ARE IN MILLIMETERS UNLESS SPECIFIED OTHERWISE -ALL RELATIVE LEVELS ARE IN METERS UNLESS SPECIFIED OTHERWISE -ALL DIMENSIONS MEASURE UNFINISHED SURFACES UNLESS SPECIFIED OTHERWISE -ALL DIMENSIONS ARE TO BE READ AND NOT SCALED OFF -ANY DISCREPANCY IN DRAWING IS TO BE BROUGHT TO THE IMMEDIATE NOTICE OF THE CONSULTANTS/SUPERVISION TEAM -MINOR ADJUSTMENTS NEED TO BE CARRIED OUT ON SITE TO MATCH WITH EXISTING BUILDING		1:1	E-04
DRAWING NAME: FOOD SCIENCE LABORATORY						PLOT NO:		DRAWING TITLE: POWER POINT TO SDB LAYOUT			
LOCATION: LOBEYSA, PUNAKHA, BHUTAN.						THARM NO:					



PROJECT:PROPOSED FACILITIES AT COLLEGE OF NATURAL RESOURCES IN THE 12TH FIVE YEAR PLAN						NORTH	NOTES	DATE	SCALE	DRAWING NO
FUNDED BY:GOVERNEMENT OF INDIA / GNH COMMISSION.	COLLEGE OF NATURAL RESOURCES www.cnr.edu.bt www.rub.edu.bt	DESIGNED AND DRAWN BY: YADAV/DHUNGANA Email: yadav0718@cnr.edu.bt Phone:1752923	ENDORSED BY: PRESIDENT COLLEGE OF NATURAL RESOURCES, ROYAL UNIVERSITY OF BHUTAN, LOBEYSA	APPROVED BY: PUNAKHA DZONGKHAG		<div>- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS SPECIFIED OTHERWISE</div> <div>- ALL RELATIVE LEVELS ARE IN METERS UNLESS SPECIFIED OTHERWISE</div> <div>- ALL DIMENSIONS MEASURE UNFINISHED SURFACES UNLESS SPECIFIED OTHERWISE</div> <div>- ALL DIMENSIONS ARE TO BE READ AND NOT SCALED OFF</div> <div>- ANY DISCREPANCY IN DRAWING IS TO BE BROUGHT TO THE IMMEDIATE NOTICE OF THE CONSULTANTS/SUPERVISION TEAM</div> <div>- MINOR ADJUSTMENTS NEED TO BE CARRIED OUT ON SITE TO MATCH WITH EXISTING BUILDING</div>		DRAWING TITLE: TELEPHONE POINT	1:1	E-05
DRAWING NAME: FOOD SCIENCE LABORATORY										
LOCATION: LOBEYSA, PUNAKHA, BHUTAN.										

SDB



16WAY TPN DB & 63A TPN RCCB WITH
FOLLOWING OUTGOING:

6A SPMCB - 5 NOs.

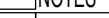
16A SPMCB - 24 NOs.

32A MCB - 4 NOs.

BALANCE LOAD IN WATTS

R-PHASE	Y-PHASE	B-PHASE
L1- 580	L1- 580	L1- 580
L1- 580	L1- 580	L1- 580
P1- 2000	P7- 2000	P13- 2000
P2- 2000	P8- 2000	P14- 2000
P3- 2000	P9- 2000	P15- 2000
P4- 2000	P10- 2000	P16- 2000
P5- 2000	P11- 2000	P17- 2000
P6- 2000	P12- 2000	P18- 2000
P19- 2000	P20- 2000	P21- 2000
P22- 2000	P23- 2000	P24- 2000
17160	17160	17160

4x95Sqmm. PVC insulated
Cu. cond. cable 1.1KV grade

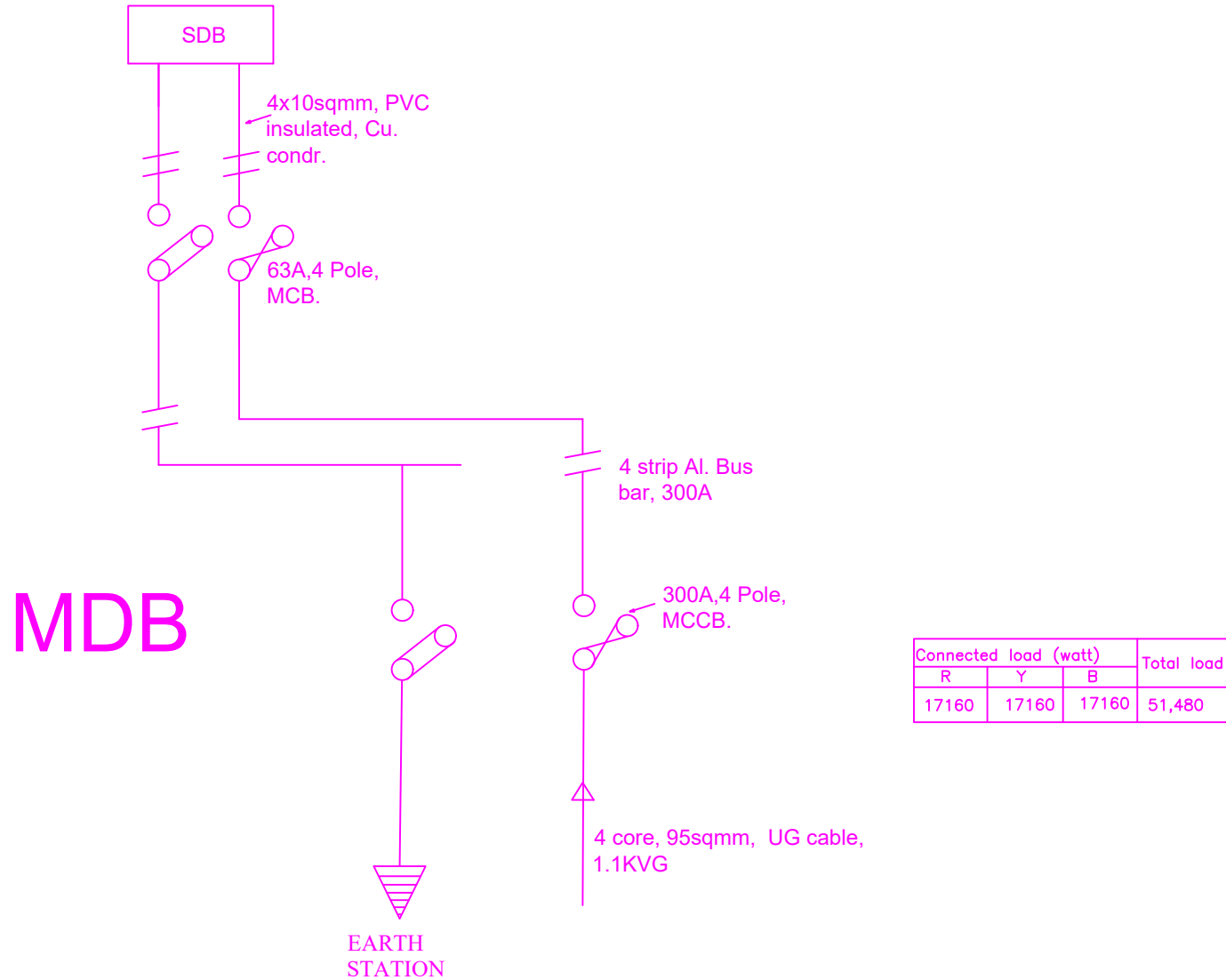
PROJECT:PROPOSED FACILITIES AT COLLEGE OF NATURAL RESOURCES IN THE 12TH FIVE YEAR PLAN						NORTH	NOTES	DATE	SCALE	DRAWING NO
FUNDED BY:GOVERNEMENT OF INDIA / GNH COMMISSION.		COLLEGE OF NATURAL RESOURCES www.cnr.edu.bt www.rub.edu.bt	DESIGNED AND DRAWN BY: YADAV DHUNJHA Email: ydada0017@cnr.edu.bt Phone:17529823	ENDORSED BY: PRESIDENT COLLEGE OF NATURAL RESOURCES, ROYAL UNIVERSITY OF BHUTAN, LOBEYSA	APPROVED BY: PUNAKHA DZONGKHAG		-ALL DIMENSIONS ARE IN MILLIMETERS UNLESS SPECIFIED OTHERWISE -ALL RELATIVE LEVELS ARE IN METERS UNLESS SPECIFIED OTHERWISE -ALL DIMENSIONS MEASURE UNFINISHED SURFACES UNLESS SPECIFIED OTHERWISE -ALL DIMENSIONS ARE TO BE READ AND NOT SCALED OFF -ANY DISCREPANCY IN DRAWING IS TO BE BROUGHT TO THE IMMEDIATE NOTICE OF THE CONSULTANTS/SUPERVISION TEAM -MINOR ADJUSTMENTS NEED TO BE CARRIED OUT ON SITE TO MATCH WITH EXISTING BUILDING	DRAWING TITLE: LOAD CALCULATIONS	1:1	E-06
DRAWING NAME: FOOD SCIENCE LABORATORY					PLOT NO.					
LOCATION: LOBEYSA, PUNAKHA, BHUTAN.					THARM NO.					

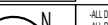
COLLEGE OF NATURAL RESOURCES
www.cnr.edu.bt
www.rub.edu.bt

DESIGNED AND DRAWN BY:
YADAV DHUNGANA
Email: yadav0718@cnr.edu.bt
Phone: 1752923

ENDORSED BY:
PRESIDENT
COLLEGE OF NATURAL RESOURCES,
ROYAL UNIVERSITY OF BHUTAN,
LOBEYSA

APPROVED BY:
PUNAKHA
DZONGKHAG



PROJECT:PROPOSED FACILITIES AT COLLEGE OF NATURAL RESOURCES IN THE 12TH FIVE YEAR PLAN							NORTH	NOTES	DATE	SCALE	DRAWING NO
FUNDED BY:GOVERNEMENT OF INDIA / GNH COMMISSION.		COLLEGE OF NATURAL RESOURCES www.cnr.edu.bt www.rub.edu.bt		DESIGNED AND DRAWN BY: YADAV DHUNGANA Email: yadav0718@cnr.edu.bt Phone:17525823	ENDORSED BY: PRESIDENT COLLEGE OF NATURAL RESOURCES, ROYAL UNIVERSITY OF BHUTAN, LOBEYSA	APPROVED BY: PUNAKHA DZONGKHAG	 PLOT NO: THRM NO:	-ALL DIMENSIONS ARE IN MILLIMETERS UNLESS SPECIFIED OTHERWISE -ALL RELATIVE LEVELS ARE IN METERS UNLESS SPECIFIED OTHERWISE -ALL DIMENSIONS MEASURE UNFINISHED SURFACES UNLESS SPECIFIED OTHERWISE -ALL DIMENSIONS ARE TO BE READ AND NOT SCALED OFF -ANY DISCREPANCY IN DRAWING IS TO BE BROUGHT TO THE IMMEDIATE NOTICE OF THE CONSULTANTS/SUPERVISION TEAM -MINOR ADJUSTMENTS NEED TO BE CARRIED OUT ON SITE TO MATCH WITH EXISTING BUILDING	DRAWING TITLE: LOAD CALCULATIONS	1:1	E-06
DRAWING NAME: FOOD SCIENCE LABORATORY											
LOCATION: LOBEYSA, PUNAKHA, BHUTAN.											