

- NOTES:**
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE M&E SERVICES STRATEGY, ARCHITECTS DRAWINGS AND ALL RELATED PROJECT DOCUMENTATION.
  - DO NOT SCALE THIS DRAWING - ALL DIMENSIONS ARE TO BE VERIFIED BY SITE MEASUREMENT BEFORE STARTING WORK.
  - ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
  - THIS DRAWING IS PROVIDED TO ILLUSTRATE DESIGN INTENT ONLY AND IS SUBJECT TO DETAILED DESIGN. NO FINAL QUANTITIES, LENGTHS OR SIZES SHALL BE TAKEN FROM THIS DRAWING.
  - THE ELECTRICAL INSTALLATION SHALL BE INSTALLED IN ACCORDANCE WITH THE 18TH EDITION OF IET WIRING REGULATIONS (BS7671) REQUIREMENTS OF ELECTRICAL INSTALLATIONS INCLUDING AMENDMENT 4.
  - FIRE ALARM SOUNDER BEACONS & MANUAL CALL POINTS SHALL BE PROVIDED AT ROOF LEVEL.
  - ROOF LIGHTING & EMERGENCY LIGHTING TO BE PROVIDED FOR SAFE ACCESS & EGRESS. TO BE DETAILED AT NEXT DESIGN STAGE AND SHALL BE COORDINATED WITH FINAL EQUIPMENT POSITIONS & MAINTENANCE.
  - LIGHTING PROTECTION SHALL BE PROVIDED TO BS EN 62065. LIGHTING PROTECTION TO BE DETAILED AT STAGE 4 FOLLOWING SPECIALIST INPUT.
  - TRADE HEATING & WEATHER PROTECTION SHALL BE PROVIDED TO ALL EXTERNAL ELEMENTS, WHERE NECESSARY.
  - THE PV ARRAY IS SHOWN INDICATIVE. THE FINAL DESIGN OF THE PV SYSTEM WITH ACCOMPANYING CALCULATIONS SHALL BE CARRIED OUT BY AN MCS APPROVED CONTRACTOR.
  - VENTILATION STACKS SHALL NOT TERMINATE LESS THAN 900mm ABOVE THE TOP OF ANY OPENABLE WINDOW OR VENTILATION OPENING AND WITHIN A HORIZONTAL DISTANCE OF 3m AND TERMINATE 450mm ABOVE THE ROOF LEVEL.
  - THIS DRAWING IS PROVIDED TO ILLUSTRATE DESIGN INTENT ONLY AND IS SUBJECT TO DETAILED DESIGN. NO FINAL QUANTITIES, LENGTHS OR SIZES SHALL BE TAKEN FROM THIS DRAWING.

- ABBREVIATIONS**
- SVP SIDE VENT PIPE
  - PSV PASSIVE STACK VENT
  - RC ROOF COWL
  - VRF VARIABLE REFRIGERANT FLOW AIR CONDITIONING UNIT
  - AC AIR CONDITIONING UNIT (DX / SPLIT)
  - DX DIRECT EXPANSION
  - RAT RETURN AIR
  - SA SUPPLY AIR
  - EXH EXHAUST AIR
  - KEA KITCHEN EXTRACT AIR
  - WC WINDCATCHER
  - WH WEATHERPROOF HOOD

- LEGEND**
- DISTRIBUTION BOARDS
  - SPN ISOLATOR
  - TPN ISOLATOR
  - RED MANUAL BREAK GLASS CALL POINT
  - WALL MOUNTED VISUAL SOUNDER BEACON
  - PV INVERTER, HOUSED IN IP RATED ENCLOSURE
  - LV SUB-MAN - MEDIUM DUTY RETURN FLANGE PERFORATED GALVANISED STEEL CABLE TRAY
  - PV DC CABLEING - MEDIUM DUTY RETURN FLANGE PERFORATED GALVANISED STEEL CABLE TRAY

200 No. 475 W PANELS ACHIEVE AN OUTPUT OF 87.011 MWh/a BASED ON A SOUTH-WEST FACING ORIENTATION. SYSTEM OUTPUT TO BE FURTHER CONFIRMED FOLLOWING PV SPECIALIST DESIGN INPUT.

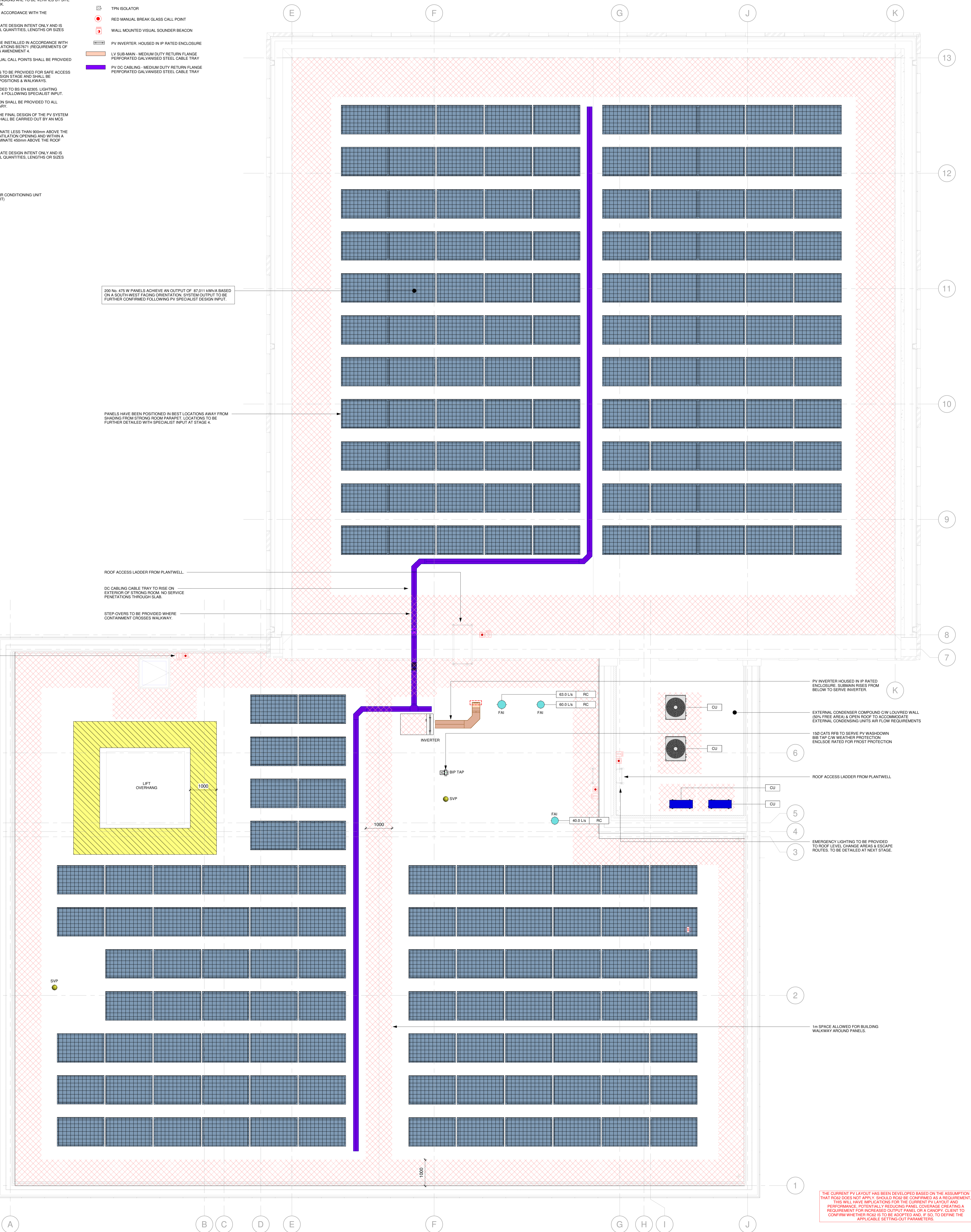
PANELS HAVE BEEN POSITIONED IN BEST LOCATIONS AWAY FROM SHADING FROM STRONG ROOM PARAPET. LOCATIONS TO BE FURTHER DETAILED WITH SPECIALIST INPUT AT STAGE 4.

ROOF ACCESS LADDER FROM PLANTWELL

DC CABLEING CABLE TRAY TO RISE ON EXTERIOR OF STRONG ROOM. NO SERVICE PENETRATIONS THROUGH SLAB.

STEP-OVERS TO BE PROVIDED WHERE CONTAINMENT CROSSES WALKWAY.

ROOF ACCESS HATCH - MANUAL CALL POINT AND SOUNDER BEACON LOCATED ADJACENT HATCH AND AT ALL POINTS OF LEVEL CHANGE ON ROOF.



- PV INVERTER HOUSED IN IP RATED ENCLOSURE. SUB-MAN RISES FROM BELOW TO SERVE INVERTER.
- EXTERNAL CONDENSER COMPOUND CW LOUVRED WALL 100% FREE AREA & OPEN ROOF TO ACCOMMODATE EXTERNAL CONDENSING UNITS AIR FLOW REQUIREMENTS
- 150 CATS RFB TO SERVE PV WASHDOWN. BE TAP CW WEATHER PROTECTION. ENCLOSE RATED FOR FROST PROTECTION
- ROOF ACCESS LADDER FROM PLANTWELL
- EMERGENCY LIGHTING TO BE PROVIDED TO ROOF LEVEL CHANGE AREAS & ESCAPE ROUTES. TO BE DETAILED AT NEXT STAGE.
- 1m SPACE ALLOWED FOR BUILDING WALKWAY AROUND PANELS.

THE CURRENT PV LAYOUT HAS BEEN DEVELOPED BASED ON THE ASSUMPTION THAT ROOF DOES NOT APPLY. SHOULD ROOF BE CONFIRMED AS A REQUIREMENT, THIS WILL HAVE IMPLICATIONS FOR THE CURRENT PV LAYOUT AND PERFORMANCE. POTENTIALLY REDUCING PANEL COVERAGE CREATING A REQUIREMENT FOR INCREASED OUTPUT PANEL OR A CANOPY. CLIENT TO CONFIRM WHETHER ROOF IS TO BE ADOPTED AND, IF SO, TO DEFINE THE APPLICABLE SETTING-OUT PARAMETERS.

**1 RF - ROOF PLANT LAYOUT**  
1 : 50

REVISED	S4 - FOR REVIEW & AUTHORIZATION	27.04.2026
DATE	DESCRIPTION	DATE

**S4 - FOR REVIEW & AUTHORIZATION**

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M&E SERVICES - ROOF PLANT LAYOUT

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DESIGNED BY	TJ	DATE	01.04.2026
CHECKED BY	RG	DATE	01.04.2026
APPROVED BY	RG	DATE	01.04.2026
SCALE	A0	SCALE	As indicated

JAF-ESD-ZZ-RF-DR-Z-7000 P01