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.	04 Power Supply System_12 Dec 2019 (PA) Clause: 4.10.12 & 4.10.15 (3) Page: POW-4-85,86	"1. Backup Operating Facilities shall be equipped only for open/close operation of all circuit breakers and only for monitoring of all circuit breakers' statuses, when main operating facilities in OCC are failed. 2. The backup operation facility has a function that can be used as a training facility for power supply and distribution system operation using a sequence simulator by off-line system. As PRI has training facilities. The contractor must consult with the customer whether to use this feature." "One OCC to be provided (and BCC as an OPTION for future to be confirmed). Central workstations shall be provided giving an effective means of display and control. Simultaneous control operations from the OCC and BCC shall not be allowed. Main Control shall be available at OCC. It shall be transferred automatically to BCC in case of OCC communication Failure or Both Servers failure. Else, BCC controller shall request OCC controller to transfer control. On BCC controller's request, OCC controller can transfer control to BCC & vice-	No, bidder's understanding is incorrect. The P-SCADA located within OCC are dual parallel redundant operating system and must be able to 'back-up' each other. The BOCC is a back-up for emergency use only in the event the OCC is out of services with all staff evacuated.

Metro Manila Subway Project Phase 1 Package CP106: E&M Systems and Track Works			
ITEM NO.	**REFERENCE/CLAUSE/ SECTION**	**QUERIES**	**RESPONSE**
		versa but with an authorization In Emergency BCC controller can forcefully take over control & vice-versa. It shall generate an audio Alarm at OCC as well as at BCC. Each transfer shall be a recorded event with time stamping." According to the requirement above, operation concept of "Backup Operating Facilities" in OCC and "BCC" are overlapped and contradicted, i.e. both of them are the backup when OCC is failed. As such, we proposed "Backup Operating Facilities" in OCC should be served for training purpose only, while backup of OCC will be covered by BCC. Please confirm	
2.	04 Power Supply System_12 Dec 2019 (PA) Clause: 4.8.4 (34.5 kV Switchgears – item (f)) Page: POW-4-49	"The switchgear shall be protected from total dust ingress and protected from long term immersion up to specified pressure. The 34.5 kV switchgear shall be comprised of the following:…" Please confirm the detailed specification for the above.	Under the CP 106 design build contract the Contractor is responsible to develop the detailed technical specification for 34.5kV Switchgear including design, build and test of all electrical equipment/components which compliant with BSEB/IEC standards and or equivalent JIS Standards as specified in the

Metro Manila Subway Project Phase 1 Package CP106: E&M Systems and Track Works			
ITEM NO.	**REFERENCE/CLAUSE/ SECTION**	**QUERIES**	**RESPONSE**
			Employer's Requirement.
		Volume III, Part 2 —Employer's Requirements (ER) ***d) Drawings***	
3.	Vol III Part 2 Employers Requirements_d) Drawings_19 Dec 2019	There are no signalling track layout and route tables for Quezon, East Avenue, Anonas, Katipunan, Kalayaan and East Valenzuela. Please provide.	Concept route table for stations showing diverging routes where the turn back provision is available was included in the Bid document for information only. Route table is a part of detail design, which the contractor shall prepared with headway simulation/calculation and submit during the detailed design phase for the Engineer and Employer review for approval.
		Volume IV, Part 3 — Conditions of Contract and Contract Forms	

Metro Manila Subway Project Phase 1 Package CP106: E&M Systems and Track Works			
ITEM NO.	**REFERENCE/CLAUSE/ SECTION**	**QUERIES**	**RESPONSE**
4.	CP106 Vol IV_CF_PC_CONTRACT FORMS_11 Dec 2019 (PA) Clause: Percentage of retention 14.3 (c) , Particular Conditions (PC) Part A – Contract Data Page: PC-4	Please confirm if a retention bond is acceptable in place of deduction on each payment.	A retention bond is NOT acceptable in place of deduction on each payment.
5.	CP106 Vol IV_CF_PC_CONTRACT FORMS_11 Dec 2019 (PA) Clause: 14.7 Payment, Particular Conditions (PC) Part B – Specific Provisions Page: PC-10	The 2-internet links do not work. Please confirm the correct links.	Please use the following links: http://www.jica.go.jp/english/our_work/types_of_assistance/oda_loans/oda_op_info/procedure/index.html http://www.jica.go.jp/english/our_work/types_of_assistance/oda_loans/oda_op_info/procedure/pdf/transfer_201208.pdf
General Bid Bulletin			

Metro Manila Subway Project Phase 1 Package CP106: E&M Systems and Track Works			
ITEM NO.	**REFERENCE/CLAUSE/ SECTION**	**QUERIES**	**RESPONSE**
6.	General Bid Bulletin No. 6. Clause: Annex B, Item 13 Page: 5 of 6	There are discrepancies between main line layout and individual station layout. Please provide the updated individual station route table for signalling design.	Route table is a part of detail design, which the contractor shall prepared and develop based on the headway simulation/calculation and submit them for the Engineer and Employer review and approval.
7.	General Bid Bulletin No. 6. Clause: Annex A, Item 17 Page: 8 of 65	We understand that CBTC and ETCS are independent systems (both hardware and software level) from each other, while that interoperability is required, and the Interface Specification shall be developed by CP106 as a part of the concerned parties, this is not possible without details of the ETCS system to be used. Please confirm details of the ETCS system so that compatibility and interoperability can be reviewed. If ETCS details are not available, please confirm this will be excluded from CP106 until such information is available.	Interoperability is only of the MMSP Rolling operating on the NSCR- South section. As part of the design and build contract an Interface specification of the Signaling systems in the Rolling Stock for the (CBTC) by CP 106 and NSCR -South Signaling system (ETCS) Contractor shall be developed between the CP106 (MMSP Contractor) & NS-01 (NSCR Contractor) during the detailed design phase. The exclusion and / or inclusion of the ETCS information within the Interface Specification shall be determined during the detailed design stage between the Contractors.

Metro Manila Subway Project Phase 1 Package CP106: E&M Systems and Track Works			
ITEM NO.	**REFERENCE/CLAUSE/ SECTION**	**QUERIES**	**RESPONSE**
			The interface specification is subject to the Engineer and Employer review and acceptance.
8.	General Bid Bulletin No. 6. Clause: Annex B, Item 7 Page: 3 of 6	Item 7 of Annex B in GBB 6 mades reference to Calamba Depot and Mindanao Depot. No other references are made in the ITT to these depots. Please confirm these depots are within the scope of CP106? If these depots are within the scope of CP106, please provide details of location, track layout, signalling layout and the signalling route table. Also, please provide details power availability and location of TSS and Signalling Equipment Room in these depots. For Mindanao depot, please provide details of the ETCS system to be installed. Please provide key dates for access and completion in these depots.	Bidders understanding is incorrect. Only Mindanao Depot at East Valenzuela is within the scope of CP106 contract. Refer to Drg. No. MMSP-SIG-0000-DD-0401 for Track and Signalling layout of Mindanao Depot. The Depot route table is a part of detail design, which the contractor shall prepared and develop based on the headway simulation and calculations by the Contractor which is submitted for the Engineer and Employer review and approval. TSS and SER locations in the Depot can be found on Depot drawings which were attached as part of GBB 5.

Metro Manila Subway Project Phase 1 Package CP106: E&M Systems and Track Works			
ITEM NO.	**REFERENCE/CLAUSE/ SECTION**	**QUERIES**	**RESPONSE**
			Total power supply capacity for Signalling is referenced in section 2.5.10 Miscellaneous Signalling System, section 7) Power Supply System. Contractor to provide detailed power calculation during detailed design. ETCS level 2 shall be provided by NS01 contractor as required to establish ETCS enabled MMSP trains can communicate with the wayside track equipment at Bicutan and beyond. Key dates for access are published in GBB No 1 published on 14 Feb 2020.
9.	General Bid Bulletin No. 3. Clause: Annex A, Item 13 Page: 9 of 43 General Bid Bulletin No. 6. Clause: Annex A, Item 50	In GBB3 item 13, it is stated that the Contractor of the Power Supply System (POW) shall be responsible for design and build of 115/34.5kV BSS, covering civil/structure and electrical. In GBB6 item 50, it is stated that "Contractor is required to work closely with Civil/ Architecture Contractor/s with respect	Both GBB No.3 and No.6 are correct. For the BSS, the Contractor shall be responsible for design and build a complete of 115/34.5kV BSSs which covering civil/structure and electrical.

Metro Manila Subway Project Phase 1 Package CP106: E&M Systems and Track Works			
ITEM NO.	**REFERENCE/CLAUSE/ SECTION**	**QUERIES**	**RESPONSE**
	Page: 26 of 65	to room size …" Please confirm all equipment room building structures, including BSS, TSS and SSS are provided by the civils contractor?	Meanwhile, all equipment rooms building structures within the Station including TSS(s) & SSS(s) shall be built by Civil Contractors. However, the CP 106 Contractor shall be responsible for the coordination and providing all the interface requirement with relevant Civil Contractors. Refer to Appendix 6 of the Bidding Document.
10.	General Bid Bulletin No. 6. Clause: Annex "A", Item 5 Page: 3 of 65	We note that under GBB6 item 5, Facilities SCADA is part of the CP106. We do not believe this to be correct, as the systems contractor has no information of equipment being provided under the civils contract nor details of the clients/operators requirements. This information is required to be able to size and determine the requirements of the facilities SCADA. Please confirm our assumption is correct and the Facilities SCADA sits outside the CP106 Scope?	No, bidder's understanding is incorrect. Station Facility SCADA is the responsibility of the Civil Contractor under the Building Management System (BMS) Interfacing with Station BMS is the responsibility of CP106 Scope of works. Civil Contractor/s are responsible for all Station BMS (i.e. Facility SCADA).

Metro Manila Subway Project Phase 1 Package CP106: E&M Systems and Track Works			
ITEM NO.	**REFERENCE/CLAUSE/ SECTION**	**QUERIES**	**RESPONSE**
			CP 106 contractor shall interface and possibly integrate with the Station BMS at the OCC. This system integration is called Integrated Control and Supervisory System / Facility SCADA (ICSS)/FSCADA). The demarcation and detailed interface points defined with Civil Contractor/s during the design stage. The requirements of ICSS/FSCADA shall be published in the next General Bid Bulletin as CP 106 addendum.

Metro Manila Subway Project Phase 1 Package CP106: E&M Systems and Track Works			
ITEM NO.	**REFERENCE/CLAUSE/ SECTION**	**QUERIES**	**RESPONSE**
11.	General Bid Bulletin No. 6. Clause: Annex "A", Item 5 Page: 3 of 65	In the event our assumption above on the facilities SCADA is incorrect, please provide details of all equipment being installed that is required to be monitored by the facilities SCADA including equipment type, number, location, standards to be fulfilled by FSCADA, means of interface with the SCADA system (i.e. via hardwire or network or any serial interface), the number of inputs and commands required, communication protocol for LAN interface, no. of I/O points per interfacing system per stations, please also provide details of the functionality required from the SCADA including the number of users and terminals, location of these users and terminals, types of alarms etc. Please detail how many workstations are needed for FSCADA in each location? And how many monitors per workstations? In addition, please confirm if FSCADA will control or monitoring only for each interfacing systems?	Refer to the response to item 10 above.
12.	General Bid Bulletin No. 6. Clause: Annex "A", Item 24 Page: 11 of 65	In GBB6, it is stated that "At present the Contractor should assume and consider the future design of TETRA system in range of VHF band (30MHz- 300MHz) and UHF band (300MHz-3000MHz). The Engineer and the Employer shall	There will be no change in Frequency range for MMSP radio system. Frequency range will remain same. The MMSP radio frequency configuration will

Metro Manila Subway Project Phase 1 Package CP106: E&M Systems and Track Works			
ITEM NO.	**REFERENCE/CLAUSE/ SECTION**	**QUERIES**	**RESPONSE**
		assist the Contractor to secure the frequencies for radio system from NTC after CP106 Contract award" Not securing these frequencies prior to design is an issue and may result in additional cost if frequency range is changed. We therefore suggest to limit the risk and the potential for additional cost to the Employer that these frequencies are secured prior to contract award, or the Employer accepts the risk of additional cost if these frequencies are not secured. Please confirm	be VHF band between 30MHz- 300MHz and UHF band between 300MHz-3000MHz. The required frequencies will be secure with Authorities during the detailed design for project use.
13.	General Bid Bulletin No. 6. Clause: Annex "A", Item 23 Page: 11 of 65	In reference to response "spares parts quantity for Telecom package shall be for 10 years from end of DNP". Please confirm if 1. This is to be included in our offer and delivered. or 2. Spare parts price list with quantity to be offered and exercised by Employer separately and the price for 10 years spares should not be included in our offer.	The Contractor to propose spare parts and quantity based on their Reliability Availability and Maintainability (RAM) assessment for the Engineer and Employer review and acceptance. The spare parts quantity of equipment for telecom package shall be for 10 years from the end of Defect Notification period (i.e. full hand over to O&M). The Design and spare parts to avoid any unavailability or obsolete of telecom

Metro Manila Subway Project Phase 1 Package CP106: E&M Systems and Track Works			
ITEM NO.	**REFERENCE/CLAUSE/ SECTION**	**QUERIES**	**RESPONSE**
			equipment's parts in market for next 10 years.
14.	General Bid Bulletin No. 6. Clause: Annex "C", Signaling Layout in Depot, Main Line Layout of Signaling Scheme Page: 6 & 7 of 77	Please confirm track circuits are required for the depot and the full length of the tunnel section.	Secondary train detection system shall be used within the depot and mainline to detect the absence of a trains that loss of CBTC communication. However, the Contractor shall present a failure mode effect and criticality analysis (FMECA) and safety assurance with the detailed design.