

PARTICULAR SPECIFICATION

APPENDIX AM

**SOLAR PHOTOVOLTAIC (PV) PANELS PROVISION FOR
STATION**

Appendix AM

Solar Photovoltaic (PV) Panels Provisions for Station

Purpose	-	To design and facilitate installation, access and maintenance of solar PV panels at station entrance roof <u>and at-grade structures including RC and metal roofs</u>
Location	-	Station entrance roof
Loading Requirements	-	Maximum 0.5 KN/m2
Classification of Room	-	External
Approximate area	-	Extent of solar PV panels to be coordinated with the Authority's M&E consultant and SWC. The area shall not be more than 8 degrees incline for safety of maintenance personnel.
Lighting level	-	Nil
Ventilation requirements	-	Natural ventilation
Power	-	Nil
Acoustic requirements	-	Nil
Communication requirements	-	Nil
Fire Protection	-	To comply with latest Code of Practice for Fire Precautions in Rapid Transit Systems (CPFPRTS) and/or prevailing fire code requirements
Security requirements	-	To comply with PTS requirements
Furniture and fittings	-	Fall arrest system and roof walkway system, as required.
Services	-	Contractor to coordinate and interface with <u>Authority's In-house Designers C1009</u> and SWC on the space (installation and maintenance) and cable routing associated with the solar PV installation
Remarks	-	<ul style="list-style-type: none"> Provide roof access for maintenance and to comply with latest CPFPRTS and/or prevailing fire code requirements Installation of solar PV panel will be provided by SWC. Coordinate and interface with the Authority's M&E Consultant and SWC and make necessary civil and structural provisions for installation of solar PV panel including structural loading of roofs, stumps, space for inverter panels, closets, cable risers, etc. Coordinate and interface with the Authority's M&E Consultant and SWC for the lightning equipotential bonding. <u>Provide space for inverter panels at each of the station's entrances. The size of the inverter panels shall be coordinated with the Authority's M&E Consultant and SWC.</u> <u>Coordinate and maximize roof space for the installation of the Solar PV system as required by the Authority.</u>