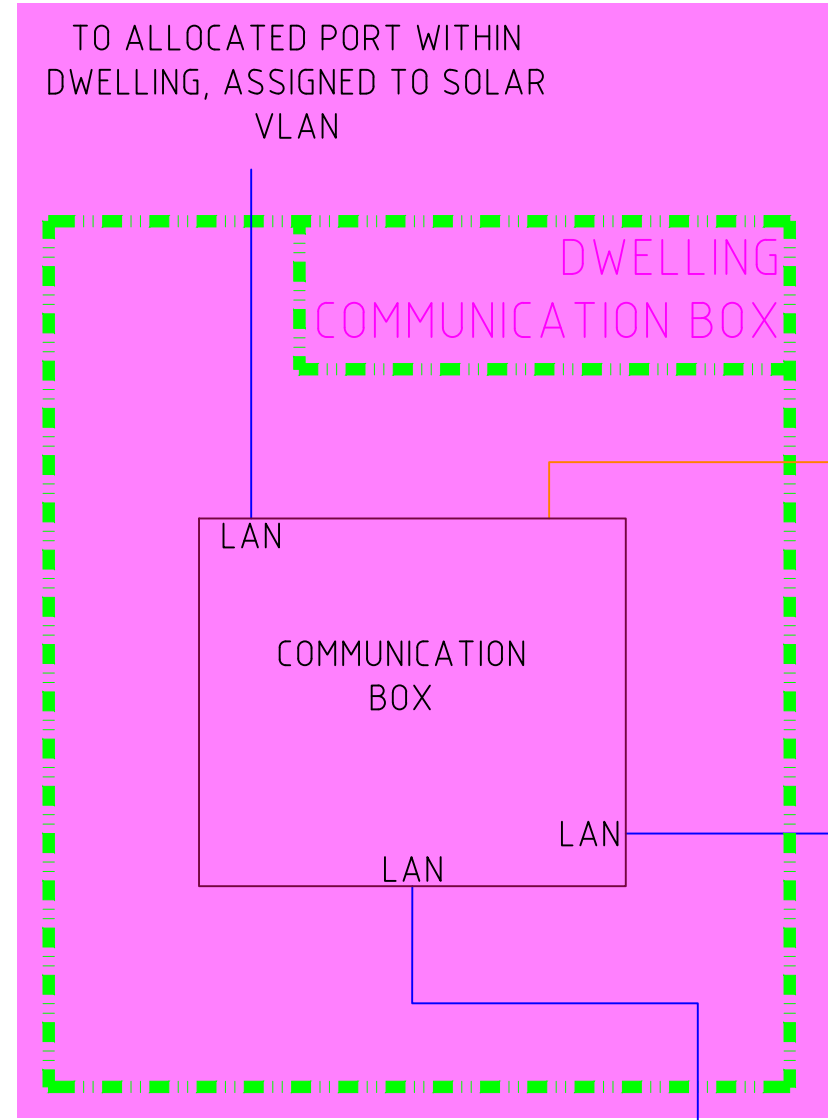


CENTRAL PROTECTION IES ISOLATION POINT. CONTRACTOR COIL SHALL BE POWERED BY THE COMMUNICATION BOX OUTPUT.

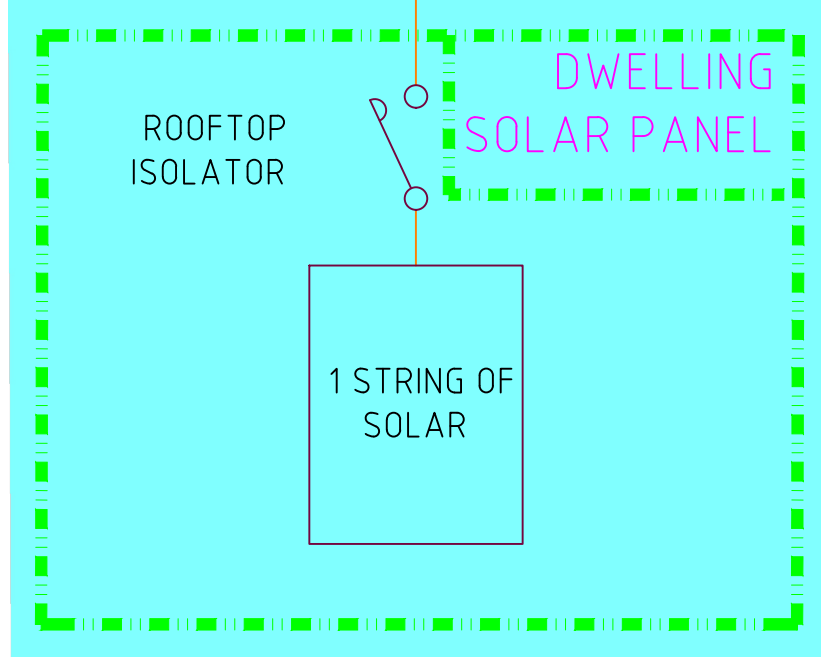
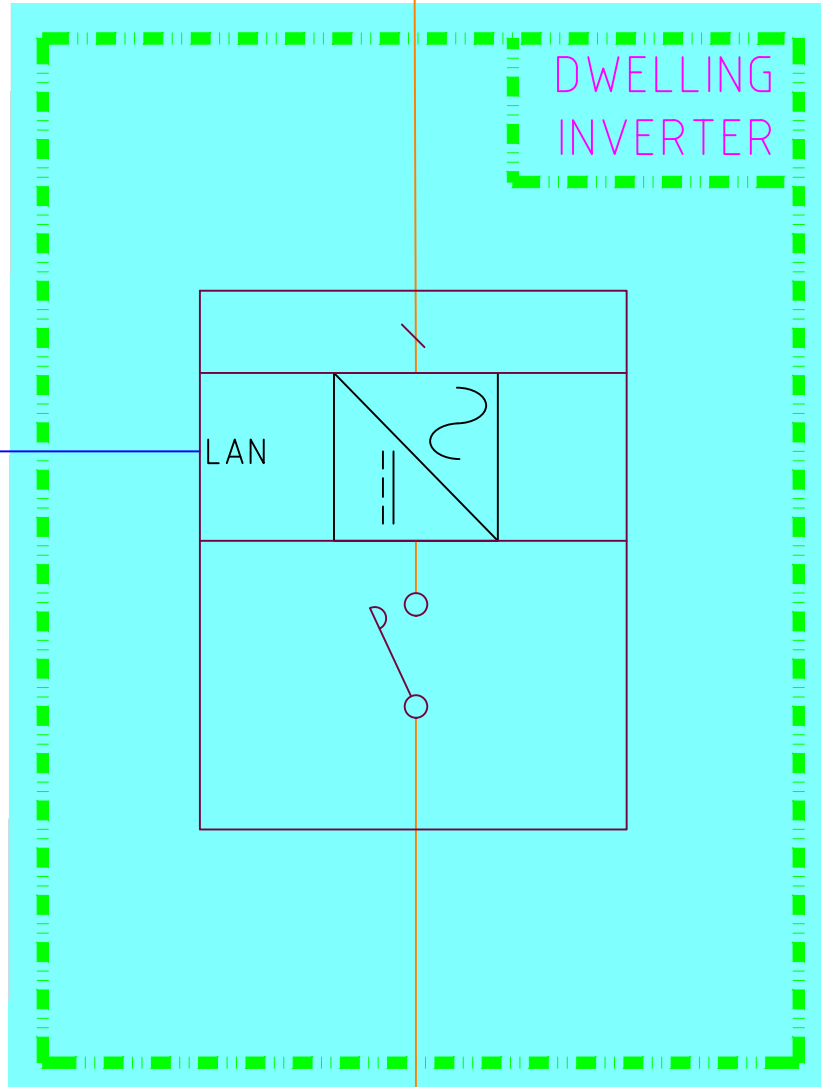
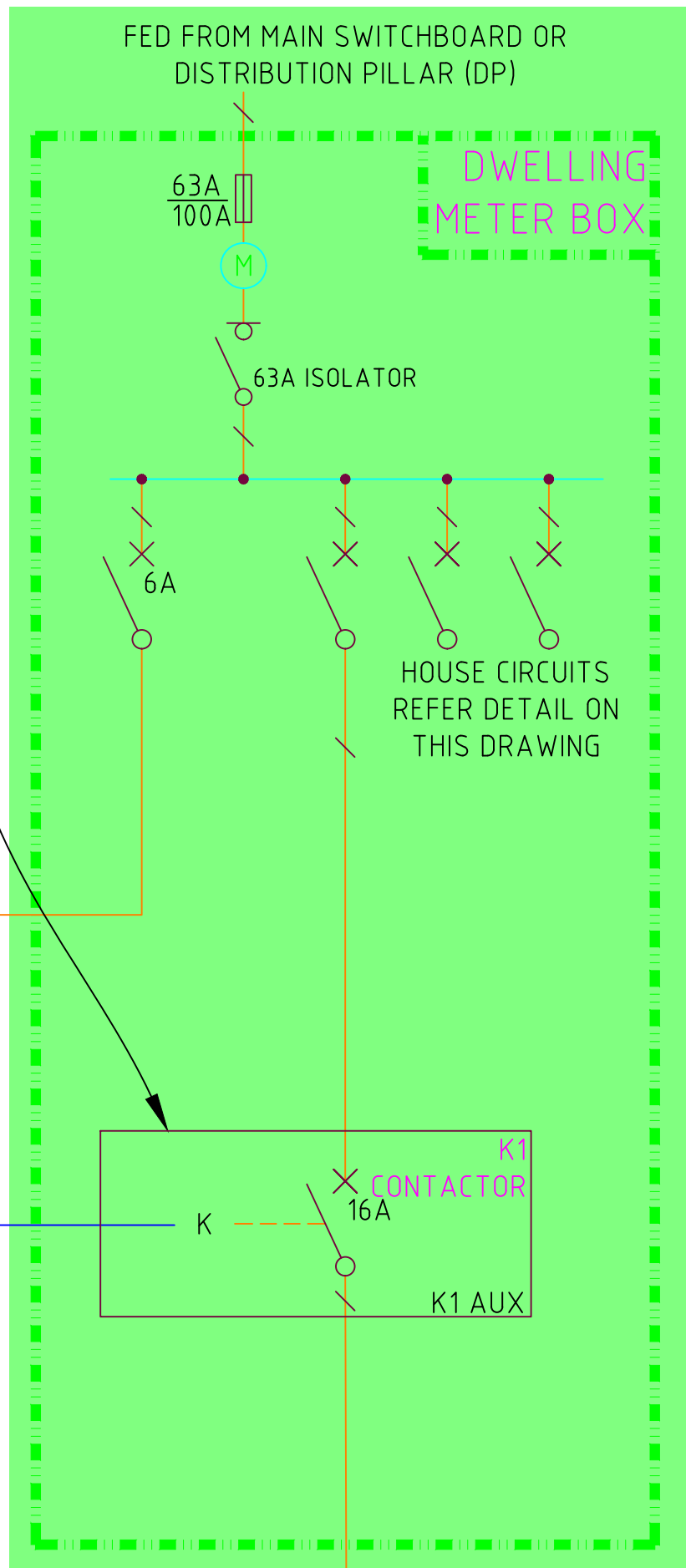


ETHERNET COMMUNICATION FROM DISTRIBUTOR CONTROLLER FOR CENTRALIZED AND BALANCE CONTROL OF IES, CONNECT CABLE TO LAN PORT.

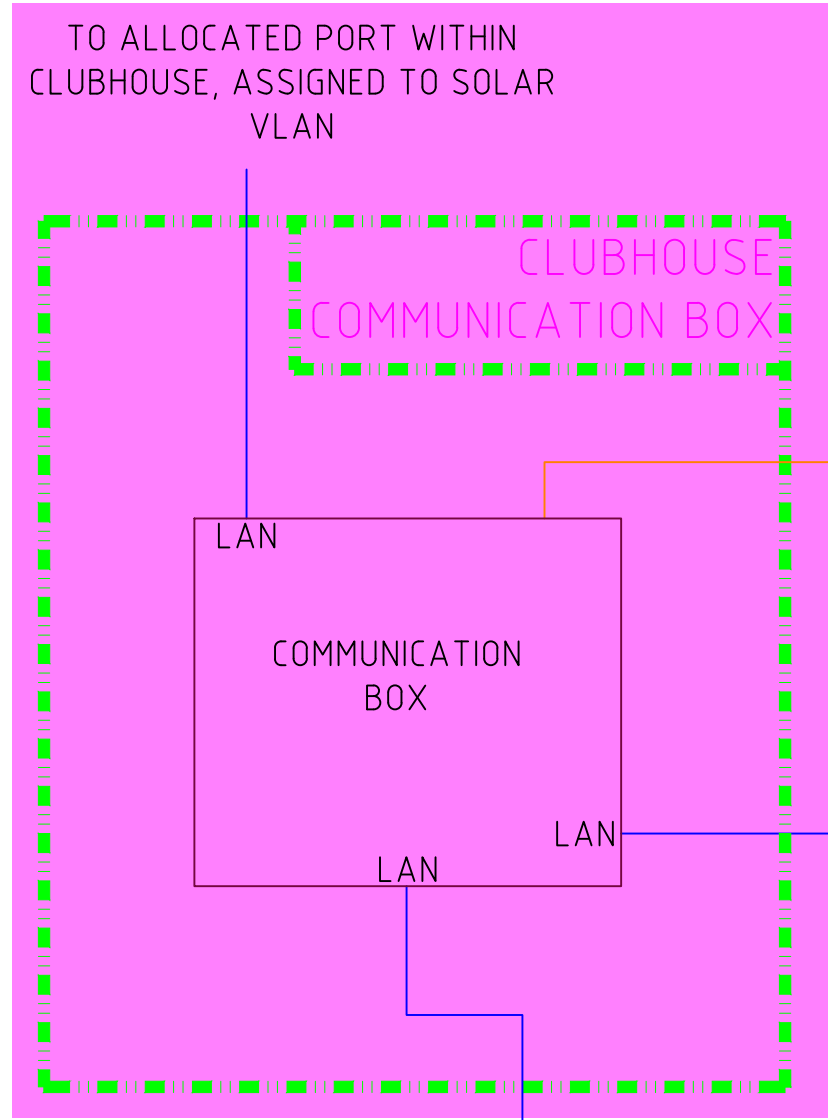
ENERGY MAESTRO CONTROL PANEL SHALL BE INSTALLED ADJACENT THE EXISTING SITE MSB OR INCORPORATE IN NEW EXTENDED MSB TIRE WITH MIN W800mm×H1000mm×D300mm CHAMBER WITH BACKPLATE AND ESCUTCHEON FOR CONTROL/PROTECTION EQUIPMENT.

NOTES:-

- INDICATION LAMP AND EMERGENCY PUSH BUTTON SHALL BE LOCATED ON PANEL ESCUTCHEON ON DOOR.
- INCLUDE FOR SUITABLE SWITCHMODE POWER SUPPLY UNIT, 24VDC.
- CEC CERTIFIED CONTRACTOR SHALL SUPPLY DETAILED SCHEMATICS FOR APPROVAL PRIOR TO MANUFACTURE.
- CONTACTORS WITHIN EACH DWELLING SHALL INCLUDE LAMP FIXED TO ESCUTCHON PANEL TO INDICATE SYSTEM OPERATION (ON / OFF).
- ALL (DO) OUTPUT SIGNALS FROM MOXA RTU SHALL BE VIA A RELAY MODULE.
- ENERGY MAESTRO COMMUNICATION BOX DISTRIBUTED SIEMENS BASED SLAVE CONTROLLER SHALL BE WALL MOUNTED IN SHADE UNDER EAVE OR INDOORS ADJACENT THE INVERTER. PRE-WIRED 1 PHASE+N+PE SUPPLY AND THE 2 ETHERNET CABLES SHALL BE WIRED AS SHOWN IN SLD AND AS PER THE INSTALLATION MANUAL.COMMUNICATION BOX SHALL PROPAGATE CENTRAL CONTROLLER'S PROTECTION AND CONTROL REQUIREMENTS TO DISTRIBUTED IES.SYSTEM OPERATES IN FAIL-SAFE WHERE IT DISCONNECTS INVERTER DURING LOSS OF COMMUNICATION OR ANYLOCALIZED FAILURE.



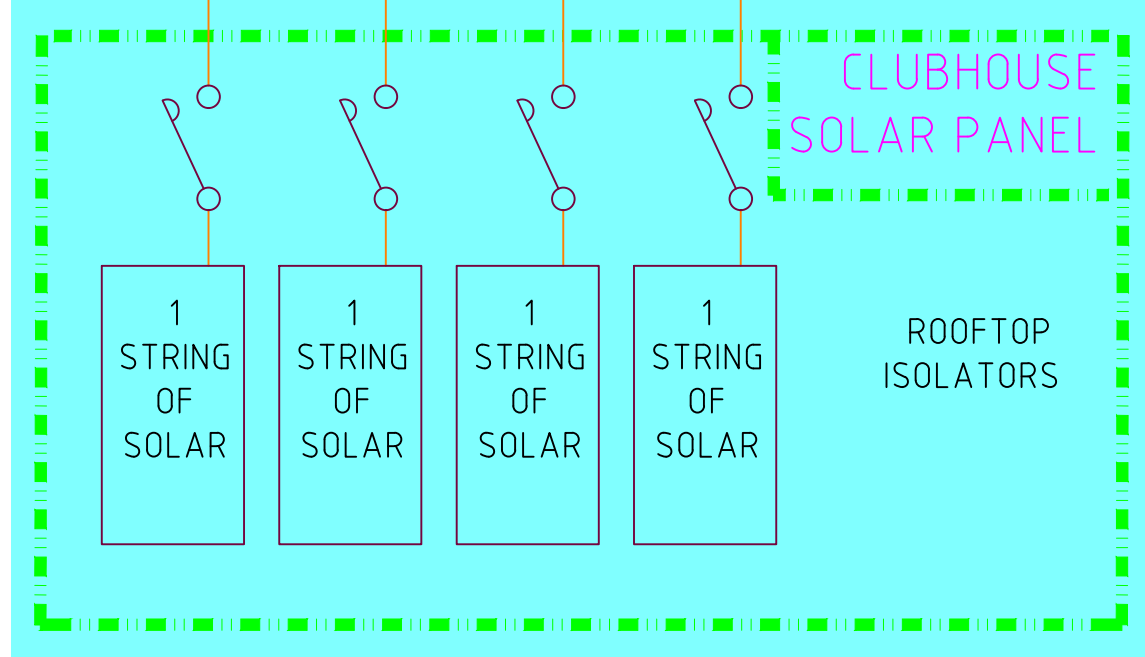
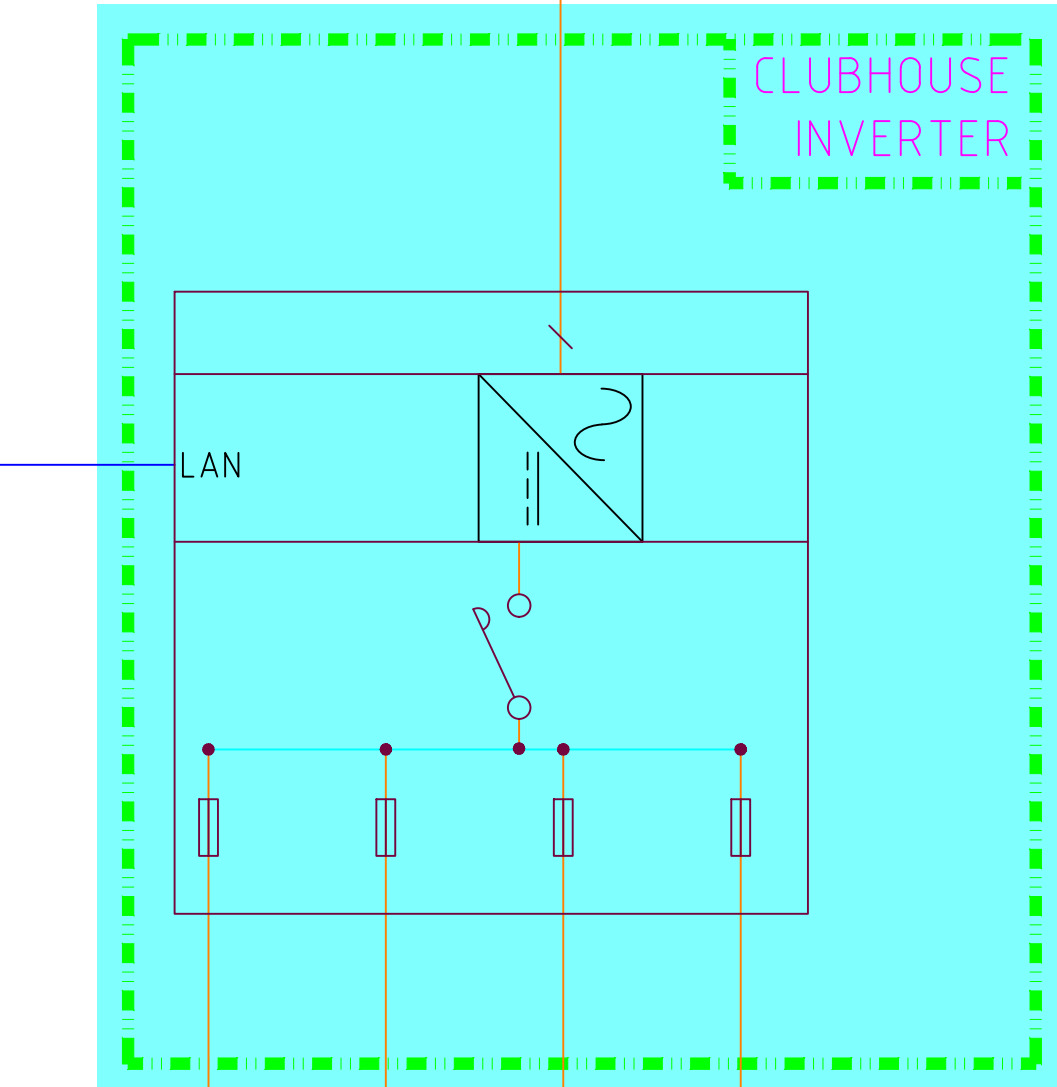
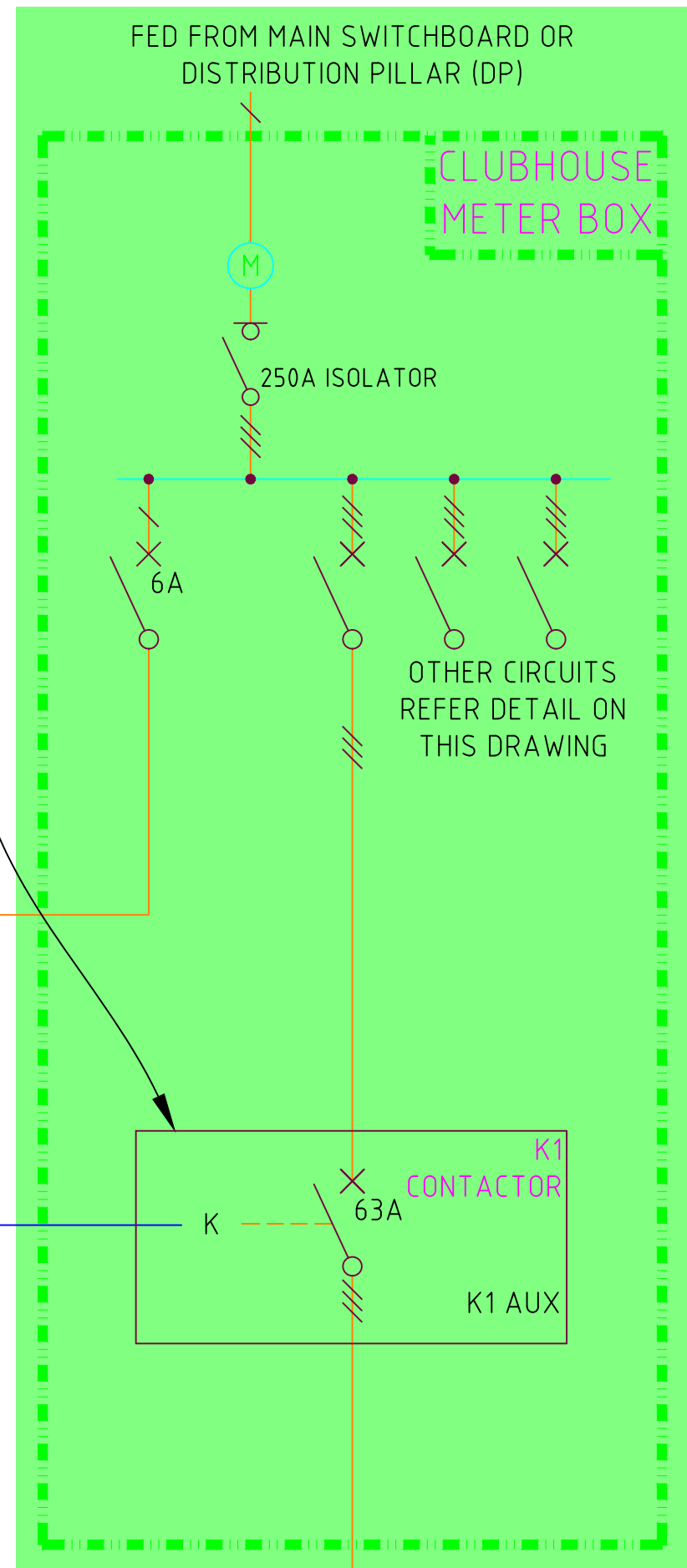
CENTRAL PROTECTION IES ISOLATION POINT. CONTRACTOR COIL SHALL BE POWERED BY THE COMMUNICATION BOX OUTPUT.



ETHERNET COMMUNICATION FROM DISTRIBUTOR CONTROLLER FOR CENTRALIZED AND BALANCE CONTROL OF IES, COMMUNICATION SHALL ALSO SERVE AS PROTECTION ISOLATION VIA DRMO CONTROL CONNECT CABLE TO LAN PORT.

- CONNECTION AND CONTROL TOPOLOGY SHOWN IS REFLECTIVE OF ALL 147 DWELLINGS.
- VOLTAGE RISE OF THE SITE IES SHALL BE CONFIRMED TO BE 2%.
- STATIC IP ADDRESS OF THE SAME DEDICATED SUBNET AND VLAN (TOTAL OF 297+3SPARES,300) SHALL BE ALLOCATED FOR IES IN COORDINATION WITH NETWORK OPERATOR.
- FIREWALL WALL RULES SPECIFIC TO ENERGY MAESTRO SYSTEM AND FRONIUS INVERTERS SHALL BE COORDINATED AND WHITE-LISTED WITH NETWORK OPERATOR.

- CIVIL'S ELECTRICAL SERVICES CONTRACTOR
- SOLAR CONTRACTOR
- COMMUNICATIONS CONTRACTOR
- BUILDER'S ELECTRICAL CONTRACTOR



RESEARCH SUBMISSION
DOCUMENT ISSUED FOR FINAL YEAR PROJECT RESEARCH SUBMISSION

REV	DATE	DESCRIPTION	Drn.	Chkd.
RS1	27/04/25	RESEARCH SUBMISSION	M.N.	JZ-P10
RS2	02/06/25	RESEARCH SUBMISSION	M.N.	JZ-P10

REV	DATE	DESCRIPTION	Drn.	Chkd.

MARKER:

JINGXIN
ZHANG

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CONTRACTORS MUST VERIFY ALL DIMENSIONS AT THE JOB BEFORE COMMENCING ANY WORK OR MAKING ANY SHOP DRAWINGS WHICH MUST BE SUBMITTED AND APPROVED BEFORE MANUFACTURE. ANY EXTRA ENTAILED IN WORK HEREON MUST BE CLAIMED AND APPROVAL OBTAINED BEFORE PROCEEDING OTHERWISE NO EXTRA WILL BE ALLOWED.

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RESIDENTIAL DEVELOPMENT
123 IMAGINARY WAY, PROJECT TEST, VIC 9999

ELECTRICAL SERVICES -
SINGLE LINE DIAGRAM (AUSNET SOLAR PROTECTION LAYOUT)

SCALE: NTS@A1
DRAWN: M.N.
DATE: 25/04/2025
PROJ. No: 25001
DRG No: 25001-E0101
REV: RS1