		Metro Manila Subway Project Phase 1 Package CP106: E&M Systems and Track Works	
ITEM NO.	**REFERENCE/CLAUSE/ SECTION**	**QUERIES**	**RESPONSE**
		Volume II, Part 2 – Employer's Requirements, *c) Technical Requirements (ERT)*	
1.	03 Telecommunication System_12 Dec 2019 (PA) Clause: 3.7.5 3(a) Page: TEL-3-44,45	Four Security Functions are specified in the User requirement as follows • Intruder detection • Suspicious person detection • Desertion detection • Removal detection Performances of the analytics are significantly influenced by environmental conditions (lighting, exposure and installation) and context of deployment (crowd, field of view, etc), in order for us to define the best technical solution while keeping a cost-efficient approach, can you provide full use cases for the Security Functions? Please define in particular for each of the above functions: • operational objective and respective characteristics of any object of interest to be monitored, • detection area to be covered, camera placement, detection rate and acceptable false alarms.	CP106 is design and built contract. The Performance of CCTV system with security functions shall be evaluated during detailed design stage by The Engineer and The Employer. To overcome certain environment conditions each video input shall be configured with the following analytic filters as a minimum: 1. Rain filter to overcome extreme wet and foggy weather outdoor conditions 2. Image stabilization filter to overcome pole vibration 3. Smoke /Cloud/shadow filter. 4. Stationary motion filter that ignores constant motion such as leaves moving in the wind, waves, and so on. The video analytics applications provided by the Contractor shall include following as a

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			minimum: - **Intrusion Detection**: Detection of unauthorized entry into secured areas of station. Alert when there is intrusion in a certain direction. **Baggage Detection:** Identification of unattended luggage in station area and at the entry and exit gates. **People Counting:** Count the number of people across multiple entries/exits, with reports and trend analysis. **Vehicle Detection if any**: Detection of vehicles , in the Depot area **Queue line Control:** Indication of queue build-up in station area, and at the Entry/Exits. **Counter Flow:** Detection of people moving in the wrong direction such as technical area (i.e. back of house) points.

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			Asset Protection: Detecting to identify objects have been removed. **Camera Tampering: Monitor** and alarm over heating temperature **Overcrowding Detection:** The coverage area assessment for camera placement and detection rate shall form part of detailed design requirement detailed in the Vol II - Telecom ERT subject to approval from the engineer and The Employer. Th acceptable False Alarm shall be reviewed and expect to meet the reliability and availability requirements with the contractors RAM. All station shall be divided into safety, security and operations categories within the classified areas. The category class (safety, security and

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			operations) is determined by the area of detection to be covered by the camera placement, with detection rate and acceptable false alarms during detailed design stage.
2.	03 Telecommunication System_12 Dec 2019 (PA) Clause: 3.7.5 3(a) Page: TEL-3-44,45	If the full use case is not defined yet and in order to avoid any over specification that might have very important cost impact we propose to include only a Proof Of Concept (POC) to demonstrate the features and define in detail with the Engineer and Employer performance indicators (detection rate, acceptance level of false alarms). The finalized Security Functions and full associated costs will be determined during project execution once the use case and performance indicators are fully determined and approved. Attached herewith the POC proposal for the four Security Function. As part of the contract a total of 10 cameras for the 4 Security Functions will be deployed at designated station in the Partial operation phase. Please confirm if the approach is acceptable.	The CCTV design shall follow the requirements specified in the Vol II - Telecommunication ERT. The full use of CCTV system shall be decided during detailed design. CP106 is design and built contract. The POC was not accompanied with this clarification for the Engineer & the Employer to assess. However, we agree to review a POC with a cost benefit analysis during the detailed design stage from the Contractor. The maximum number of CCTV cameras in the Station shall be determined after a

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			coverage study as part of the detailed design. Station architecture design was published for the Bidders to conduct a preliminary assessment following the requirements of the Vol II - Telecom ERT.
		General Bid Bulletin	
3.	GBB 17, ANNEX B ITEM 17. 23 Public Event Show At East Valenzuela Station (New Section)	1) Please confirm if the event is on May 2022 or March 2022. 2) Please confirm access date to East Valenzuela Station. Currently, according to GBB no.1: • access date to station is week 48 (i.e. Dec 2021 on the • assumption that the commencement date is Jan 2021); • equipment room access is week 70 (i,e. May 2022); • completion is week 87 (i.e. September 2022). 3) Please confirm access date to PRI. Currently according to GBB 1, the access date is week 130 (i.e. June 2023). These dates do not correlate with the public event.	1) The event show will be on **May 2022**. There is typo in the last sentence of the first paragraph. 2) Access date to the East Valenzuela Station was published in the GBB No.1 for the PO section. For the public event show, the Contractor shall closely coordinate with the relevant parties i.e. Civil Contractor to gain early or partial access to meet this particular event. 3) Same as item no. 2) above.
4.	GBB 17, ANNEX B ITEM 14	Please confirm the requirement "*provision to monitor statuses of other system/equipment at different levels*", please detail	This is design and built contract, therefore the Contractor shall propose, define and

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	5.22 Integrated Control And Supervisory System (ICSS)/FSCADA (New Section)	the monitoring required for each system as the necessary interface equipment will need to be evaluated and priced for these systems.	coordinate with relevant parties within the CP 106 work package for the detail monitoring health statues and other interfaces with each system within this contract CP 106 during the detailed design stage. This is including the level of alarms shall be monitored such as Critical, Major & Minor Alarms. Appendix 6 of the Vol II defines the external interface responsibilities.