

CLARIFICATIONS TO PRE - BID QUERIES

KOLKATA METRO RAIL CORPORATION LIMITED

Contract-UG/EL-L & E (R) – Detailed Design, Detailed Engineering, Prototype, Manufacture, Supply, Delivery and Storage at Site, Installation, Testing And Commissioning (including integrated testing & commissioning), Training of Personnel, Demonstration of Performance of System/ Equipment & Annual Maintenance Contract of Lift & Escalator System (L & E) of Two Underground and Six Elevated Stations of Kolkata Metro East-West Line Project (Phase1)

KMRCL / CONTRACT – UG/EL-L & E (R)

Sr. No.	VOL.	SECTION	CLAUSE No. / Sub Head / BOQ Sr. No.	PAGE No.	DESCRIPTION AS PER CONTRACT	QUERY	CLARIFICATION
1	Vol 1	FOT	Appendix 1 - Contract Conditions	FOT Appendix 1/1	EMD Amount Point 1 of Appendix 1- Contract Conditions Amount of Tender Security (paragraph C18 of Instructions to the Tenderers) - INR 1.5 Crore (One Crore Fifty Lakhs).	It is observed that the EMD amount is INR 15,000,000.00 (Rupees One Crore and Fifty Lakh only). This is deemed to be quite high as compared to the estimated Project Cost. For most Global Metro & Railways Tenders, the EMD is always one %. We are currently executing a prestigious project of DMRC for which EMD was one % only. We request you to please review the EMD amount.	No change in tender condition is envisaged.
2	Vol 2	ECR	Clause 1.11.1	ECR/2	Financial Eligibility Criteria I – Financial Standing	It is mentioned in the footnote that 'each member must fulfill the criteria'. It is not clear what should be the Net Worth for each member and for each year (of last two years). Please clarify.	In case of JV/ Consortium, at least one member must fulfil 40% of the criteria and other members 25% for T1 and T9. For T2 and T2A, each member must fulfill the criteria. However in totality JV/Consortium (all the partners) put together should meet 100% of financial standing criteria at all times. All other criteria will be evaluated jointly as Consortium.
3	Vol 1	NIT	Clause 1	NIT/1	Seperate NIT for Elevators & Escalators Point 1 of Notice Invitation to Tender 1. Kolkata Metro Rail Corporation Limited (KMRCL) are calling tender for design based on detailed design, detailed engineering, prototype, manufacture, supply, delivery and storage at site, installation, testing and commissioning (including integrated testing & commissioning), demonstration of performance of the system and annual maintenance contract Lifts & Escalator System as detailed under the scope of work of this tender document for Underground stations of Kolkata Metro East-West Rail Project. Joint Venture, Consortium and Sole Bidder (Indian and International companies) complying with the requirements of the Document can apply. The KOLKATA Metro Rail Corporation Limited's (KMRCL) East-West Line system is on 750 volts DC third rail over a length of 16.6 Km (Approx.). It is partly Elevated (5.8 K.M) and partly Underground (10.8 K.M.) construction. General Consultants (GC) are appointed by KMRCL who will work as Engineers for this project and assist KMRCL in evaluating the tenders.	It has been a recent trend in Metro and Railways Tenders to have separate NITs for Elevators and Escalators (Mumbai Metro Rail Corporation Limited invited a PQ for combined facilities but are now asking for fresh NITs separately). We request KMRCL to review the matter.	No change in tender condition is envisaged.
4	Vol 2	ECR	Clause 1.11.1	ECR/3	Experience Criteria III – Experience Record	Experience criteria of 60 Escalators & 60 Elevators seem high. Request KMRCL to reconsider lowering the number keeping in view the numbers required for this Tender.	No change in tender condition is envisaged.
5	Vol 1	ITT	Clause A1.1	ITT/1	Total number of working stations The KMRCL East-West Line (EWL) Metro Project will be approximately 16.6 km long, operating an east-west corridor of Kolkata Metro Rail Project and will connect Howrah Maidan at the West and Salt Lake Sector V at the East. The route will be approximately 5.8 km elevated and 10.8 km underground. There shall be 6 stations on via-duct and 6 stations underground. The line will have interchange with existing network of Indian railways at Howrah, Sealdah and Esplanade stations of Indian Railways.	The NIT title mentions two underground stations while in given clause states that there will be 6 stations underground. KMRCL is requested to please clarify.	Scope of the present tender covers 2 underground stations and six elevated stations.
6	Vol 2	ECR	Clause 1.11.1	ECR/3	Prequalification Criteria III – Experience Record T12 - If the member of JV/JVA/Consortium responsible for manufacturing & supplying of elevator, is of foreign origin then they should have experience of manufacturing and supplying minimum 60 Machine room less elevators for MRTS (Metro Stations/ Airport) application, excluding the country of Origin. T 13 - If the member of JV/JVA/Consortium responsible for manufacturing & supplying of elevator is of foreign origin then they should have experience of manufacturing and supplying minimum 60 Heavy Duty Escalators for MRTS (Metro Stations/ Airport) application, excluding the country of Origin.	Prequalification Criteria: It is mentioned that "only the experience out of the country of origin will be considered ". However, recently issued Metro Tenders do not include this requirement (that only the 'Experience out of the country where the machines are manufactured, will be considered'). This clause seriously restricts the competition without bringing any additional benefit to KMRCL.	No change in tender condition is envisaged.
7	Vol 3	Part II	7.4.3	62	For tests outside India, the contractor shall be responsible for cost of travelling and accommodation incurred by the Employer and / or authorised representative based on 4 trips of 3 persons for 7 days each.	Test outside India normally carried out in One Trip within 5 or 6 days time for each Elevators & Escalators factories, However we consider the Second Trip in the special event of any change the test plan. Hence consider only 2 trips instead of 4 trips for 5 days each.	No change in tender condition is envisaged.
8	Vol 3	Part I	6.2.11	36	The Contractor shall provide Seismic operation Control system with primary wave sensor for the Lifts measurable in Richter scale. These shall be integrated with Seismic operation control device through RMS/ BMS System. Upon detecting such wave, the equipment shall direct all the Lift cars in the Station/ Admin & OCC Building/ Depot to the nearest floor and immediately open doors for safe exit. The lift shall only be reset manually after the signal is clear and the lift has been inspected by the maintenance personnel. One number of primary wave seismic sensor shall be provided in each station, Admin & OCC building and Uppal depot.	The scope Supply of the Primery Wave sensors for Seismic operation is not mentioned, and it should be in the scope of KMRC.	No change in tender condition is envisaged.
9	Vol 3	Part I	7.8.24	93	Four number Bollards shall be installed at the entry of Escalator landings to prevent the passenger with bulky luggage or baby carriage from boarding the Escalator. The bollards height shall be 100 cm and shall carry the traffic light. The traffic light should interface with the direction of Escalators i.e. light shall be red when Escalator is not available for use and shall be Green when Escalator is available for use. The details shall be got approved from the Employer at the time of design.	This has reference to the EN 115 of page 62(safety of escalators & moving walks) having clause no. A.2.5 that there should not be any obstruction up to 2500mm from outermost edge of escalator. The fixing of traffic bollards will create hindrances for passenger movements Resulting into breakage of bollard and there bypassing of sensors which result in continuous operation speed with higher power consumption.Kindly Requested you to Delete this requirement.	Please refer to Addendum No 1 S.No 27

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10	Vol 3	Part I	7.15	102	All the Escalators shall be equipped with a sprinkler system in the landing pits and machine rooms. The Contractor shall provide sprinkler pipes and heads inside truss for the Escalators and shall co-ordinate with designated Contractors and make adequate provision to incorporate all the required fire protection equipment and to get the sprinklers provided in the landing pits and machine rooms connected to the main Fire Sprinkler / Suppression system.	Only Provision to fixing the Sprinkler pipes and heads will be done underneath the Escalator Truss.	No change in tender condition is envisaged.
11	Vol 3	Part I	6.8.10 a (ii)	45	Architrave (Fascia/ Jamb) - Scratch Resistant Stainless steel SS 304 5WL / Stone work, stainless steel of not less than 1.5 mm in thickness. The fascia of minimum 300 mm width on every landing or as per site condition for fixing the Landing Plate, Indicators, MCP etc. shall be of Scratch Resistant Stainless steel SS 304 5WL/ Stone work and shall be in scope of elevator Contractor. The architrave design with drawings and details have to submitted and approval to be taken before manufacturing.	The architrave work of SS 304 5WL finish 1.5 mm thick can be done by Lift contractor, but any Stone work for Architrave should not be the scope of Lift contractor. As a lift contractor we can co-ordinate with the Civil contractor for proper Interfacing.	Please refer to Addendum No 1 S.No 19
12	Vol 3	Part I	6.16.1 (g)	54	Fascia : Where the gap between the car door sill and surface of the Elevator shaft wall exceed 125 mm, galvanized sheet steel fascia plates of not less than 1.5 mm thick shall be provided. These shall be fixed between the undersides of landing entrance sills and the top of the door hanger case to form a flush surface in the path of travel at the car entrance. The plates shall cover the whole width of the landing door and extend by 150 mm on each side of the door. It shall be rigid and properly reinforced. The fascia plate shall be painted in a accepted colour.	Since Car door lock is provided, the Fascia may not be required.	No change in tender condition is envisaged.
13	Vol 3	Part II	6.1.4	55	The Contractor shall provide all tools, Laptop computers or any special device to upload/ download the software, data logs, equipment, manuals and training necessary for the Employer to maintain and re-configure all software provided under this Contract. The documentation of software may be supplied after the expiry of the warranty period, under terms and conditions acceptable to the Employer.	Supply scope of Laptop computer should not be in lift contractor scope.	No change in tender condition is envisaged.
14	Vol 3	Part I	6.18.2	58	The water sensors in the elevator pits shall be provided wherever pits are on the ground level or below the ground level. The requirement of water sump in the elevator pits for such Elevators shall be coordinated with the civil contractor.	Please specify the exact numbers of Elevator & escalators pits on Ground level.	10 Elevators & 20 Escalators
15	Vol 2	SCC	32. Contractor's Management Team (GCC Clause 6.9)	SCC	This part of the cl. talks about a QA Manager to be permanently stationed in Kolkata.	In all our INFRA projects like MMOPL(Mumbai Metro), Mumbai Monorail, BMRCL (Bangalore Metro) we didn't have any full time onsite stationed Quality Assurance / Control Managers. Kindly confirm if this is a mandatory requirement, since our nature of work does not call for a QA Manager to be stationed full time on a single project site. (The incoming & inprocess quality checks are carried out by the project team). The final inspection is carried out by SIAS team (Quality Control Inspector / Engineer). Plz note that the ISO 9001 (QMS) audits will be carried out onsite once every quarter by the QA Manager from Schindler India Head office.	No change in tender condition is envisaged.
16	Vol 2	Eligibility Criteria	BASIS OF EVALUATION	ECR/38	8. Quality Control Manager 1 no. 9. Quality Control Engineer 4 nos.	In all our INFRA projects like MMOPL(Mumbai Metro), Mumbai Monorail, BMRCL (Bangalore Metro) we didn't have any full time onsite stationed Quality Assurance / Control Managers. Kindly confirm if this is a mandatory requirement, since our nature of work does not call for a QA Manager to be stationed full time on a single project site. (The incoming & inprocess quality checks are carried out by the project team). The final inspection is carried out by SIAS team (Quality Control Inspector / Engineer). Plz note that the ISO 9001 (QMS) audits will be carried out onsite once every quarter by the QA Manager from Schindler India Head office.	No change in tender condition is envisaged.
17	Vol 2	Eligibility Criteria	26b Quality Assurance Programme:	ECR/34	Do Tenderers or each constituent member currently maintain an in-house Quality Assurance programme?. If yes, give details.	Yes. We maintain Quality Assurance program on lines with ISO 9001: 2015 (Quality Management System) requirement.	Noted
18	Vol 2	Eligibility Criteria	26b Quality Assurance Programme:	ECR/34	Have you (or each constituent member in the case of a group) had any of your recent projects ISO 9000 / 9001 / 9002 certified? If yes, give details.	Yes. 02 nos. of projects, namely, (1) Omkar 1973-Worli & (2) Runwal Greens-Mulund have been certified during our ISO 9001:2015 re-certification audit held in Nov'16 from BSI.	Noted

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19	Vol 3	Part II	2.7 Reliability, Availability And Maintainability Assurance Plan	Pg. 26	2.7.1 The Contractor shall submit for review by the Employer, a Reliability, Availability and Maintainability Assurance Plan. 2.7.2 The Contractor shall describe procedures required to perform the specific tasks necessary to achieve RAM requirements in the Reliability, Availability and Maintainability Plan.	Kindly ask the same from the factory / supplier	No change in tender condition is envisaged.
20	Vol 2	GCC	11.1.1	GCC/56	11.1.1 The Contract price, subject to any adjustment thereto in accordance with the contract, shall be inclusive of all Taxes, CST/VAT,CWT, Royalties, Octroi and other charges leviable and payable to the authorities including all types of Custom related duties and Excise duties. All Taxes/Levies/Octroi etc. shall be as prevailing on 28 days before closing date for submission of tender. Nothing extra shall be payable over the quoted rates as accepted by the Employer, notwithstanding any provision to the contrary in any law for the time being in force, save and except what is specifically provided in General or Special Conditions of Contract. No price adjustment shall be made for Temporary Work and fuel.	Changes in VAT / Taxes / GST when effective to be Included in Contract Price.	Any change in taxes to be dealt with SCC 1 & SCC 53 (last para).
21	Vol 2	GCC	11.1.1	GCC/56	If the Employer obtains a waiver and exemption specific to Kolkata Metro Rail Project for any other taxes and duties, etc. in full or part thereof, the Contractor will be advised on the process to be followed to obtain exemption/refund of such taxes, duties, etc. from the concerned Authorities. The Contractor shall arrange for the remittance of the refund so obtained to the Employer. In case of exemption, the Contractor shall pay the amount calculated by the Engineer on account of exemption to the Employer either separately or the Employer at its discretion shall deduct the calculated amount from any payments due to the Contractor under the Contract.	Refund of Taxes paid to be claimed by Kolkata Metro from Tax Authorities, and Schindler India cannot refund the same nor do the necessary process for Customer.	SCC clause 53 conclusively defines the refund of taxes if any. No change in tender condition is envisaged.
22	Vol 2	GCC	11.1.1	GCC/56	Service tax	We will be charging Service tax(present rate 15%) on Installation and commissioning, transportation, clearing forwarding charges of contract value.	No change in tender condition is envisaged. Please refer SCC 53.
23	Vol 3	Part I	5.12	33	The design of the earthing system shall conform to IS 3043 : 1987	Earthing is under which contractor scope? Normally it is not elevator contractor scope of earthing.	No change in tender condition is envisaged. Double earthing will be provided by E&M contractor for elevator and escalator at one point inside the shaft. Internal earthing from that point to the elevator/escalator components will be done by elevator/escalator contractor.
24	Vol 3	Part I	6.2.11	36	The Contractor shall provide Seismic operation Control system with primary wave sensor for the Lifts measurable in Richter scale. These shall be integrated with Seismic operation control device through RMS/ BMS System. Upon detecting such wave, the equipment shall direct all the Lift cars in the Station/ Admin & OCC Building/ Depot to the nearest floor and immediately open doors for safe exit.	Seismic sensor which contractor scope of supply?	Please refer to S.N. 8. Seismic sensor will be in the scope of elevator/escalator contractor.
25	Vol 3	Part I	6.3.2	38	a) Driving motor shall be of the AC synchronous/asynchronous axial type designed for special duty cycles required for Elevator operation with no slip rings.	we provide radial machine not axial one. Is it OK?	No change in tender condition is envisaged.
26	Vol 3	Part I	6.3.2	38	(g) The Elevator machine shall be fitted with a manual mechanical emergency device capable of having the brake released by hand and requiring a constant effort to keep the brake open. In case of MRL lifts, the motor brake shall be able to be remotely released outside the lift well.	We provide Manual Electrical emergency device with battery back up and not Manual mechanical emergency release. Is it OK?	Please refer to Addendum No 1 S.No 17
27	Vol 3	Part I	6.4.1	39	At least three (3) steel wire ropes specially manufactured for Elevator use shall be employed for the suspension of Elevator car and counterweight.	we supply STM instead of rope. Is it OK?	Please refer to clause 6.4.4., flat belts are included in the clause. No change in tender condition is envisaged.
28	Vol 3	Part I	6.8.10 a (i)	45	i. Landing Transom Panels - Scratch Resistant Stainless steel, SS 304 5WL finish stainless steel of not less than 1.5 mm in thickness	What is the dimension of landing transom panel?	As per the requirement and design.
29	Vol 3	Part I	6.8.10 b (iv)	46	Car Doors - Scratch Resistant Stainless steel, 5WL SS 304 finish with 1 hour fire rated stainless steel of not less than 1.5 mm in thickness - For the glass door, Thickness of glass shall not be less than 10mm and with the stainless steel 304 5WL frame. The fire rating of the glass shall be minimum 1 hour.	Which station / lifts required glass car and landing door is not mentioned in tender. Kindly share the details.	No change in tender condition is envisaged. All lifts (Stainless steel / Glass) car panels with 5WL SS 304 finish only. Glass landing doors and Car Glass doors only in case of concourse to platform lifts.
30	Vol 3	Part I	6.9.3	48	On "Without Attendant" mode, if no command is registered or due to some abnormality in Lift Safety circuit, after the expiry of a preset time interval of 10-30 seconds (Adjustable) the door shall re-open once for 30 seconds (Adjustable) so as the commuter can come out and then close.	The door open button will work when pressed and not automatically. Is it OK?.	No change in tender condition is envisaged.

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31	Vol 3	Part I	6.9.3	49	If the car door is forced open, the Elevator shall stop and the alarm activated (even when the Elevator is out of order) until the door is fully closed. The audio-visual alarm signal shall be sent to the relevant landing as well as to SCR and CC rooms.	There is car door lock , so it is not possible to open the car door from inside the car. Also alarm will not activate.	No change in tender conditionis envisaged.
32	Vol 3	Part I	6.9.4.1	49	Electrically operated proximity detector devices(s) shall be installed on the leading edge of the car doors.	Electrical proximity switch is not required as there is photo cell and 3 D light curtain.	No change in tender conditionis envisaged.
33	Vol 3	Part I	6.11.3 (a)	50	(a) An alarm button in yellow colour with bell shaped symbol self-illumination type, when pressed, shall activate the alarm hooters and register the alarm condition through the Remote Monitoring System at the SCR/ CC room or as per requirement of employer. The Audio Visual console/display of suitable size shall be installed at the top most and lowest landings as well as in SCR and Customer Care Room.	alarm button, door open , close button will not illuminate. It it OK? As there is response on pressing these buttons	No change in tender conditionis envisaged.
34	Vol 3	Part I	6.11.3 (j)	51	(j) Provide Emergency stop button in the car operating panel. When operated shall bring the lift to nearest landing with alarm and the communication through BMS to SCR/OCC etc	this feature is not possible and it is against the safety of passenger.	No change in tender conditionis envisaged.
35	Vol 3	Part I	6.11.4	51	i. Fully Automatic with Attendant operation. ii. Automatic with Attendant operation.	Eplain the functionality of fully automatic and automatic attendant operation?	Please refer to Addendum No 1 S.No 20
36	Vol 3	Part I	6.16.1 f (iii)	54	iii. The locking device shall have at least IP 54 protection.	pl explain what is locking device, what mechanism they are talking about?.	No change in tender conditionis envisaged. IP 54 is the switch.
37	Vol 3	Part I	6.16.1 (g)	54	These shall be fixed between the undersides of landing entrance sills and the top of the door hanger case to form a flush surface in the path of travel at the car entrance.	out product have car door lock, the landing full facia is not required. Is it OK?	No change in tender conditionis envisaged.
38	Vol 3	Part I	6.16.2	55	Pushbuttons: Provide single riser(s) with flush mounted faceplates. Include pushbuttons for each direction of travel which illuminate to indicate call registration. Include approved engraved message and pictorial representation prohibiting use of Lift during fire or other emergency situation as part of faceplate. Provide vandal resistant pushbutton with Braille markings, LED illumination and tactile symbols. The buttons should be permanently illuminated of dull illumination and on activation shall be bright illumination. Hall fixture face plates shall be stainless steel SS 316 or 304. Sizes should be submitted by the Contractor to Client for review and finalization during detailed design phase	The buttons shall illuminate only when pressed. Is it OK?	No change in tender conditionis envisaged.
39	Vol 3	Part I	6.16.3 (2)	55	Illuminate up or down LCD display and sound tone once for up and twice for down direction prior to car arrival at floor.	What is illuminate up or down LCD display?, not clear pl check and explain	No change in tender conditionis envisaged. Please refer to clause no 6.16.3 fully to understand.
40	Vol 3	Part I	6.16.3 (2)	55	Sound level shall be adjustable from 20 - 100 dbA measured at 1.5 meter in front of hall control station and 1 meter off floor.Illuminate light until the car doors start to close.	Sound adjustment not possible, but can provide fixed dbA level as per requirement. Pl share the watts of the speaker.	No change in tender conditionis envisaged.
41	Vol 3	Part I	6.17.5	57	Next Landing The car shall automatically proceed to the nearest floor with a functioning landing door if the car doors fail to open at the designated floor.	when passenger gives next car call it will go to that landing.It will not automatically go to next landing. Is this fuction ok?.	No change in tender conditionis envisaged.
42	Vol 3	Part I	6.18.3 (h)	58	a terminal stop limit switch shall be provided to stop the car from traveling in an upward direction not less than 1.8m from the soffit of the Elevator shaft.When this switch is activated, it shall not stop the car from operating in the down direction.	reversing is not possible,but recall drive in controller can do this function. Is it OK?	No change in tender conditionis envisaged.
43	Vol 3	Part I	6.19.6	61	Maintenance Access Panel (MAP) should preferably be located at Concourse level of station. Maintenance Access Panel (MAP), its enclosure shall be IP 54, Piifer proof. MAP shall have data down loading facilities for fault diagnostic through RS – 485 port. Fault data logging in MAP should have date & Time stamping facilities. MAP locking arrangement should be of SS 304. The wirings inside the MAP panel should be neatly dressed.	we don't have MAP, our controller or LDU is placed on top floor landing. Fault data logging in controller is possible for schindler employee and they can share this to customer as per request. Is it OK?	No change in tender conditionis envisaged. The terminology is used as MAP, it can be controller or LDU but the requirement to be matched with clause 6.19.6 requirement.
44	Vol 3	Part I	6.20.1	62	The RMS will be provided by the designated contractor. However, the Contractor shall provide/receive the following status monitoring points and control points to the RMS in the form of interface voltage free contacts. Fault data logging should have Date & Time stamping facility.	RMS panel will be provided by which contractor? Provide us the complete specification of RMS panel if it is in Elevator contractor scope?	No change in tender conditionis envisaged. Please read the clause 6.20 with sub clauses in details for understanding the requirement.
45	Vol 3	Part I	6.20.5	63	Upon actuation by remote switch from the RMS for parking on, the elevator shall complete the last landing or car call, if any, and return to the designated landing and stop there with both the car and landing doors open for 15-20 seconds and then close. The "Not in service" indicator shall be illuminated on the landing indicator automatically for a pre-determined time and then extinguished. The car light and ventilation fan shall be switched off automatically at the same time. The essential buttons e.g. door open, intercom and alarm bell etc. on the car operating panels shall be remained functional and illuminated when the Elevators have been parked and locked out.	What is the purpose of " not in service" display when parking is turned on. This feature is not required.	No change in tender conditionis envisaged. Please read the clause 6.20 with sub clauses in details for understanding the requirement.

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46	Vol 3	Part I	6.21.1	63	The Elevator operation system shall be designed to provide the following emergency operation. The Contractor shall provide the ITBs with terminals for the Designated Contractor to terminate the fire and power failure signals.	What is power failure signal. What is the purpose of providing power failure signal?.	No change in tender conditionis envisaged. Please read the clause in details for understanding the requirement.
47	Vol 3	Part I	6.22.1	65	An Elevator monitoring and fault diagnostic system shall be provided for each Elevator by the Elevator Contractor. This system shall provide an auxiliary output port on the controller for plugging the laptop and down loading historical data, which will be reviewed at design stage.	Schindler employee can perfrom this and share to customer on request.	No change in tender conditionis envisaged.
48	Vol 3	Part I	6.24.3	65	Fixed cat ladders shall be provided between the bottom landing and the pit floor by the Contractor.	CAT ladder would require most space in shaft, so normally simple ladder is provided when there is space available in pit. Is it OK?.	No change in tender conditionis envisaged.
49	Vol 3	Part I	6.29.3	69	Car roof shall be stainless steel SS 304 5WL finish cover panels exposed to public view with a collapsible maintenance platform or any othersuitable arrangement with "Employer/ Employer's Representative" approval above. It shall be able to sustain two persons and be able to resist a vertical force of 2000N at any position without permanent deformation. Permanent, hinged and foldable safety balustrades	what is meant by collapsible maintenance platform? PI explain the functionality.	No change in tender conditionis envisaged. Please read the clause in details for understanding the requirement.
50	Vol 3	Part I	6.30.6	72	(a) London Transport Executive Three Metre Cube Smoke Emission Test, using optical measuring instruments. The maximum value of absorbance AO (ON), AO (OFF) shall be 0.8 & 1.2 respectively. (b) The US National Bureau of Standard Smoke Chamber Test, used to evaluate plaque samples of materials of constant thickness. (NFPA-258 Smoke Generation of Solid Materials 1982). The maximum specific optical density shall be 170 under the non-polluted condition. (c) The flame propagating criteria of US IEEE Standard 383, with a minimum test short circuit time of five minutes, in the IEEE Standard 383 test. (d) IEC 332 Parts 1 and 3, Category B, tests on single and bunched cables under fire conditions. (e) Limiting Oxygen Index of at least 30, to ASTM D-2863. (f) A temperature index (TI) of 260°C to ASTM D-2863. (g) All insulation is to be moisture and heat resistant, with temperature ratings appropriate to the application conditions, and in no case lower then 120oC.	We can provide Cables complying to EN,IS,BS,IEC, ASTM standards and not against other metro tenders like london transport executive three metre cube some emission test.	No change in tender conditionis envisaged.
51	Vol 1 & Vol 2	ITT & SCC	A.1.5 & SCC 40	ITT/1 & SCC 40	The Contractor shall establish facilities for transfer of technology either independently or with an Indian Partner of proven track record in relative areas for all imported systems / subsystems. The transfer of technology shall cover the areas as listed in Employer's Requirements. The Contractor shall provide the transfer of technology as described in the Employer's Requirements.	No transfer of technology can be agreed upon.	No change in tender conditionis envisaged.
52	Vol 2	ECR	1.14	ECR/4	1.14 For calculating rupee equivalent as on 31.03.2015, the exchange rate used shall be as follows: Date/Currency. USD JPY EUR 31-03-2015 62.6369 0.5256 68.1991 For calculating rupee equivalent as on 31.03.2016, the exchange rate used shall be as follows: Date/Currency. USD JPY EUR 31-03-2016 66.588 0.586 74.4854	Request to provide the exchange rate from USD to RMB and RMB to INR	Please refer to Volume 1 & Volume 6 in details.
53	Vol 2	ECR	Section No 5	ECR/6	In respect of all tenderers (whether applying individually or as part of a group) and all holding or parent companies thereof, a bankers reference (in English) should be provided from the tenderer's or company's principal bank in its country of incorporation or registration. Such reference should indicate the financial standing of the tenderer and access to lines of credit of other financial resources	Please note Banking Reference shall be submitted only for the Consortium partners from the Bank in its country of incorporation or registration as per the Bank's format	No change in tender condition is envisaged.
54	Vol 2	GCC	1.1.6.12 & 4.6	GCC/11 & GCC/23	"Defects Liability Period" means the defects liability period stated in the Special Conditions of Contract calculated from the date of taking over of whole of the Works and not any sub-section or part thereof. This Includes where modified hardware or software is provided, any repairs, replacements or modifications to equipment during the Defects Liability Period will not cause the Defects Liability Period to be extended. If a Subcontractor's obligations extend beyond the expiry date of Defects Liability Period then the Contractor shall assign the benefits of such obligations to the Employer	Start of Defect liability period for a period of 24 months to be splitted in group as per agreed Schedule completion and shall not commence on taking over of whole of works. All liabilities of bidder shall cease at the end of DLP of 24 months period except in case AMC Agreement to maintain the escalators is in Bidder's scope.	No change in tender condition is envisaged.

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55	Vol 2	GCC & SCC	1.8 Sch 5 5.8	GCC/13, GCC/39	The Contractor shall be deemed (by signing the Contract) to give to the Employer a non-terminable transferable non-exclusive royalty-free licence to copy, use and communicate the Contractor's Documents, including making and using modifications of them. This licence shall: (a) apply throughout the actual or intended working life (whichever is longer) of the relevant parts of the Works, (b) entitle any person in proper possession of the relevant part of the Works to copy, use and communicate the Contractor's Documents for the purposes of completing, operating, maintaining, altering, adjusting, repairing and demolishing the Works, and (c) in the case of Contractor's Documents which are in the form of computer programs and other software, permit their use on any computer on the Site and other places as envisaged by the Contract, including replacements of any computers supplied by the Contractor. Insofar as the copyright or other intellectual property rights in any plans, calculations, drawings, documents, materials, plant, know-how and other information relating to the Works shall be vested in the Contractor, the Contractor grants to the Employer his successors and assigns a royalty free, non-exclusive and irrevocable license (carrying the right to grant sublicenses) to use and reproduce any of the works designs or inventions incorporated and referred to in such documents or materials and any such know-how and information for all purposes relating to the Works or the East West Metro Project including without limitation the design, manufacture, nstallation, completion, testing and commissioning (including Integrated testing and Commissioning) reinstatement, extension and including remedy of any effect in the Works. To the extent that beneficial ownership of any such copyright or other intellectual property rights is vested in anyone other than the Contractor, the Contractor shall use best endeavours to procure that the beneficial owner thereof shall grant a like licence to the employer. For the avoidance of doubt, any such licence granted shall not be determined if the Contractor shall for any reason cease to be employed in connection with the Works. Insofar as the patent, copyright or other Intellectual Property Rights in anyplant, design data, plans, calculations, drawings, documents, materials, know-how and information relating to the Works shall be vested in the Contractor, the Contractor shall grant to the Employer, his successors and assignees a royalty-free, nonexclusive and irrevocable license (carrying theright to grant sub-licenses) to use and reproduce any of the works, designs or inventions incorporated and referred to in such plant, documents or materials and any such know-how and information for the purposes ofoperating and maintaining the Works (including the installation, reconstruction, testing, commissioning, completion, reinstatement, repairand operation of the Works). If any patent, registered design or software is developed by the Contractor specifically for the Works, the title thereto shall vest in the Employer and the Contractor shall grant to the Employer a non-exclusive irrevocable and royalty-free licence to use, repair, copy, modify, enhance, adapt and translate in any form such Software for Employer's own use.	Please provide clarity on "Contracto's documents". Further, Bidder request that this Clause related to IPR be replaced with" All intellectual property rights in the equipment's including the control software and sub contractor docuements which enables routine operation, maintenance and repair of the equipment ("Control Software") remain the property of Sub Contractor. The Contractor is entitled to a non-exclusive right to use the Control Software and to operate the Equipment for its own purposes, but the Contractor shall have no other right or interest in the Control Software, especially as regards to the right to reproduce, reverse engineer or deal in the Control Software.	No change in tender conditionis envisaged.
56	Vol 2	GCC	2.3	GCC/16	It shall be Contractor's exclusive responsibility to get approvals, permits or license required for the Contracts. However, the Employer may (where he is in a position to do so) provide reasonable assistance to Contractor at the request and cost of the Contractor in getting Permits, License or Approvals required during the Contract. The rendering of such assistance by the Employer shall not be interpreted as a pretext by the Contractor as condoning of any delay or non-performance of any of the Contractors obligations. The following-up of all such applications shall be the responsibility of the Contractor.	All Statutory Permission approvals and license shall be in Customer's scope including statutory fees and other related incidental cost for the same.	No change in tender conditionis envisaged.
57	Vol 2	GCC	4.1,4.26	GCC/18 & GCC/31	The Contractor acknowledges responsibility for ascertaining and securing at his own cost: (a) conditions bearing upon the proper transportation, disposal, handling nd storage of materials (including but not limited to hazardous toxic substances and excavated materials); (b) availability of electricity, water and gas; The Contractor shall be wholly responsible for security of site and Works.	Please note cost for all preparatory work including paower, storage and security at site shall be borne by the Customer. Budder shall carry out basic housekeeping activities post completion of its work.	No change in tender condition is envisaged.
58	Vol 2	GCC	4.2.1 (a)	GCC/19	Within 28 days of receipt of the Letter of Acceptance, the successful Tenderer shall furnish Performance Guaranteeten per cent of the Contract price in types and proportions of currencies in which the Contract Price is payable. The Performance Guarantee shall be valid up to 28 days beyond the final completion of Defect Liability Period against each contract.	10% Performance Security to be splited for Supply as well as Installation contract value in respective contract to be given by Supplier and Installation Contractor . This Security to be given lot wise valid for 24 months from the date completion of units lot wise. Neither party shall be liable to the other party for loss of use of any Works, loss of profit, loss of any Contract or any other indirect or consequential loss or damage which may be suffered by the other party in connection with the Contract. Notwithstanding anything contained herein or elsewhere, the total liability of the Contractor to the Employer under the Contract shall not exceed the Contract Price received by Contractor.	No change in tender condition is envisaged.
59	Vol 2	GCC	4.7	GCC/24	Any breach of Clauses 4.5 to 4.6 shall entitle the Employer to rescind the Contract under Clause 13.2 of these conditions and also render the Contractor liable for loss or damage arising due to such termination.	Please note "In case of breach, Bidder shall be provided with a written notice of 15 days to cure the breach within 30 days of receipt of the same, failing which Contract wwill be terminated."	No change in tender condition is envisaged.

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60	Vol 2	GCC	4.26	GCC/31	No final payment in settlement of the accounts for Works shall be made till, in addition to any other condition necessary for such final payment, site clearance and clearances of labour camps, etc. shall have been effected by him. Such clearance may be made by the Engineer through any other agency at the expense of the Contractor in the event of the Contractor's failure to comply with this provision within 7 days after receiving notice to that effect from the Engineer. All expenses on such removal / clearance shall be debit to the Contractor as loans due from the Contractor to the Employer, and the Employer shall be competent to recover the same from any other amount payable to the Contractor from Contractor's on-account or final bills, or from Performance Guarantee amount.	Final payment cannot be linked to clearing of site. All payments for Risk purchase to be mutually agreed at actual not exceeding the cost of such portion of work and should be carried out at Customer's risk.	No change in tender condition is envisaged.
61	Vol 2	GCC	5.5	GCC/37	The Contractor shall submit at his own cost the following samples and relevant information to the Engineer for pre-construction and/or remanufacture review in accordance with the procedure for Construction and/or Manufacture Documents described in Clause 5.3: (a) manufacturer's standard samples of Materials, (b) samples (if any) specified in the Employer's Requirements. Each sample shall be labelled as to origin and intended use in the Works.	Samples shall be limited with respect to Finishes and Small items. Inspection/testing and approvals for all materials in the Equipment shall not be practically possible	No change in tender condition is envisaged.
62	Vol 2	GCC	6.10.1	GCC/43	In case, deployment of a Special Police Force becomes necessary at or near Site, during the tenure of Works, the expenses for the same shall be borne by the Contractor	In case the deployment of such Special Police Force is for reasons attributable to acts and omissions of Contractor, the cost of the same shall be borne by the Contractor.	No change in tender condition is envisaged.
63	Vol 2	GCC	8.1	GCC/48	The Contractor shall not commence the construction, manufacture or installation of the Works or of any part of the Works unless and until the Engineer has endorsed the relevant Working Drawings in accordance with the Employer's Requirements.	Please note all work shall be commenced and carried out as per the schedule of work / the programme mutually agreed between the parties in writing.	No change in tender condition is envisaged.
64	Vol 2	GCC	8.2 & 8.5	GCC/48 & GCC/50	Time is the essence of Contract and shall remain so at all times during the pendency of the Contract including the extended period of Contract. Time is the essence of the Contract. Appendix to the Form of Tender shall include in respect of the Works and in respect of any Stage, a percentage of the total Contract Price which shall be recoverable from the Contractor as liquidated damages for each day of delay in completion of the Works or in achievement of a stage by a particular Key Date. The total amount of liquidated damages in respect of the Works in all stages shall, however, not exceed the limit of liquidated damages stated in the Appendix to the Form of Tender. The aforesaid liquidated damages do not, however, include the sums payable by the Employer to Designated Contractors on account of delay caused by the Contractor to Designated Contractors which sums shall be recoverable from the Contractor in addition to any liquidated damages payable under this clause, the total ceiling limit is 10% of Contract Price as specified under Appendix 1 to the Form of Tender. Include the following in GCC 8.5 with the following: The maximum limit of liquidated damages shall be limited to 10% of contract price for the whole of the Works.	Please note Time cannot be the essence of Contract as customer has pre estimate of damages that will be levied in form of Liquidated damages. Liquidated damages to be calculated @ 0.5% of the contract value of delayed unit for per one week delay with an upper limit of 5 % of the contract value per week of delay for delayed unit and shall be the sole and exclusive remedy for delay available with customer.	No change in tender condition is envisaged.
65	Vol 2	GCC	8.3	GCC/48	Failure or delay by the Employer or the Engineer, to hand over to the Contractor the Site necessary for execution of Works, or any part of the Works, or to give necessary notice to commence the Works, or to provide necessary Drawings or instructions or clarifications or to supply any material, plant or machinery, which under the Contract, is the responsibility of the Employer, shall in no way affect or vitiate the Contract or alter the character thereof, or entitle the Contractor to damages or compensation thereof but in any such case, the Engineer shall extend the time period for the completion of the Contract, as in his opinion is / are reasonable	Please note in case of any delay by the Customer and for reasons not attributable to the bidder both cost and timeline for completion shall be mutually renegotiated between the parties.	No change in tender condition is envisaged.
66	Vol 2	GCC	8.8	GCC/51	The Contractor shall not be entitled to extra cost (if any), incurred by him, during the period of suspension of Work, if such suspension is (a) provided for in the Contract, or at the site or (e) to ensure safety and to avoid disruption of traffic and utilities, as also to permit fast repairs and restoration of any damaged utilities, If the Contractor suffers delay and/or incurs Cost from complying with Engineer's instructions under Sub-Clause(b) Payment of such cost which shall be included in the Contract Price.	Mutually agreed Suspension charges and remobilisation charges will be charged by Bidder in case the Suspension is beyond 3 weeks for reason not attributable to Bidder and completion schedule will be consequently modified.	No change in tender condition is envisaged.
67	Vol 2	GCC	7.5	GCC/45	If the Engineer requires such Plant, Material, design or workmanship to be retested, the tests shall be repeated under the same terms and conditions. If such rejection and retesting cause the Employer to incur costs, such costs shall be recoverable from the Contractor by the Employer, and may be deducted by the Employer from any monies due, or to become due, to the Contractor.	Bidder proposes that cost of testing and retesting to be in customer scope . Cost to be repaid by Contractor only in case bidder/ Contractor fails to remedy the breach within 7 days of receipt of written notice and such amount to be limited to contract value for defective unit or repaired unit, as the case may be.	No change in tender condition is envisaged.

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68	Vol 2	GCC	9.1	GCC/52	The Works shall be taken over by the Employer when they have been completed in accordance with the Contract, have passed the Tests on Completion, including Integrated Testing and Commissioning, and a Taking Over Certificate for the Works has been issued. If the Works are divided into Sections, the Contractor shall be entitled to apply for a Taking Over Certificate for each Section. The Contractor may apply by notice to the Engineer for a Taking-Over-Certificate not earlier than 14 days before the works or section (as the case may be) will, in the Contractor's opinion, be complete and ready for taking over. The Engineer shall, within 28 days after the receipt of the Contractor's application –(b) reject the application, giving his reasons and specifying the work required to be done by the Contractor to enable the Taking Over Certificate to be issued. The Contractor shall then complete such work before issuing a further notice under this Clause	Units to be splitted in group as per agreed Schedule completion for taking over followed by commencement of DLP.	No change in tender condition is envisaged.
69	Vol 2	GCC	9.2	GCC/53	The Engineer may, at the sole discretion of the Employer issue a Taking Over Certificate for any part of the Permanent Works. If the Employer uses any part of the Works for revenue service; and the Contractor shall cease to be liable for the care of such part from such date, when responsibility shall pass to the Employer. If the Employer uses any part of the works for revenue service before the Taking Over Certificate is issued, the defects liability period of that part of the works shall be commenced as soon as such part is put to use for revenue service	Neither the Customer nor any third party shall be entitled to use the escalator for any purpose whatsoever prior to: • the formal written issuance of taking over certificate by Customer. • the receipt of the full and final payment by Bidder. In case any unit is put to use or taken ove for any purpose (whether or not put to use for revenue service) before issuance of taking over certificate then it will be at customer's risk and the warranty and Defect liability period will commence for the unit.	No change in tender condition is envisaged.
70	Vol 2	GCC & SCC	10.1, 10.3 & 8	GCC/53, GCC/54 & SCC 8	"Defects Liability Period" shall mean the defects liability period stated in the Special Conditions of Contract calculated from the date of issue of the last Taking Over Certificate for whole of the Works. Provided that, if any part of the Works or sub-systems or component of that part has been replaced, renewed or repaired, the "Defects Liability Period" in respect of that part or sub-system or components of that part shall start from the date of such replacement, renewal or repair has been completed to the satisfaction of the Engineer The Defect Liability Period shall be extended by a period, after the Works are taken over,..... which they are intended, by reason of a defect or damage. The Defects Liability Period shall be 24 months from the date of issue of Taking Over. Certificate..... Defects Liability Period will not cause the Defects Liability Period to be extended comprising modified hardware or software wherever provided.	Start of Defect liability period for a period of 24 months to be splitted in group as per agreed Schedule completion and to commence upon completion on pro rata basis or groupwise as applicable and not from the date of issue of the lastTaking Over Certificate for whole of the Works and this period will cease at the end of 24 without liability for continuing warranty for start from the date such replacement, renewal or repair. No extension of DLP can be agreed to be given unless the same cannot be used for reasons solely attributable to acts/ omissions od the Contractor.	No change in tender condition is envisaged.
71	Vol 2	GCC	10.4 (a)	GCC/54carry out the work himself or by others, in a reasonable manner and at the Contractor's risk and cost, but the Contractor shall have no responsibility for such work: the costs incurred by the Employer in remedying the defect or damage shall be recoverable from the Contractor by the Employer;	Risk Purchase can be invoked only if the Contractor fails to remedy the breach within 7 days of receipt of written notice and such amount to be limited to contract value for defective unit or repaired unit, as the case may be.	No change in tender condition is envisaged.
72	Vol 2	GCC	11.1.1	GCC/57	Nothing extra shall be payable over the quoted rates as accepted by the Employer, notwithstanding any provision to the contrary in any law for the time being in force, save and except what is specifically provided in General or Special Conditions of Contract. No price adjustment shall be made for Temporary Work and fuel.	Prices are fixed till price validity date beyond which Prices and delivery dates will be renegotiated.	No change in tender condition is envisaged.
73	Vol 2	GCC	11.1.1	GCC/57	If the Employer obtains a waiver and exemption specific to Kolkata Metro Rail Project for any other taxes and duties, etc. in full or part thereof, the Contractor will be advised on the process to be followed to obtain exemption/refund of such taxes, duties, etc. from the concerned Authorities. In case of failure by the Contractor to obtain and remit the refund within reasonable time (to be decided by the Employer & intimated to the Contractor) to the Employer, the same will be recovered by the Employer from the amounts due as payment to the Contractor or as debt due from the Contractor. If the Contractor fails to take the required action to obtain refund or exemption, the Employer may take action in accordance with the Conditions of Contract.	All responsibility for availing tax exemption will be of customer and Bidder will render support for the same. No recovery is acceptable. Any increase in the present taxation structure or introduction of additional taxes by the State / Central (including but not limited to excise duty, GST) / Local Authorities will be borne by the Customer.	No change in tender condition is envisaged.
74	Vol 2	GCC & SCC	11.2.1, 11.2.7 & SCC 7	GCC/58 & SCC 7	The advance shall be paid on receipt of acceptable Bank Guarantees of equal amount or one acceptable Bank Guarantee for 10% of contract price as defined in the Payment schedule. The advances shall be used by the Contractor strictly for the purpose of the Contract, and for the purpose for which they are paid. Under no circumstances, shall the advances be diverted for other purposes. Any such diversion shall be construed as a breach of the Contract and the Contractor shall be asked to return the advance at once and pay interest at 15% per annum till the advance is recovered back from him. The Contractor shall return the advance and pay the interests in one go without demur The Banker's Guarantee against mobilisation payment shall be returned to the Contractor immediately after completion of the Whole of the Works and Taking over Certificate".	Please note ABG as mentioned shall be valid only till delivery of material at site. In no case shall the advance paid be recoverable or interest be agreed to be charged on such advance amount	No change in tender condition is envisaged.

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75	Vol 2	GCC	11.5,11.12 12.5	GCC/59, GCC/61 & GCC/68	Payments shall be made into a bank account, nominated by the Contractor in Indian rupees in a bank in India unless otherwise permitted in Special Conditions of Contract. If payments are to be made in more than one currency, ----- or the Engineer makes a determination of Cost in a currency other than Indian rupees, all such payments shall be made in the relevant foreign currency and no adjustment shall be made to any payment or to the Final Contract Price on account of any fluctuation in the exchange rate between Indian Rupees and such other currency from the Base Date, i.e. the last working day, -----into Indian Rupees for the purpose of payment, the exchange rate to be employed for such conversion shall be the selling rate of exchange at the close of business of the State Bank of India on the date of payment. If the Contract provides for ----- of the Cost of the varied work, without being bound by the proportions of various currencies specified for payment of the Contract Price	For clarity please note Payment to be made separately for Supply and Installation value to respective entity of Consortium in the currency rate applicable on the date of making such payment for the amount quoted in the tender. i.e. a) For inputs to the Works, which are expected to be supplied from within India, in Indian Rupees. b) For those inputs to the Works, which are expected to be supplied from outside India, in foreign currencies.	No change in tender condition is envisaged.
76	Vol 2	GCC	11.6	GCC/60	Retention money equal to 10% of the amount due to the contractor from each on account payment will be retained, so as to maintain a reserve in the hands of employer equal to 5% of the contract price.	Bidder proposes 5% RBG on completion valid for DLP	No change in tender condition is envisaged.
77	Vol 2	GCC	11.16ii	GCC/62	If any part or item of the Work is allowed to be carried out by a Sub-Contractor, assignee or any subsidiary or allied firm, the Engineer shall have power to secure the books of such Sub-Contractor, assignee or any subsidiary or allied firm through the Contractor, and shall have power to examine and inspect the same. The above obligations are without prejudice to the obligations of the Contractor under any statute, rules or orders.	Please note audit or inspection of document and bill shall be strictly limited to the scope of work of the Contractor and Subcontractor covered under this Agreement. Any audit or inspection can be carried out only after providing a notice of 7 days in writing of its intent to audit.	No change in tender condition is envisaged.
78	Vol 2	GCC	11.17ii	GCC/62	And further, unless the Contractor pays and clears immediately on demand any claim of the Employer, the Employer shall at all times be entitled to deduct the amount of the said claim from the moneys, securities and / or deposits which may have become or will become payable to the Contractor under these presents or transaction whatsoever between the Employer and the Contractor even if the matter stands referred to Arbitration.	There shall be no withholding or deduction of payments unless agreed by in writing between the parties	No change in tender condition is envisaged.
79	Vol 2	GCC	13.2.1	GCC/69	In any one these events or circumstances, the Employer may upon giving 14 days notice to the Contractor, terminate the Contract and expel the Contractor from the Site.	It is proposed that 14 Days to be replaced with 30 days with cure period of additional 15 days .	No change in tender condition is envisaged.
80	Vol 2	GCC	14.1	GCC/72	All sums payable by way of compensation under these conditions shall be considered reasonable compensation payable to the Employer, without reference to the actual loss or damage sustained, and whether or not any damage shall have been sustained. The decision of the Engineer as to compensation claimed shall be final and binding.	All claims for compensation to be mutually agreed between the parties in writing.	No change in tender condition is envisaged.
81	Vol 2	GCC	14.3	GCC/73	All sums payable by way of compensation under these conditions shall be considered reasonable compensation payable to the Employer, without reference to the actual loss or damage sustained, and whether or not any damage shall have been sustained. The decision of the Engineer as to compensation claimed shall be final and binding.	Events happening in country of supply should also be included in this clause.	No change in tender condition is envisaged.
82	Vol 2	GCC	14.6	GCC/74	Except as provided otherwise in these Conditions, neither party shall be liable to the other party for loss of use of any Works, loss of profit, loss of any Contract or any other indirect or consequential loss or damage which may be suffered by the other party in connection with the Contract. The total liability of ----- the most elementary rules of diligence which a conscientious Contractor would have followed in similar circumstances.	No exclusion to Limitation of liability is acceptable and to be read subject to neither party shall be liable to the other party for loss of use of any Works, loss of profit, loss of any Contract or any other indirect or consequential loss or damage which may be suffered by the other party in connection with the Contract. Notwithstanding anything contained herein or elsewhere, the total liability of the Contractor to the Employer under the Contract shall not exceed the Contract Price received by Contractor. No Open Indemnity obligation can be agreed upon. Also please note that Contractor shall cease to be responsible for the care of that Section or part of the work from the date of issue of such Taking Over Certificate and responsibility for the same shall pass to the Employer"	No change in tender condition is envisaged.
83	Vol 2	GCC	15, 12,13,19 25,161	GCC/74	Insurance	Parties to agree on the Insurance to be taken applicable to Contractor's scope of work before signing of the contract.	No change in tender condition is envisaged.
84	Vol 2	GCC	17.13	GCC/82	The reference to Conciliation / Arbitration shall proceed notwithstanding that the Works shall not then be or be alleged to be complete, provided always that the obligations of the Employer, Engineer and the Contractor shall not be altered by reasons of arbitration being conducted during the progress of the Works. Neither party shall be entitled to suspend the work or part of the work to which the dispute relates on account of arbitration and payments to the Contractor shall continue to be made in terms of the Contract.	Bidder shall only carry out work which are not subject matter of dispute and shall be paid for any / all services rendered during pendency of proceedings	No change in tender condition is envisaged.
85	Vol 2	SCC	20	SCC/10	Cross Fall Breach : This Contract will be awarded with the stipulation that three separate Contracts are awarded ----- any or all Contracts. This Clause is common to both Contracts.	Please note this cannot be accepted upon. Every contract shall be treated as a single contract and compliance and payment for the each contract to be separate from the other contract.	No change in tender condition is envisaged.

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86	Vol 2	SCC	42	SCC/16	Under such circumstances, the Contractor shall also grant to the Employer, without ----- the Contractor to the Employer pursuant to the Contract. If the Contractor fails to provide spare or replacement parts as described in this Subclause -----be recoverable from the Contractor.	No IPR in Spares will get transferred and in case of discontinuance of spare parts, Bidder will give 40 days notice and may provide same or similar spares. No risk purchase acceptable.	No change in tender condition is envisaged.
87	Vol 2	SCC	46	SCC/18	AMC and Penalty	in case the deployment of such Special Police Force is for reasons attributable to acts and omissions of Contractor, the cost of the same shall be borne by the Contractor.	No change in tender condition is envisaged.
88	Vol 2	SCC	48	SCC/21	The Contract Price shall be adjusted for increase/decrease of the price of Labour, Steel, Stainless Steel, Copper and Fuel as per the Price Adjustment Formula detailed below	Prices are fixed till price validity date beyond which Prices and delivery dates will be renegotiated. Prices cannot be fixed throughout the Tenderers performance of the contract as in that case it will be vague. Any variation in tax or introduction of new tax will be to customer account.	Please refer to Addendum No 1 S.No 6 and SCC 1
89	Vol 2	SCC	11.5.2	SCC/26	the Contractor shall be entitled to receive interest on the amount unpaid during the period of delay. This period shall be deemed to commence after 56 days from the date of issue of the Certificate. the Contractor shall be entitled to receive interest on the amount unpaid during the period of delay. This period shall be deemed to commence after 56 days from the date of issue of the Certificate.The interest shall be calculated at an interest rate equal to State Bank of India prime lending rate.	The period when interest on delayed payment shall be applicable shall be 30 days from the date of invoice.	No change in tender condition is envisaged.
90	Vol 1	NIT	11	NIT 4	The tender from JV/Consortium (existing or proposed) shall be signed so as to legally bind all partners jointly and severally.	Pursuant to Power of Attorney in favour of Lead Member, we understand Lead Member can sign the tender to make both parties jointly and severally liable.	Kindly refer to clause A5.2 of Volume 1 for details.
91	Vol 1	ITT	A 1.2	ITT/1	...includes a ten (10) year's Annual Maintenance Contract (AMC) commencing after the completion of two (2) years Defects Liability Period."	We understand AMC prices will be basic value excluding taxes.	SCC Clause 53 conclusively defines the Contract Price. No change in tender condition is envisaged.
92	Vol 1 & Vol 2	ITT & ECR	A 1.5 1.7	ITT/1 ECR/ 2	The Contractor shall establish facilities for transfer of technology either independently or with an Indian Partner of proven track record in relative areas for all imported systems / subsystems. The transfer of technology shall cover the areas as listed in Employer's Requirements. Capability to transfer of technology for design, indigenous system assembly, installation, maintenance and software customisation/modifications with in a defined time frame	Need clarity on ambit of transfer of technology ? This clause to be read subject to "All intellectual property rights in the equipment's including the control software which enables routine operation, maintenance and repair of the equipment ("Control Software") remain the property of Schindler Group. The Customer is entitled to a non-exclusive right to use the Control Software and to operate the Equipment for its own purposes, but the Customer shall have no other right or interest in the Control Software, especially as regards to the right to reproduce, reverse engineer or deal in the Control Software."	No change in tender condition is envisaged.
93	Vol 1	ITT	C7.3	ITT/13	The Tenderer shall submit with his Tender either the proposed terms and conditions upon which the Designer would be appointed in the event of acceptance of the Tender (excluding the financial and commercial terms thereof) or at least a statement of the heads (salient features) of such an agreement.	We understand this clause is not applicable where one of the Partner in Consortium has Designer capability.	Clause C7 with all sub clauses are applicable.
94	Vol 1	ITT	C 18.1	ITT/17	In the case where the Tenderer is a JV or consortium, the Bank Guarantee for Tender Security shall be from JV or Consortium and not from individual members except that a local member of the JV or Consortium is permitted to furnish the tender Security with an assurance from the other JV or Consortium members to back such a Security.	We understand that such assurance from the other JV or Consortium members to back such a Security can be in the form of undertaking.	It has to be reflected in the MoU.
95	Vol 1	ITT	C19.1 F 5	ITT/18 ITT/ 27	The Tenderer shall submit full details of the identity of the proposed parties who shall provide or issue the Performance Guarantee. Since the Consortium or JV shall have be registered in India before issue of LOA, the PG shall be submitted by registered Consortium or JV in accordance with Sub-Clause 4.2 of the GCC; and relevant SCC	Whether both members of the Consortium can submit Performance Guarantee for their respective contract value.	No change in tender condition is envisaged.
96	Vol 1	ITT	ANNEXURE 3	ITT Annexure 3 / 1	Format of Bank Guarantee.	Please add Mandatory Bank clause in BG formats Notwithstanding anything contained herein or elsewhere: (i) Our liability under this Bank Guarantee shall not exceed Rs. _____/- (_____) (ii) This Bank Guarantee shall be valid up to ___/___/___ post which it ceases to be in effect in all respects whether or not the original Bank Guarantee is returned to us. (iii) Our liability under this guarantee will arise only if we receive a claim or demand in writing, in accordance with the terms of this guarantee, from _____ on or before ___/___/___."	No change in tender condition is envisaged.

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97	Vol 1	FOT	Appendix 1 - 4	FOT Appendix 1 / 1	4. Liquidated Damages (GCC Sub-Clause 8.5 and SCC 22) 0.05% of the contract price per week or part thereof for delay in accomplishment of the respective key dates. The maximum limit of liquidated damages shall be 10% of the contract price accepted for whole of the works.	Bidders request you to reduce the maximum LD to 5% of the contract value and be limited to the part of work which is pending.,	No change in tender condition is envisaged.
98	Vol 1	FOT	Appendix 8 - CI 1	FOT Appendix 8 / 1	Should the Tenderer be an entity established or to be established to tender for this Contract, details of the shareholders' agreement or proposed shareholders' agreement shall be supplied together with the percentage participation and percentage equity in the agreements	As two sister concern of same Parent Company will be forming consortium for this project and in that case, details of the shareholders' agreement or proposed shareholders' agreement shall be supplied together with the percentage participation and percentage equity in the agreements is not applicable.	No change in tender condition is envisaged.
99	Vol 2	ECR	1.4	ECR /1	Foreign Tenderers /Partners of JV/ Consortium shall obtain requisite attestation to their notarisation from the Indian Embassy in their country.	Need clarity on this requirement . Whether such attestation to their notarisation from the Indian Embassy in their country can be done on award of contract and bidder can submit undertaking to that effect.	No change in tender condition is envisaged.
100	Vol 2	ECR	1.7	ECR/2	The Lead member shall be the Technical member in case of JV/ Consortium	Need clarity on this requirement. We understand that Technical member mean to imply that any of the member of the Consortium needs to have experience in the Elevator / Escalator industry and experience can be either of any such of Supply, Installation, Testing , commissioning etc.,	Yes
101	Vol 2	ECR	1.9	ECR/2	LITIGATION HISTORY: The Tenderer should provide accurate information on any litigation or arbitration resulting from contracts completed or under its execution over the last ten years in the pro-forma enclosed as Annexure – 1B, 2B.	Need clarity on pecuniary limit to list such matters (if any).	No change in tender condition is envisaged.
102	Vol 2	SCC	Schedule 3 1 A	S3/ 1 SCC/ 4	Parent Company Guarantee/ Parent Company Undertaking	We understand from specifically mentioned comment of not used , this requirement of Parent Company Guarantee/ Parent Company Undertaking is waived off.	Yes
103	Vol 3	Part 1	7.2.1	75	Escalators shall be heavy duty, reversible type and capable of operating safely, smoothly and continuously in both directions for a period of not less than 20 hours a day, seven (7) days a week with a alternating passenger load reaching 100% of Contract Load (120kg per step) for three hour and 50% of Contract Load for the following hour within the environmental conditions as stated in the General Specification and at the location where the Escalators are to be installed.	"Escalators shall be heavy duty with proven design of energy efficiency with VVVF (Variable voltage variable frequency) drive, reversible type and capable of operating safely, smoothly and continuously in both directions for a period of not less than 20 hours a day, seven (7) days a week with an alternating passenger load reaching 100% of Contract Load (120kg per step, including all horizontal steps) for 01 hour and 50% of Contract Load for the following 02 hours and so on for 20 hours a day, seven days a week within the environmental conditions as stated in the General Specification and at the location where the escalators are to be installed. The heavy duty escalator should be a proven, tested and sustainable product for MRTS applications in terms of technology and design, as defined in clause 4.3.1 of PS."	No change in tender condition is envisaged.
104	Vol 3	Part I	7.2.4	75	A. Handrail Speed: Consistent with step speed (slip rate to be less than 1%).	We will follow EN115: 5.6.1 General : On the top of each balustrade there shall be provided a handrail moving in the same direction and at a speed with a tolerance of – 0 % to + 2 % relative to the actual speed of the steps, pallets or belt under normal operating conditions.	No change in tender condition is envisaged.
105	Vol 3	Part I	7.3.4	79	Expansion Joints: The contractor shall include provision of special sliding and fixed Escalator supports to accommodate movement of the building expansion joints. Seismic risks should be considered and special supports shall be provided, wherever required. Upon seismic activities escalators must shutdown and remain shut down until controller is manually reset and the units are started with a key. The contractor shall provide one fixed and one floating support. The seismic signal shall be sent from the BMS in Operation Command center to all the equipment in all the stations through Fiber Optic Backbone system. In this case the lift vendor shall ensure that his controller shall receive the signals transmitted by BMS to stop the Escalator. All necessary interfaces required shall be provided by the Escalator Contractor	1. We will provide the fixed and movable end supports for seismic on escalator. 2. We will provide the dry contacts and RS485 interface to receive the signal to shutdown the escalators, seismic contact need to be provided by local which is suggested to install on building construction.	No change in tender condition is envisaged.

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106	Vol 3	Part I	7.3.6	80	Stainless steel (SS 304) surface comb plates with yellow – coloured diecast. The alternatives like coloured fiber, for the Comb plate is subject to the Employers acceptance at the design stage. Corrosion resisting aluminum alloy comb teeth shall be provided at both landings of each Escalator. The comb plate structure shall withstand a load of 6000N/m ² with a deflection not exceeding 2.0 mm. The teeth of the combs shall properly mesh with the cleats on the step treads and shall be designed to permit simple replacement in sections. The yellow colour light in the pits shall be provided to demarcate the moving and the non-moving parts of the Escalators. The Escalator Contractor shall provide UPS of suitable capacity to feed power to Comb light, pit light, etc.	1. We will provide combplate with AISI 304 stainless steel surface and the comb teeth are aluminum with yellow color. Please clarify with customer if it is acceptable. 2. We will provide yellow combplate lighting and UPS interface on escalator.	Please refer to Addendum No 1 S.No 24
107	Vol 3	Part I	7.3.10	81	The distance between the inner decking immediately below the handrail shall not be less than 1200 mm. The step width is 1000 mm. The skirt panel will have width of approx. 1006 to 1010 mm. The starting point of inner decking shall have width of same 1010 mm. But the distance between points on the inner decking below the handrail shall be 1200 mm. This implies that the inner decking has a slope component of approx. 95 mm on each side (under the handrail) and then becomes flat to meet the balustrade.	Please clarify the details of required dimensions, it will be good if a drawing can be provided.	No change in tender condition is envisaged.
108	Vol 3	Part I	7.4.1	83	Balustrades shall be provided with smooth and continuous handrails moving in the same direction and at the same speed as the steps with tolerance of 0% to 2% of the speed of the steps. The handrail shall have a life span of at least seven (7) years under operating conditions as stated in clause 7.2.1. The colour of the handrails shall be black but the Employer reserves the right to select other colours or designs at no extra cost. The escalators shall be provided with V type hand rail for all the rises	We propose the design life of the Handrail to be 4 years.	Please refer to Addendum No 1 S.No 25
109	Vol 3	Part I	7.5.3	84	Both sides and the rear edge of each step shall be painted with yellow demarcation lines of at least 20mm wide and the paint shall be applied on the entire surface of the step riser and the grooves of the step tread except the walking surface shall remain unpainted in natural aluminium finish.	Please clarify the color of step painting, black or silver?	No change in tender condition is envisaged. Black Colour
110	Vol 3	Part I	7.5.4	84	Step riser shall be of a cleat-and-groove type. The grooves shall be painted black and dull finish except those areas specified in Clause 7.5.3 above. . Step shall be covered with sound deadening material.	Sound deadening material is not a high-performance option for metro project, because the environment noise is much higher than escalators. Please clarify.	No change in tender condition is envisaged.
111	Vol 3	Part I	7.5.5	85	Step chains shall be of the endless roller type located on both sides of the moving step. The chains shall be provided in matched lengths and be of high quality steel construction incorporating links, pins, bushes, axles and rollers with three pitches between adjacent rollers. The step rollers shall be located outside the chain links and shall be easily replaceable without dismantling the links. All chain pins shall be circlipped. Each step chain shall be provided with an automatic tension device to ensure proper tension under varying load conditions. A method shall be provided to shorten the chain by one step to compensate for chain elongation.	Propose that step chain roller inside link plates to be used for rise less than 11m rise and step chain roller outside link plates to be used for rise above than 11m rise. Please clarify .	Please refer to Addendum No 1 S.No 26
112	Vol 3	Part I	7.6.9	87	Drive Motor: Three (3) phase, operating at not greater than 1500 rpm. Motors shall be designed to operate in confined non vented spaces. Motor insulation class "F" or greater and temperature rise shall be restricted to class "B". Power factor at any load shall be \geq 95%. Slip at 100% load shall be less than 4%.	Please clarify if power factor means cos phi.	No change in tender condition is envisaged.
113	Vol 3	Part I	7.10.	95	Provisions for the Remote Monitoring System (RMS)	We will provide MODBUS protocol and RS485 interface on escalator for remote monitoring and control, the computer and software need to be provided by local. Besides, please kindly clarify: 1. If both monitoring and control functions are required; (As per requirement of EN115, if remote control is used, the operator shall either be able to see the entire escalator or shall have means of ensuring that nobody is using the escalator or moving walk before making this operation. So video system or equivalent is needed to be provided by local, or it will have risk.) 2. If LED based Remote Monitoring System Panel is required;	No change in tender condition is envisaged.
114	Vol 3	Part I	7.13.12	100	The Escalator controller shall be housed in an IP55 spray painted, 1.5mm thick galvanized sheet (with minimum 85µm thick Galvanizing) metal cabinet with hinged door, lockable with a dedicated key. For elevated stations the protection rating controllers shall be IP65 The operating buttons / switches etc shall be provided in lockable enclosure to restrict access to authorized person only. The size of the controller cabinet shall be suitable for mounting into a wall closet of maximum dimensions 2000 mm (width) x 2000mm (height) x 500 mm (depth) with doors and shall be suitable to house the incoming power supply isolators and ITBs. The contractor will have to suitably design the layout after due interfacing with other designated contractors and with the approval of "Engineer".	We will provide IP55 for both external controller and controllers inside truss for all units. For the elevated stations, propose to provide the protection cover by local.	Controller will be placed inside the truss for all units as per the requirement of the clause.
115	Vol 3	Part I	7.14.1	101	All cables used shall be rated for 1.1 kV Voltage grade.	Halozen Free Cables will be provided.	No change in tender condition is envisaged. Please read Clause 7.14 with all sub-clauses.

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116	Vol 3	Part I	7.14.2	101	The conductor shall be of stranded conductor composed of plain annealed copper wire complying with IEC 228, Class 2.	The latest standard is IEC 60228, not IEC 228. We will provide the cable which comply with IEC 60228, Class 5. Please clarify with custmoer.	Noted
117	Vol 3	Part I	7.14.3	101	The insulation shall consist of an extruded layer of cross-linked polyethylene complying with IEC 502.	The standard is IEC 60502, not IEC 502. This standard is used for transmission and distribution power, which is not applicable for escalator power transmission. Please clarify.	Noted
118	Vol 3	Part I	7.16.2	102	The comblights shall be provided with a UPS by the Contractor. The lighting level of the comblight shall not be less than 50 lux at the centre of the comb.	We will provide UPS interface on escalator.	No change in tender condition is envisaged.
119	Vol 3	Part I	7.2.8	76	Escalator design shall be such that no major repairs shall be necessary for a period of at least fifteen (15) years from the date of issue of 'Certificate of Taking Over', assuming that regular inspection and maintenance are carried out in accordance with the manufacturer's recommendations.	Design lifetime is different as real lifetime, which impact by real using enviroments. Real lifetime for major componets are as following as per following: Escalators Service life (In Years) 1.steps 15 2. Relay, timers and control gear 8 3. Handrail drive system 15 4. Step chains and step axles 15 5. Tension carriage assembly 15 6. Main drive assembly 15 7. Emergency brake assembly 15 8. Step and chain rollers 8 9. Handrail 4	No change in tender condition is envisaged.
120	Vol 3	Part I	7.2.11 (a)	77	Truss, tension carriage, main drive, floor plate and comb plate supporting structure and backing: Hot-dipped galvanised, minimum thickness 85µm.	Comb plate support structure possible 50um hot-dipper galvnized. Floor plate support structure not necessary.	No change in tender condition is envisaged.
121	Vol 3	Part I	7.4.1	83	The handrail shall have a life span of at least seven (7) years under operating conditions as stated in clause 7.2.1	We propose the design life of the Handrail to be 4 years.	No change in tender condition is envisaged.
122	Vol 3	Part I	7.14.5	101	Fire retardant, low smoke, halogen free materials shall meet the following requirements:- (a) London Transport Executive Three Metre Cube Smoke Emission Test, using optical measuring instruments. The maximum value of absorbance AO (ON), AO (OFF) shall be 0.8 & 1.2 respectively. (b) The US National Bureau of Standard Smoke Chamber Test, used to evaluate plaque samples of materials of constant thickness. (NFPA-258 Smoke Generation of Solid Materials 1982). The maximum specific optical density shall be 170 under the non-piloted condition. (c) The flame propagating criteria of US IEEE Standard 383, with a minimum test short circuit time of five minutes, in the IEEE Standard 383 test. (d) IEC 332 Parts 1 and 3, Category B, tests on single and bunched cables under fire conditions. (e) Limiting Oxygen Index of at least 30, to ASTM D-2863. (f) A temperature index (TI) of 260°C to ASTM D-2863. (g) All insulation is to be moisture and heat resistant, with temperature ratings appropriate to the application conditions, and in no case lower then 90°C.	We will Provide standard halogen free cable. Insulation resistance:according to IEC 60502-1.	No change in tender condition is envisaged.
123	Vol 3	Part I	14.3.2 (i)	183	Electrical Distribution Equipment i. Push Buttons Push Buttons shall be coloured as follows: 1. "Start" -Green; 2. "Stop" Red; All other push buttons shall be black. "Start" push buttons shall be effective when the selected switch is in the local" position. They shall not be effective when the selector switch is in the "off" or "remote" position.	Only emergency stop button will be of push type. Color changing is not applicable.	No change in tender condition is envisaged.
124	Vol 2	ECR	1.11.1 II - Technical & organizational capability T4	ECR/3	10 staff	Request you to kindly clarify this statement	No change in tender condition is envisaged. Please refer Basis of Evaluation indicated on page no ECR/38 and ECR/39 of Volume 2.

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125	Vol 2	ECR	1.11.1 II - Technical & organizational capability T6	ECR/3	More than one discipline not represented adequately in the Proposed organization	Request you to kindly clarify this statement	No change in tender condition is envisaged. Please refer Basis of Evaluation indicated on page no ECR/39 of Volume 2.
126	Vol 2	ECR	1.11.1 II - Technical & organizational capability T14	ECR/3	Comprehensive Maintenance / Maintenance without spares of Lift System beyond DLP	Request you to kindly clarify this statement. The projects have to be MRTS/ Commercial and number of units coming under this	No change in tender condition is envisaged. Please refer Basis of Evaluation indicated on page no ECR/40 of Volume 2.
127	Vol 2	ECR	1.11.1 II - Technical & organizational capability T15	ECR/3	Comprehensive Maintenance / Maintenance without spares of Escalator System beyond DLP.	Request you to kindly clarify this statement. The projects have to be MRTS/ Commercial and number of units coming under this	No change in tender condition is envisaged. Please refer ECR/40 for clarification.
128	Vol 3	Part I	5.10.	31	The safety related features of the lift shall achieve a minimum availability of 99.99% at the end of the DLP	Please reduce it upto 98%	No change in tender condition is envisaged.
129	Vol 3	Part I	1.5	11	Escalators (public service application) shall comply with the requirements of the heavy duty type for Mass Transit application in accordance with latest edition of British Standard BS EN 115, and European Standard EN115: Safety rules for the construction and installation of Escalators. Unless otherwise stated herein, the design, installation, testing and commissioning shall comply with the latest edition of all applicable standards issued by the Bureau of Indian Standards and other relevant local regulations applicable	Elevators shall comply to EN81 Escalators shall comply to EN115	Noted
130	Vol 3	Part I	6.2.11	36	One number of primary wave seismic sensor shall be provided in each station, Admin & OCC building and Uppal depot.	Only Interface will be provided.	Please refer to Addendum No 1 S.No 16
131	Vol 3	Part I	6.8.10 (b) viii.	46	Hand/grip rail - Polished Stainless steel, steels SS 304 All stainless steel materials specified for car and landing finishes shall be of grade of 304 and shall be subject to the acceptance of the "Engineer". The samples have to be given for approval from employer. All car interiors/architrave, doors and interfaces with civil structure and finishes shall be subject to the acceptance of the "Engineer".	Number of handrails inside the elevator is unclear	Three sides
132	Vol 3	Part I	6.13.4	52	The Lifts (inside and outside) should also be numbered at each station for the purpose of easy identification.	This identification number should be a part of the COP or anywhere inside the elevator. Also this should be a steel plate with engraved marking or an acrylic board with paint marking	No change in tender condition is envisaged.
133	Vol 3	Part I	6.16.3 (2) 6.16.3 (6)	56	sound tone once for up and twice for down direction prior to car arrival at floor. Prior to the car's arrival, the hall lantern shall begin flashing and the chime shall sound twice.	Please help us understand which statement to follow	No change in tender condition is envisaged.
134	Vol 3	Part I	6.19.7	61	Shaft Lighting shall be in scope of lift contractor by maintaining the lux level as per statutory requirement and Indian standards.	Not in Bidder's scope	No change in tender condition is envisaged.
135	Vol 3	Part I	6.29.2	69	The glass doors shall be of a design that includes a frosted glass panel/ sticker at lower section of the glass doors to provide privacy for women wearing dresses of length midway between knee and waist level.	We will provide standard glass door only.	No change in tender condition is envisaged.
136	Vol 3	Part I	Table	18	Elevated Stations - Schedule of Machine Room-Less Type Lifts Suitable For Metro Station Operation:	Minimum required pit depth for Hanging Pit is 2200mm	No change in tender condition is envisaged.
137	Vol 3	Part I	Table	18	Elevated Stations - Schedule of Machine Room-Less Type Lifts Suitable For Metro Station Operation:	Car size not mentioned for the Elevated Station elevators	No change in tender condition is envisaged.
138	Vol 3	Part I	Table	18	Elevated Stations - Schedule of Machine Room-Less Type Lifts Suitable For Metro Station Operation:	Door size of 1050 x 2180 cannot be complied to. We can provide COPD 1000/1100 x 2100 opening for 13 passenger elevators	1000X2100 mm door opening for 13 passenger is OK

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139	Vol 3	Part I	6.2.6 & Table on Page 18	35	Elevator car shall have minimum internal dimensions of 2000 mm (D) by 2100 mm (W) for carrying the rated load 2000 Kg / 26 persons and 1600mm (W) by 1400 mm (D) for carrying the rated load 1000 kg/ 13 persons along with wheel chair. The false ceiling height of the Elevator car shall not be less than 2300mm. The Elevator and door shall be configured so that it is possible to handle a person on a wheel chair.	The car size differs in the Table provided and in the clause. Kindly confirm the car size.	Please refer to Addendum No 1 S.No 13
140	Vol 3	Part I	Table No 2 & 7.2.2	75	Underground Stations - Schedule of Escalators Suitable For Metro Station Operation. Remarks - Ground to concourse escalator angle will be 35 degrees. Escalators shall be designed for installation and operation at an angle of inclination of 30°.for concourse to platform and 30°.for ground to concourse escalators.	Conflicting statements. Please confirm the angle of inclination for the escalators	Please refer to Addendum No 1 S.No 22
141	Vol 3	Part I	4.3.1	26	The Contractor shall be fully responsible for obtaining relevant safety certificate or any other approval required from statutory authorities, Commissioner of rail Safety, Government Lift Inspector etc. for installation (Erection Permission), commissioning and operating the Lift and Escalator System before Revenue Service. The renewal of the license / safety certificate during DLP will also be the responsibility of the contractor. Fee, if any for obtaining such license/ certificate shall be borne by the contractor	Please accept below deviation: Otis will be responsible for procuring lift license permits/licenses from Lift Inspectorate/ PWD Office, including payment of all necessary official fees for such licenses/ permits. You will provide all requisite assistance to enable Otis to obtain the permit / licenses and shall execute / provide such documents as may be reasonable requested by Otis in this regard. However, Otis will not be liable for any delays in the administrative process of procuring such licenses/ permits.	No change in tender condition is envisaged.
142	Vol 3	Part I	5.9.3	31	The reliability of equipment should ensure that it does not result in passenger trappings in the Elevator due to equipment failure. Any claim/ Damage /Compensation claimed by the affected passenger/ Elevator / Escalator user on account of equipment failure shall be recovered from the firm. Employer's Representative may imposed a penalty @ Rs: 15000/- (Rs. Fifteen Thousand Only) per case. The penalty is applicable during DLP and AMC	Penalty Rs.15000 is too high kindly consider Rs.5000 Only	No change in tender condition is envisaged.
143	Vol 3	Part I	6.3.2	38	(g) The Elevator machine shall be fitted with a manual Mechanical emergency device capable of having the brake released by hand and requiring a constant effort to keep the brake open. In Normal Opertaion ,the electromagnetic brake shall only be applied when the lift has come to complete stands still.The brake shall only be meant for holding the lift in the position at every landing ,Providing control without any jerking effect.In case of MRL lifts ,The Motor shall be able to be remotley released out side the lify well. (g) The Elevator machine shall be fitted with a manual electrical emergency device with battery backup capable of having the brake released by hand and requiring a constant effort to keep the brake open. In Normal Opertaion ,the electromagnetic brake shall only be applied when the lift has come to complete stands still.The brake shall only be meant for holding the lift in the position at every landing ,Providing control without any jerking effect.In case of MRL lifts ,The Motor shall be able to be remotley released out side the lift well.	Belt Drive only Battery operated Manual Emergency Resuce is provided	Please refer to Addendum No 1 S.No 17
144	Vol 3	Part I	6.4	39	Hoisting Rope	Please add Belt also as same mention in clausue 6.4.3	Please refer to clause 6.4.4., flat belts are included in the clause.No change in tender conditionis envisaged.
145	Vol 3	Part I	6.4.1	39	At least three (3) steel wire ropes specially manufactured for Elevator use shall be employed for the suspension of Elevator car and counterweight. The diameter/dimension and specification of rope/coated steel belts for the car and counterweight shall conform to latest version/ amendments of IS: 14665 (Part 4/Sec. 8) and IS: 15785.	Please add Belt also as same mention in clausue 6.4.3	Please refer to clause 6.4.4., flat belts are include in the clause.No change in tender conditionis envisaged.
146	Vol 3	Part I	6.4.2	40	(a) The type of wire rope	Please add Belt also as same mention in clausue 6.4.3	Please refer to clause 6.4.4., flat belts are include in the clause.No change in tender conditionis envisaged.
147	Vol 3	Part I	6.8.1	42	i. Each roller guide shall consist of three wheels tyred with polyurethane or a durable resilient material, each rotating on ball bearing having sealed-in lubrication, assembled on a substantial metal base. They shall be so mounted as to provide continuous contact of all wheels with the corresponding rail surfaces under all condition of loading and operation. The wheels shall run on three finished rail surfaces. The Contractor shall provide a means of adjustment of spring pressure and of play between shoes and guide rails.	Please consider the Slipper type Guide shoe for Car and confirm Type of Guide shoe for Counter Weight.	Roller guide shoe for both Car and Counter Weight.
148	Vol 3	Part I	6.8.4	43	The car platform shall be constructed from cold rolled steel spray galvanized with steel flooring. The platform shall be designed on the basis of the rated load evenly distributed with a minimum safety factor of five (5). The design of the final floor finish is subject to Acceptance of the Engineer.	Kindly Consider The car platform shall be constructed from eold-rolled steel spray galvanized with steel flooring. The platform shall be designed on the basis of the rated load evenly distributed with a minimum safety factor of five (5). The design of the final floor finish is subject to Acceptance of the Engineer.	Please refer to Addendum No 1 S.No 33
149	Vol 3	Part I	6.8.10	45	Car Interior and Elevator Finishes 5WL i. Landing Transom Panels - Scratch Resistant Stainless steel, SS 304 5WL finish stainless steel of not less than 1.5 mm in thickness ii. Architrave (Fascia/ Jamb) - Scratch Resistant Stainless steel SS 304 5WL / Stone work, stainless steel of not less than 1.5 mm in thickness	Please Remove 5WL and consider Scratch Resistance Stainless Steel SS304 for Car,Landing Door ,Hall Button Face Plate ,Hall Gong Face Plate and Architrave	No change in tender condition is envisaged.

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150	Vol 3	Part I	6.9.2	48	Both car and landing doors shall be fitted with sheaves type door hangers. The sheaves wheels shall be tyred with as sound attenuating material and shall rotate on grease packed precision ball bearing. The up thrust of the door shall be taken by a roller mounted underside to the hanger track.	Kindly clarify Meaning of Sound Attenuating Material	No change in tender condition is envisaged. Please refer to clause for the requirement.
151	Vol 3	Part I	6.11.3	50	(b) A red "Car Overload" indicating lamp with buzzer and announcement in Hindi, English & Bengali Language.	Kindly Consider the overload Display in COP LCD not Separate.	No change in tender condition is envisaged.
152	Vol 3	Part I	6.16.2	55	Hall Call Buttons The faceplate shall be made of stainless steel grade 316 hairline finishes. The Stainless steel plate should be at least 2.5 mm thick and its mounting arrangement should have two minimum Sunken Screws. This plate should be pilfering proof. The Jumbo type hall call buttons shall be micro-push type, suitable for heavy duty and vandal proof. The response light of the call buttons shall be orange or red, when illuminated. When an Elevator arrives at the hall, the illumination shall cease.	In Clause 6.8.3 & 6.11.2 asking face plate finish SS304 5WL, As per clause 6.16.2 required 316 Hairline Finishes Kindly Clarify. We are requesting to consider Scratch Resistance Stainless Steel SS304 only.	Please refer to Addendum No 1 S.No 21
153	Vol 3	Part I	6.19.7	61	Not used. Shaft Lighting shall be in scope of lift contractor by maintaining the lux level as per statutory requirement and Indian standards.	Kindly Clarify who will do Shaft Lighting and Exhaust Fan For with Shaft	Clause clearly states only for shaft light lighting which is the scope of the lift contractor.
154	Vol 3	Part I	6.19.11	61	In the event of failure of the normal electrical supply, the supply to the alarm cum intercom system, emergency car lighting, and the ventilation fan shall be automatically switched to an emergency battery operated power supply (UPS) of E&M System. The Elevator contractor shall do the necessary interface with E&M contractor for Supply of Armoured Cable up to the Electrical Box of UPS (inside the elevator's shaft) & for routing of armoured cable upto the entry point inside the elevator's shaft. All hoistway and car top safety switches shall be rated to IP Class 55 (minimum). The rating of UPS is subjected to Prior approval by Engineer	Kindly consider UPS supply in Electrical contractor scope and remove from Elevator Contractor. In Elevator Shaft there is no space to Installed the UPS.	No change in tender condition is envisaged.
155	Vol 3	Part I	6.20.1	62	The RMS will be provided by the designated contractor. However, the Contractor shall provide/receive the following status monitoring points and control points to the RMS in the form of interface voltage free contacts. Fault data logging should have Date & Time stamping facility.	Kindly Clarifyh for RMS system who will provide the Computer and also Confirm the distance between Elevator Shaft and SCR Room.	No change in tender condition is envisaged. Please read the clause 6.20 with sub clauses in details for understanding the requirement.
156	Vol 3	Part I	6.29.3	69	Car roof shall be stainless steel SS 304 5WL finish cover panels exposed to public view with a collapsible maintenance platform or any othersuitable arrangement with "Employer/ Employer's Representative" approval above. It shall be able to sustain two persons and be able to resist a vertical force of 2000N at any position without permanent deformation. Permanent, hinged and foldable safety balustrades or any other suitable arrangement with "Employer/ Employer's Representative" approval forming an integral part of car top maintenance platform shall be provided. The design shall be to the review of the "Employer/ Employer's Representative".	Car Roof is not Visuable to please consider Car Roof made of Galvanized Sheet.	No change in tender condition is envisaged.
157	Vol 3	Part I	6.30	71	Special Cable Requirements	Kindly Consider All control cables and all power cables shall comply with the requirement as per EN-115 (latest edition) and shall be tested in accordance with the relevant BS / IEC standard	No change in tender condition is envisaged.
158	Vol 3	Part I	7.2.1	75	Escalators shall be heavy duty, reversible type and capable of perating safely, smoothly and continuously in both directions for a period of not less than 20 hours a day, seven (7) days a week with a alternating passenger load reaching 100% of Contract Load (120kg per step) for three hour and 50% of Contract Load for the following hour within the environmental conditions as stated in the General Specification and at the location where the Escalators are to be installed.	Kindly Consider the Load pattern as per EN115	No change in tender condition is envisaged.
159	Vol 3	Part I	7.2.3	75	Operating speeds of the Escalators shall be as follows: - (a) Service (rated) speed - Nominal 0.65m/s and 0.5 m/s (optional) (b) Maintenance / Idling / Crawling Speed - Less than 0.2m/s.	Kindly Consider, (a) Service (rated) speed - Nominal 0.5 m/s (b) Maintenance / Idling / Crawling Speed - Half of Service (rated) Speed.	No change in tender condition is envisaged.
160	Vol 3	Part I	7.2.11	77	Escalator components shall be protected against corrosion as follows: (a)Truss, tension carriage, main drive, floor plate and comb plate supporting structure and backing Hot-dipped galvanised, minimum thickness 85µm	Kindly Consider Main Drive ,Tension Carriage 3 Layer Painting.	No change in tender condition is envisaged.
161	Vol 3	Part I	7.3.1	78	Structural truss shall be of sufficient strength to carry the dead weight of the Escalator which shall include any exterior claddings and decking extensions plus passenger load. Passenger loading shall be assumed as 5000 N/m2 (load carrying areas = nominal width of Escalator x distance between supports). The truss shall be designed to retain the steps and the running gear should the track system fails. The truss shall also be designed to support an additional load of the outer cladding panels and truss claddings up to a maximum load of 300N/m2	Actual cladding load coming on truss is 100N/m2 so please consider outer cladding panels and truss claddings up to a maximum load of 200N/m2	No change in tender condition is envisaged.

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162	Vol 3	Part I	7.3.2	79	Truss shall be supported at both ends (and at intermediate support for vertical rises above 6m) with resilient supports and bearing plates. The provision of bearing plates and resilient supports shall be included in this Contract but shall be co-ordinated with the respective Civil Contractors. Resilient supports shall be designed for the purpose of preventing the transmission of noise and vibration to the station structure. The truss shall be designed to support the dead weight of the Escalator plus the passenger load. Considering the passenger load, the maximum calculated deflection shall not exceed 1/1000th of the distance between supports Truss Extensions or Reduction: Provide truss and access cover extensions at entry and/or exit landings as required and/or to suit building structural support locations. However there may be a tolerance as per site conditions. Truss Isolation: Provide isolation pads at support locations to isolate truss and prevent transmission of noise and vibration to building structure	As per BOQ contractor has to consider the rise variation $\pm 5M$, as per this clause intermediate support for vertical rises above 6M required. 6 Meter is coming in band of $5.5 \geq 6.5$, So please consider the without intermediate support upto 5.5M of 6.5M	No change in tender condition is envisaged.
163	Vol 3	Part I	7.3.9	80	Escalators shall be provided with balustrade as specified in the Escalator Schedule in the form of tender. Balustrades shall consist of handrail decks, inner panels, outer cladding panels, skirts and lighting installation as given below: (a) Handrail decks Profile: Minimum 1.5mm thick stainless steel, and profile hairline finish (Grade 304) (b) Inner panels: For stainless steel panels, minimum 1.5 mm thick stainless steel, hairline finish (Grade 304), with reinforcement and sprayed-on fire resistant vibration/ sound attenuating backing subject to the acceptance of the Engineer. (c) Outer cladding panels: Minimum 1.5mm thick stainless steel with hairline finish (Grade BS304) in Visible and non-visible sections as per notice of no objection of Engineer. Panels shall be with reinforcement and sprayed – on fire resistant vibration / sound attenuating backing material subject to the acceptance of the Engineer. The cladding shall be provided on all three sides including bottom side. (d) Skirt panels: Minimum 2.0 mm thick stainless steel, hairline finish, with a material of low coefficient of friction such as Teflon or equivalent as notice of no objection without objection by the Engineer applied on the surface. (e) Lighting LED comb lighting. Power supply shall be supplied from the UPS, (to be supplied by the Escalator Contractor) Measures other than frictional or gravitation methods shall be provided to prevent the Inner panels from dislodging during normal operation. The fixing method shall be subject to the acceptance of the "Engineer".	Kindly consider the Inner panel Minimum Thickness of 2mm	No change in tender condition is envisaged.
164	Vol 3	Part I	7.3.9	80	(e) Lighting LED comb lighting. Power supply shall be supplied from the UPS, (to be supplied by the Escalator Contractor) Measures other than frictional or gravitation methods shall be provided to prevent the Inner panels from dislodging during normal operation. The fixing method shall be subject to the acceptance of the "Engineer".	UPS supply to be provided by Elcetrical Contractor ,There is no sufficient space available to installed the UPS in Escalator and its not safe	No change in tender condition is envisaged.
165	Vol 3	Part I	7.3.10	81	The distance between the inner decking immediately below the handrail shall not be less than 1200mm	There should be some tolerance to maintain the distance of 1200mm so kindly consider ,The distance between the inner decking immediately below the handrail shall be less than $1200 \pm 2mm$	No change in tender condition is envisaged.
166	Vol 3	Part I	7.3.13	82	The glass balustrade shall be fabricated of tempered safety glass with minimum thickness 10mm	After toughening of glass actually the thickness is less than 10mm so kindly consider The glass balustrade shall be fabricated of tempered safety glass with thickness 10mm	No change in tender condition is envisaged.
167	Vol 3	Part I	7.4.1	83	Balustrades shall be provided with smooth and continuous handrails moving in the same direction and at the same speed as the steps with tolerance of 0% to 2% of the speed of the steps. The handrail shall have a life span of at least seven (7) years under operating conditions as stated in clause 6.3.1& 6.3.2. The colour of the handrails shall be black but the Employer reserves the right to select other colours or designs at no extra cost The escalators shall be provided with V type hand rail for all the rises	Kindly consider the C type Handrail and also Clarify the colour of Handrail	Please refer to Addendum No 1 S.No 25

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168	Vol 3	Part I	7.4.3	83	The handrail drive system shall be provided with guides immediately before and after the drive wheel. The returning portion of the handrail shall be supported by guide rollers having bearings at not more than 2 m interval. Adequate provisions shall be provided to maintain proper tensioning throughout the service life of the handrail and prevent tightening / loosening and excessive heating up of the handrail during operation. The temperature rise of the handrail during operation shall not exceed 6°C above station ambient temperature.	There should be both option roller/Guides Track for returning portion because in glass there is not sufficient space to provide the Guide roller .So kindly consider ,The handrail drive system shall be provided with guides immediately before and after the drive wheel. The returning portion of the handrail shall be supported by guide rollers /GuideTrackshaving bearings at not more than 2 m interval. Adequate provisions shall be provided to maintain proper tensioning throughout the service life of the handrail and prevent tightening / loosening and excessive heating up of the handrail during operation. The temperature rise of the handrail during operation shall not exceed 6°C above station ambient temperature.	No change in tender condition is envisaged.
169	Vol 3	Part I	7.5.5	85	Step chains shall be of the endless roller type located on both sides of the moving step. The chains shall be provided in matched lengths and be of high quality steel construction incorporating links, pins, bushes, axles and rollers with three pitches between adjacent rollers. The step rollers and Chain rollers shall be located outside the chain links and shall be easily replaceable without dismantling the links. All chain pins shall be circlipped. Each step chain shall be provided with an automatic tension device to ensure proper tension under varying load conditions. A method shall be provided to shorten the chain by one step to compensate for chain elongation.	This sentence should be deleted because its giving flexibility to over rule the clause 8.1.1 and by shorting the chain it may be over look the gap between Step to Step as per EN115 and due this may be cause any incidents..If this option is provided then the requirement of EN115 will be overlooked wherein it states that the gap between steps should not be more than 6 mm. Kindly Consider Method Shall be provided to replace a damaged link of the step chain or Replacement of the complete chain. Shortening of the chain by removing a link is not permitted	Please refer to Addendum No 1 S.No 26
170	Vol 3	Part I	7.5.9	85	The chain rollers / wheels shall have durable elastomer materials bonded to a metal or Poly Urethane die cast hub. The shore hardness of the tyre materials shall be 92o ± 3oA when cured. The bond shall have sufficient strength to avoid de-tyring under all load conditions	Now the rollers are coming with 95o ± 3oA from all vendors so please consider , The chain rollers / wheels shall have durable elastomer materials bonded to a metal or Poly Urethane die cast hub. The shore hardness of the tyre materials shall be 95o ± 3oA when cured. The bond shall have sufficient strength to avoid de-tyring under all load conditions	The query doesnot reflect the exact language and requirement of the clause. Please refer the original clause as mentioned below "7.5.9. The chain rollers/wheels shall have durable elastomer materials bonded to a metal die case hub. The shore hardness of the tyre materials shall be 92o ± 3oA when cured. The bond shall have sufficient strength to avoid de-tyring under all load conditions". No change in tender condition is envisaged.
171	Vol 3	Part I	7.6.5	86	The contractor shall provide detailed design that includes sound reducing rubber pads,shock absorbing buffers, acoustic linings or other approved means to control vibration and noise transmission. Under conditions of normal operation and at rated speed and load, the noise level at 1m above the tread way at each comb plate shall not exceed 65dB (A) up to 0.65 m/s with the floor and landing plates in place. Under similar conditions, the noise level at 1m from motor enclosures ventilation openings shall not exceed 65dB (A).	Kindly Clarify 65dB is average noise Level.	Please refer to Addendum No 1 S.No 29
172	Vol 3	Part I	7.8.24	93	Traffic Bollards Four number Bollards shall be installed - two at the entry of Escalator landings to prevent the passenger with bulky luggage or baby carriage from boarding the Escalator & two at the exit. The bollards height shall be 100 cm and shall carry the traffic light. The traffic light should interface with the direction of Escalators i.e. light shall be red when Escalator is not available for use and shall be Green when Escalator is available for use. The details shall be got issued notice of no objection by the Employer/ Employer's representative at the time of design.	Traffic Bollards This has reference to the EN 115 of page 62(safety of escalators & moving walks) having clause no. A.2.5 that there should not be any obstruction up to 2500mm from outermost edge of escalator. The fixing of traffic bollards will create hindrances for passenger movements Resulting into breakage of bollard and there bypassing of sensors which result in continuous operation speed with higher power consumption. Requested you to Delete this requirement.	Please refer to Addendum No 1 S.No 27
173	Vol 3	Part I	7.10.1	95	The Contractor shall provide a PC based Remote Monitoring and Control System (RMS) to be run on the computer of Integrated Station Management System (ISMS) system in the Station Control Room being provided by Designated ISMS Contractor. The RMS shall provide continuous monitoring and controlling of the Escalators	Kindly Clarifyh for RMS system, who will provide the Computer and also Confirm the distance between Escalator and SCR Room.	No change in tender condition is envisaged. Please refer to clause 6.14 of Volume 3 part II for the requirement.

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174	Vol 3	Part I	7.12.1	97	The space required for machinery and other accessories shall be provided by the Civil Contractors in accordance with the co-ordinated requirements of the Contractor. Controllers and other accessories such as incoming isolators, ITBs, switches, shall be housed outside the truss in Enclosure of controller below the Escalator inclined section or in wall recess/closet besides the upper landing. Further wiring work including conduits/ trunking from the incoming isolators to Escalator equipment shall be provided by the Contractor. The Contractor shall co-ordinate with civil contractor for the layout of the equipment in the wall recess/closet.	Kindly Consider the Controller Inside the Truss Otherwise please provide the Distance Between Controller and Escalator.	Please refer to Addendum No 1 S.No 28
175	Vol 3	Part I	7.13.12	100	The Escalator controller shall be housed in an IP55 spray painted, 1.5mm thick galvanized sheet (with minimum 85µm thick Galvanizing) metal cabinet with hinged door, lockable with a dedicated key. For elevated stations the protection rating controllers shall be IP65 The operating buttons / switches etc shall be provided in lockable enclosure to restrict access to authorized person only. The size of the controller cabinet shall be suitable for mounting into a wall closet of maximum dimensions 2000 mm (width) x 2000mm (height) x 500 mm (depth) with doors and shall be suitable to house the incoming power supply isolators and ITBs. The contractor will have to suitably design the layout after due interfacing with other designated contractors and with the approval of "Engineer".	AS per Clause 7.2.12 controller is IP 54.	As per Clause 7.2.12 Protection IP Class 55 or 54 and Clause no 7.13.12 clearly mentions that controller required should be IP 55. Hence No change in tender condition is envisaged
176	Vol 3	Part I	7.14	101	Special Cable Requirements All cables used except those within the enclosed controller shall comply with the following requirement	Kindly Consider All control cables and all power cables shall comply with the requirement as per EN-115 (latest edition) and shall be tested in accordance with the relevant BS / IEC standard	No change in tender condition is envisaged.
177	Vol 3	Part I	7.17.1	102.00	Equipment shall be designed to operate quietly and smoothly. The sound level at one metre from the balustrade of each Escalator shall not exceed 65 dBA peak value as measured by a slow response sound level meter. The required acoustic treatment shall be supplied and fitted as necessary to meet this requirement.	65dBA is average Value not Peak Value kindly Clarify	Please refer to Addendum No 1 S.No 29
178	Vol 3	Part I	7.21	103.00	Accessories Each Escalator or stated otherwise shall be provided with the following accessories: (a) Two sets of maintenance barriers.	Two Set of Maintenance barriers is too High Quantity kindly Consider Two Set barriers per station	No change in tender condition is envisaged.
179	Vol 3	Part I	9.1.1	116	The design of each component shall achieve the minimum service life given below. The failure rate of the components shall not exceed 5%. Failure rate is defined as the number of failures (during the service life) divided by the total quantity of the components in one section.	The design of each component shall achieve the minimum service life given below. The failure rate of the components exceed 5%, the contractor shall be liable for replacement of the component for all the units supplied as part of the contract at no extra cost to the employer. Failure rate is defined as the number of failures (During the Srvice Life) Devided by the total quality of the component in one section.	No change in tender condition is envisaged.
180	Vol 1	ITT	IIT- A 5.1	IIT/3	Power of Attorney	Whether Power of Attorney requires notarization	No change in tender condition is envisaged. Clause clearly mentions "The Tenderer, to qualify for award of Contract, shall submit notarised written powers of attorney authorising the signatories of the Tender to commit the Tenderer or each member of the consortium or joint venture as the case may be."
181	Vol 1	ITT	IIT- A5.3	IIT/3	In case of JV/Consortium, Tenderer shall submit full details of ownership and control of each member thereof	In case of JV/Consortium..... What do you mean by ownership and control of Tenderer	No change in tender condition is envisaged. Please refer to Appendix 8 for better understanding.
182	Vol 1	ITT	IIT- C-18	IIT/17	In case of JV/Consortium, Tender Security shall be from JV or Consortium and not from individual members except that a local member of the JV or Consortium is permitted to furnish the tender Security with an assurance from the other JV or Consortium members to back such a Security	In case of JV/ Consortium , Can any one member submit the tender security	No change in tender condition is envisaged. Please refer to C 18.1 for better understanding.

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183	Vol 1	ITT	C-19	IIT/18	Performance Guarantee - shall be submitted by registered Consortium or JV	In case of JV/ Consortium , Can any one member submit the Performance Guarantee	No change in tender condition is envisaged. Please refer to C 19.1 for better understanding.
184	Vol 2	ECR	ECR - 1.4	ECR/1	JV/Consortium Agreement shall obtain requisite attestation to their notarisation from the Indian Embassy in their country	Can the JV/Consortium Agreement be notarised instead Indian Embassy notarization	No change in tender condition is envisaged. Clause is self explanatory.
185	Vol 2	ECR	cl. 6	ECR/9	Pro-forma Letter of Participation - Participation percentage, capital contribution and profit and loss agreements, financial commitment in terms of percentage of each contract	In case of Consortium Agreement, these details cannot be mentioned, plz advise	No change in tender condition is envisaged. Clause is self explanatory.
186	Vol 2	ECR	cl.1	ECR/12	Application form 2b) JV/Consortium Agreement declaration - cl. 1 Consortium agreement shall be legalise post award of contract	Can we submit the the Consortium at the time of award or at the time of bid	No change in tender condition is envisaged. Clause is self explanatory.
187	Vol 2	GCC	14.1	GCC/72	Indemnity b) loss of, or damage to, or destruction of any property (other than the Works) including consequential loss of use; and	As per clause 14.6 Consequential Damages is excluded from contract, but this clause clearly says that tenderer shall be responsible for consequential loss. Therefore request to delete the consequential applicability from the contract.	No change in tender condition is envisaged. Clause is self explanatory.
188	Vol 2	GCC	14.6	GCC/74	Limitation of Liability	The total liability of the Contractor to the Employer,shall not exceed the sum resulting from the application of a multiplier (less or greater than one) to the Accepted Contract Amount, except Electricity, Water and Gas, Employer's Equipment and Free-Issue Materials, Indemnities and Intellectual and Industrial Property Rights. Request to delete the exclusions to total liability.	No change in tender condition is envisaged. Clause is self explanatory.
189	Vol 2	SCC	Sche -3 & 4	Sche -3 & 4	Parent Company Undertaking (PCU) and Guarentee (PCG) - NOT USED	Parent Company Undertaking and Guantee whether required or NO.....? B) Instead of PCG & PCU, other guarantee is acceptebale or No.?	No change in tender condition is envisaged. Clause is self explanatory.
190	Vol 2	SCC	53	SCC/25	Prices are fixed through out the contract and not subject to variation	As the expected completion period is 98 Weeks mnetioned in Tender, if there is a delay on part of Employer for completion, can a tenderer claim additioanl payment towards actual expenses incurred for delay.	No such condition is included in SCC 53 at page SCC/25.
191	Vol 2	SCC	58	SCC/27	BOCW	Can you please clarify whether BOCW is applicable for elevator works	No change in tender condition is envisaged. Clause is self explanatory.
192	Vol 2	General Queries			Experince qualification of tenderer	Experience qualification of tenderers not mentioned, pease clarify..?	Please refer to Vollume 2 Eligibility Criteria for better understanding.
193	Vol 1	ITT	IIT- A 5.1	IIT/3	The Tenderer, to qualify for award of Contract, shall submit notarised written powers of attorney authorising the signatories of the Tender to commit the Tenderer or each member of the consortium or joint venture as the case may be.	Can contractor submit notarised copy within 30 days after award of the work.	No change in tender condition is envisaged. Clause is self explanatory.
194	Vol 2	SCC	38 & 54	SCC/15 & SCC/26	In case of JV/consortium payments shall be made in the name of same JV/consortium.	In Case of Consortium , since it is not a legal entity, it is not possible. Hence needs to be excluded from this clause. In consortium payment should be made either to Lead member of Consortium or respective member in their respective Currency through the respective mode as mentioned in this clause	Please refer clause A3.2 last para and clause A5.2 (a) of Volume 1 which states that the JV/consortitum shall be duly registered in India before issuing the Letter of Acceptance. No change in tender condition is envisaged.
195	Vol 2	GCC			The Lead member shall be the Technical member in case of JV/ Consortium.	Please clarify Technical Member.	No change in tender condition is envisaged
196	Vol 1	ITT	C16.1 (ii)	IIT/16	(ii) For those inputs to the works, which are expected to be supplied from outside India, shall be in freely tradable foreign currencies.	Can the Lead Partner, a local entity, Quote & Claim the price of the works expected to be supplied from outside India, in INR after due adherence of statutory requirement of India.	No change in tender condition is envisaged
197	Vol 1	ITT	C19.1	IIT/18	C19.1 The Tenderer shall submit full details of the identity of the proposed parties who shall provide or issue the Performance Guarantee. Since the Consortium or JV shall have be registered in India before issue of LOA, the PG shall be submitted by registered Consortium or JV in accordance with Sub-Clause 4.2 of the GCC; and relevant SCC;	Since Consortium is not a legal entity, hence PG cannot be submitted under consortium name. Allow Lead partner to submit the PG on behalf of consortium partners.	No change in tender condition is envisaged

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Sr. No.	VOL.	SECTION	CLAUSE No. / Sub Head / BOQ Sr. No.	PAGE No.	DESCRIPTION AS PER CONTRACT	QUERY	CLARIFICATION
198	Vol 1 & Vol 2	ITT / GCC	ANNEXURE 2 REQUIREMENTS FOR TENDERERS TECHNICAL PROPOSALS 2.3 Permits, Licences or Approvals	Annexure 2/1 & GCC/16	Obtaining the clearance certificate from Electrical Lift Inspector, RDSO and CRS and any other relevant statutory authorities as applicable. It shall be Contractor's exclusive responsibility to get approvals, permits or license required for the Contracts. However, the Employer may (where he is in a position to do so) provide reasonable assistance to Contractor at the request and cost of the Contractor in getting Permits, License or Approvals required during the Contract.	Please accept below deviation: Otis will be responsible for procuring lift license permits/licenses from Lift Inspectorate/ PWD Office/RDSO/CRS including payment of all necessary official fees for such licenses/ permits. You will provide all requisite assistance to enable Otis to obtain the permit / licenses and shall execute / provide such documents as may be reasonable requested by Otis in this regard. However, Otis will not be liable for any delays in the administrative process of procuring such licenses/ permits.	No change in tender condition is envisaged.
199	Vol 1	FOT	App 1 (14)	FOT Appendix 1 / 2	Penalty for failure leading to total stoppage of train operation during the DLP and AMC periods; for such delay /stoppage for more than 1 hr.- Equivalent to the amount of loss of revenue for the period.	Too high penalty for lift/escalator contractor. Should be capped at 10% of the contract value.	No change in tender condition is envisaged
200	Vol 2	ECR	5	ECR/6	If a tenderer (or member of a group) is wholly or significantly owned by a holding or parent companies, the information relating to audited accounts and financial statement (as describe above) shall be provided for such intermediate or ultimate holding or parent companies. This information shall be provided in respect of all tenderers, whether applying individually or as group together with Auditor's certification.	Since consortium partner itself has a legal entity in their respective origin/country & participating in this tender under their own jurisdiction, parent company audited accounts & Financial statement should not be required. Contractor request to eliminate this requirement.	No change in tender condition is envisaged
201	Vol 2	ECR	Application No. 2b	ECR/12/13	Joint Venture/Consortium Agreement	Contractor wish to add & elaborate each consortium partner roles, responsibility, bussiness modus operandi & payment structure in the consortium agreement for better transparency with Employer. Is contractors allowed to modify the tender Cosortium agreement format.	No change in tender condition is envisaged
202	Vol 2	GCC	1.1.3.2	GCC/9	"Contract Period" means the period from the Commencement Date to the end of Annual Maintenance (AMC) Period including Integrated Testing and Commissioning and as certified by the Engineer under Clause 7.11 (or as extended under Sub-Clause 10.3).	Does Annual Maintainece period means end of Defect Liability period of 24 months. Please clarify.	No change in tender condition is envisaged. Clause is self explanatory.
203	Vol 2	SCC	S2/2	S2 / 2	Performance Guarantee Format	Can contractor submit performance Guarantee in their standard format as approved by the respective Bank as it is a long process of getting non-standard format approved in Bank. Contractor will keep as much content as possible from Employer format .	No change in tender condition is envisaged. Clause is self explanatory.
204	Vol 2	GCC	8.5	GCC / 50 The aforesaid liquidated damages do not, however, include the sums payable by the Employer to Designated Contractors on account of delay caused by the Contractor to Designated Contractors which sums shall be recoverable from the Contractor in addition to any liquidated damages payable under this clause, the total ceiling limit is 10% of Contract Price as specified under Appendix 1 to the Form of Tender. The liquidated damages are recovered by the Employer from the Contractor for delay and not as penalty.	The percentage of Liquidated damages seems to be too high. Please reduce it to 5% if the contract value.	No change in tender condition is envisaged. Clause is self explanatory.
205	Vol 2	GCC	10.1	GCC / 53	"Defects Liability Period" shall mean the defects liability period stated in the Special Conditions of Contract calculated from the date of issue of the last Taking Over Certificate for whole of the Works.	Contractor Deviate from this clause, Defect Liability period will start from the date of Taking Over of respective equipment & not for the whole of the work. Please clarify	No change in tender condition is envisaged. Clause is self explanatory.
206	Vol 2	GCC	15.1	GCC / 74	The Contractor shall effect and maintain professional indemnity insurance for the amount in Indian Rupees, stipulated in Appendix 1 to the Form of Tender in respect of any design of the Works to be carried out by, or on behalf of the Contractor. This insurance, which shall ensure the Contractor's liability by reason of professional negligence and errors in the design of the Works, shall be valid from the date of commencement of Works until the date of issue of the Performance Certificate.	As an Ethical Company, we follow stick adhereence to avoid any professional Negligence & error in our equipment design that is to be supplied to the customer. Hence should be allowed not to submit professional indemnity Insurance which unnecessarily increase the cost of equipment.	No change in tender condition is envisaged. Clause is self explanatory.

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Sr. No.	VOL.	SECTION	CLAUSE No. / Sub Head / BOQ Sr. No.	PAGE No.	DESCRIPTION AS PER CONTRACT	QUERY	CLARIFICATION
207	Vol 2	SCC	17	SCC/8	17.1 Sources of the Fund The Labour Welfare Fund will be created jointly by KMRCL and the Contractors. A contractor shall remit a minimum amount of Rs 1 lakh against every case of death or total incapacitation and KMRCL would also contribute a matching amount. 17.6 In case of death due to accident, the immediate relative of the deceased shall be given an exgratia payment by the Contractor. The Contractor shall also provide employment to one of the dependents of the deceased under the ongoing Contract, if the family of the deceased have no other means of livelihood and the family was dependent on the income of the deceased.	The death incident covered under the said labor Welfare fund will only limited to contractor specific scope of Work & not of others like Civil, E&M etc. Please clarify.	No change in tender condition is envisaged. Clause is self explanatory.
208	Vol 2	SCC	29	SCC/12	If the Employer uses any part of the works for revenue service before the Taking Over Certificate is issued, the defects liability period of that part of the works shall be commenced as soon as such part is put to use for revenue service.	Contractor deviate from this clause, DLP should start immediately on Taking over of equipment on prorata basis & not with Employer revenue service which can be of indefinite period & is an extra cost to contractor for maintaining, securing fully installed equipment. Please amend this clause.	No change in tender condition is envisaged.
209	Vol 2	SCC	32	SCC/12	Within two months upon the Date of Letter of Award, the Contractor shall establish an office in Kolkata to house all of his staff and Designer. Progress payment will be withheld should the staff or Designers are found not permanently stationed in Kolkata.	For Consortium setup, where material is supplied from foreign partner, only construction staff (of Lead Partner) like CPM/ PM/Engineer/Safety will be stationed in Kolkata & not designer. Hopefully the same is fine, please clarify.	No change in tender condition is envisaged.
210	Vol 2	SCC	46 (a)	SCC/18	(a) The Contractor is required to carry out a 10 years Annual Maintenance Contract after expiry of the Defects Liability Period with the Employer for the Lifts and Escalators under terms and conditions as defined in this tender. The Tenderer shall indicate the Annual Maintenance Costs in the Appendix D1 of the Pricing Document in Vol 6.	Will there not be a separate maintenance agreement between Employer & Contractor for Maintenance after completion of 2 Yr of DLP Period as done normally in all Metros. Please Clarify.	No change in tender condition is envisaged.
211	Vol 2	SCC	46 (i)	SCC/20	(i) Penalty for non-compliance of the requirement of shut down In the event of the contractor's failure to carry out the programmed annual overhauling of any Lift or Escalator within 12 (twelve) months of the last annual overhauling, a lump sum amount of INR 50000 (Fifty thousand) per Lift and INR 300000 (Three Lakh) per Escalator, as the case may be, shall be deducted from the bills of the contractor	Penalty amount is too high, contractor request to amend & limit it upto 10% of the Annual Maintenance amount of the respective non compliant equipment.	No change in tender condition is envisaged.
212	Vol 2	SCC	Sche- 7	S7/1	FORM OF BANK GUARANTEE FOR MOBILISATION PAYMENT	Can contractor submit Bank Guarantee for Mobilization payment in their standard format as approved by their respective Bank as it is a long process of getting non-standard format approved in Bank. Contractor will keep as much content as possible from Employer format .	No change in tender condition is envisaged.
213	Vol 6		PRICING DOCUMENT WITH BILLS OF QUANTITIES			Please share the soft Excel copy of Vol 6 Annexure as it is very lengthy & tedious to prepared	We do not have excel
214	Vol 1	ITT	C10. Maintenance	IIT/14	The Contractor shall be responsible for maintaining the Works for 2 years during DLP followed by 10 years of AMC period from the Date of Completion of the Works. The Contractor is to ensure the availability of spares for 10 years from the date of Completion of Works. The Contractor shall build up sufficient stock of spares including consumables for attending to DLP maintenance. During the 2 years of Defects Liability Period, the Contractor may not use the Employer's spares.	Meaning of Employer Spares and During DLP period DLP spares should be used for Maintenance please Clarify.	No change in tender condition is envisaged. Please refer to Volume 6 also for better understanding.
215	Vol 2	ECR	1.7	ECR/2	In case the application is from Joint Venture, or consortium, each member of the group and each discipline should substantially satisfy the Eligibility Criteria requirements for the system for which the Member is participating. <input type="checkbox"/> The Lead member shall be the Technical member in case of JV/ Consortium.	The Lead member shall be the Technical member in case of JV/ Consortium.Kindly Clarify	No change in tender condition is envisaged.

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Sr. No.	VOL.	SECTION	CLAUSE No. / Sub Head / BOQ Sr. No.	PAGE No.	DESCRIPTION AS PER CONTRACT	QUERY	CLARIFICATION
216	Vol 2	GCC & SCC	11 & 53	GCC/56 & SCC/25	The Contract price, subject to any adjustment thereto in accordance with the contract, shall be inclusive of all Taxes, CST/VAT,CWT, Royalties, Octroi and other charges leviable and payable to the authorities including all types of Custom related duties and Excise duties. All Taxes/Levies/Octroi etc. shall be as prevailing on 28 days before closing date for submission of tender. Nothing extra shall be payable over the quoted rates as accepted by the Employer, notwithstanding any provision to the contrary in any law for the time being in force, save and except what is specifically provided in General or Special Conditions of Contract. No price adjustment shall be made for Temporary Work and fuel	The said clause states that the Contract price would be inclusive of all taxes including VAT/CST Except as otherwise specifically provided in the Contract, the Contractor shall bear and pay all taxes, duties, levies and charges assessed on the Contractor, its Subcontractors or their employees by all municipal, state or national government authorities in connection with the Facilities in and outside of the country where the Site is locate.However, it doesn't mention the service tax element in it. clause 53 of SCC page 152 reads out service tax portion to be inclusive of contract price and nothing extra payable. Given this, a clarification is required as to applicability of service tax on installation activity carried out by contractors/sub-contractors shall be reimbursed separately from contact price or will there be any specific exemption is granted to KMRCL. If yes, kindly share the exemption certificate.	No change in tender condition is envisaged.
217	Vol 1	2	A3	2	Eligible Tenderers The Tenderer shall provide such evidence of their eligibility satisfactory to the Employer as the Employer shall reasonably request. In case of a consortium, an agreement among the partners should be formed and the same should be registered in India.	Please confirm whether the Consortium Agreement can be registered in India within 60 days after award of the Contract.	No change in tender condition is envisaged.
218	Vol 1	2	A 5.2	5	Where the Tenderer comprises a consortium or joint venture, the Tenderer shall provide the following information as part of the eligibility criteria submission documents: (a) A Memorandum of Understanding, shall be provided. That Memorandum of Understanding shall be duly registered in India before issuing the Letter of Acceptance.	Please confirm whether the Consortium Agreement can be registered in India within 60 days after award of the Contract.	No change in tender condition is envisaged.
219	Vol 2	6	Annexure-4	36	Equipment Capabilities The Equipment's required are 1. Crane, Hydra & fork lifts 2. Insulation Resistance Tester 3.DG Set 4.Distribution Board 5.Welding Set 6.Brazing Kit 7.Mounting Trolley 8.Gas Leakage Detector 9.Tools & Tackles 10. A Frame for Escalator Hoisting 11. Chain Pulley Block slings etc. 12.Precision tools used for Lifts and Escalators with list to be provided	Crane, Hydra, Tools & Tackles, A Frame, Chain pulley blocks can be hired from Third party as and when required. We shall give in subcontractor details as per clause GCC Clause no. 4.5 and SCC Clause No.2	No change in tender condition is envisaged.
220	Vol 3	Part I	1.6	14	Contractor shall ensure that necessary equipment for monitoring the Ground sub-soil temperature using PT 32 or RTD probes. All facilities necessary for monitored every six months of the sub-soil temperature shall be provided by the Contractor.	Please confirm whether the ground sub-soil temperature is provided by us? If it is ,please describe more clearer.	Please refer to Addendum No 1 S.No 9
221	Vol 3	Part I	3.1	20	2.In table (Underground Stations - Schedule of Machine Room-Less Type Lifts (Complying to EN-81 Standards) Suitable For Metro Station Operation:.) for 21P Shaft dimension is mentioned as 2900mm (W) x 2600mm (D), car internal dimension mentioned as 1900 (W) x 2000 (D) x 2400 (H) and clear opening is mentioned as 1200(W) x 2100 (H)	As per EN 81 / IS the available car area exceeds standard specification Car Area 3.8m ² . preferred car internal dimension is 1800mm (W) x 1800mm (D) x 2300mm (H) and clear opening size is 1000mm (W) x 2100mm (H). Kindly correct it.	No change in tender condition is envisaged.
222	Vol 3	Part I	3.1	21	CAPACITY (NO. OF PASSENGER S/ MIN.): 135	As per EN115-1, when speed is 0.65m/s, step width is 1m, the capacity shall be 7300 persons/hour	Please refer to Addendum No 1 S.No 10
223	Vol 3	Part I	3.1	21	CAPACIT Y (KW):22.5	22.5 kw for all escalators is very high and it is not efficient, Suitable motor capacity to be selected as per power requirements of Escalators	Please refer to Addendum No 1 S.No 11
224	Vol 3	Part I	3.1	22	Ground to Concourse escalator angle will be 35deg.	This is conflict with 7.2.2 in tender and EN115 requirement, please double check	No change in tender condition is envisaged for clause no 3.1 page no 22. For clause no 7.2.2 please consider the clause as mentioned below "Escalators shall be designed for installation and operation at an angle of inclination of 30°.for concourse to platform and 30°.for ground to concourse escalators. Only one escalator at Phool Bagan station ground to concourse 35° angle of inclination". Please refer to Addendum No. 1 S.No. 22

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225	Vol 3	Part I	5.3.1	29	(xviii). Security system (a CCTV camera and cabling to be installed, in the lift shaft, shall be procured and handed over by the Communication Contractor to the Lift Contractor to be installed in the lift car at site).	Clause 5.3.1 is contradicting i.e., clause says lift contractor should install CCTV camera in Lift shaft and also in the lift car at site. CCTV is not recommended in Lift, instead recommend glass Doors.	No change in tender condition is envisaged.
226	Vol 3	Part I	5.9.1	32	The achieved level of reliability for each lift shall be 565 hours MTBF prior to COD and 1,125 hours at the end of the DLP, resulting in a Service Failure as defined in section 7.	Clause 5.9 & 6.2.15.F for MTBF target is contradicting. MTBF as per clause 5.9.1 is ok.	No change in tender condition is envisaged. Clause No 6.2.15 is the MTBF requirement for the doors.
227	Vol 3	Part I	5.11.7	32	The MTTR time measurement shall include on site diagnostics and rectification of the failure up to the point that the system is restored to full functionality. In the event that the failure cannot be rectified, the measurement shall include the time necessary to remove the failure piece of equipment from the system and replaced it with a functioning module. The maintainability shall measure by fault rectification time which should not exceed One (1) hour since its reporting to contractor call centre or his representative by OCC/Employer's Representative . Failure: Lifts not available for more than one hour for passenger service shall be registered as a failure provided. Date and time of the fault with error code provision is required.	Clause 5.11 & 6.2.15.G for MTTR target is contradicting. MTTR 4 hours is recommended.	No change in tender condition is envisaged. Clause No 6.2.15 is the MTBF requirement for the doors.
228	Vol 3	Part I	6.2.6	35	Elevator shaft dimension for 1000 kg/13 persons elevator will be 2500mm (Width) x 2000mm (Depth) (Except for Howrah Maidan station which is 1850 mm (depth)x 2425 mm (width) and for 1600 kg/ 21 persons elevator will be 3000 mm (width) x 2500 mm (depth). The Contractor shall take all necessary measures to accommodate the Elevators in the above shaft. The Contractor shall co-ordinate with the Designated Civil Contractors for all matters related to shaft size. Any minor reduction in the shaft size (depth and width) to the tune of + 250 mm and – 100 mm shall have to be accommodated in the design by the contractor by way of provision of suitable guide brackets/stainless steel channels without any additional charges. The contractor shall be responsible for any delay on this account.	The capacity of the Lifts shall be 10 P as per the shaft dimensions, It is not be possible to provide 13 P lift in 1850 D x 2425 W shaft	Please refer to Addendum No 1 S.No 13
229	Vol 3	Part I	6.2.6	35	Elevator shaft dimension for 1000 kg/13 persons elevator will be 2500mm (Width) x 2000mm (Depth) (Except for Howrah Maidan station which is 1850 mm (depth)x 2425 mm (width) and for 1600 kg/ 21 persons elevator will be 3000 mm (width) x 2500 mm (depth)	Hanging Pit & non hanging pit shaft dimension to be included. Minimum required size for 13P lift shaft dimension is 2500mm (Width) x 1900mm (Depth) & for 21P/1600 Kg lift shaft dimension is 2900mm (Width) x 2600mm (Depth). Kindly correct it.	Please refer to Addendum No 1 S.No 13
230	Vol 3	Part I	6.2.7	35	1. In table (Elevated Stations - Schedule of Machine Room-Less Type Lifts Suitable For Metro Station Operation, page no. 18) for 13P clear opening is mentioned 1050mm(W) x 2180mm (H) 2.In table (Underground Stations - Schedule of Machine Room-Less Type Lifts (Complying to EN-81 Standards) Suitable For Metro Station Operation:, page no. 20) for 13P Shaft dimension is mentioned 2500mm (W) x 1900mm (H), car internal dimension mentioned as 1500 (W) x 1500 (D) x 2400 (H) and clear opening is mentioned as 1100(W) x 2100 (H)	Minimum required of 13P 1. Shaft depth is 2000 mm for 1500 mm internal car depth. 2. Clear opening will be 1000 (W) x 2100 (H). 3. Height of car internal height will be 2300 MM for both Elevated & Under ground station. Kindly correct it	Please refer to Addendum No 1 S.No 14
231	Vol 3	Part I	6.2.6	35	6.2.6 Any minor reduction in the shaft size (depth and width) to the tune of + 250 mm and – 100 mm shall have to be accommodated in the design by the contractor by way of provision of suitable guide brackets/ stainless steel channels without any additional charges	As per IS 14665 Part 2/ sec-1 Clause 6.1 and 6.3, tolerance in minus is not allowed and not possible to design lift with this tolerance	No change in tender condition is envisaged.
232	Vol 3	Part I	6.2.7 & 8	35	6.2.7 Elevator car shall have minimum internal dimensions of 2000 mm (D) by 2100 mm (W) for carrying the rated load 2000 Kg / 26 persons and 1600mm (W) by 1400 mm (D) for carrying the rated load 1000 kg/ 13 persons along with wheel chair. The false ceiling height of the Elevator car shall not be less than 2300mm. 6.2.8 Both the car and landing entrance clear opening width shall not be less than 1000mm for 13 Persons and 21 Persons Elevators and height not less than 2100mm the door shall be of center opening type.	Car internal dimension mentioned for 2000 kgs /26P and not mentioned for 1600 Kgs/21P. Kindly include it.	Please refer to Addendum No 1 S.No 10
233	Vol 3	Part I	6.2.11	36	The Contractor shall provide Seismic operation Control system with primary wave sensor for the Lifts measurable in Richter scale. These shall be integrated with Seismic operation control device through RMS/ BMS System. Upon detecting such wave, the equipment shall direct all the Lift cars in the Station/ Admin & OCC Building/ Depot to the nearest floor and immediately open doors for safe exit. The lift shall only be reset manually after the signal is clear and the lift has been inspected by the maintenance personnel. One number of primary wave seismic sensor shall be provided in each station, Admin & OCC building and Uppal depot.	Seismic sensors are not used in any Metro Project Lifts in India and same are not recommended for MRL Lifts with two / three stops	No change in tender condition is envisaged.

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234	Vol 3	Part I	6.2.15	36 & 37	F. Mean time between failures (MTBF) shall be in excess of 8500 hours, i.e. one failure per year measured under corrective maintenance. MTBF does not include failures due to Acts of God but only failure of the equipment due to normal wear and tear or plant failure.	Clause 5.9 & 6.2.15.F for MTBF target is contradicting. MTBF as per clause 5.9.1 is ok.	No change in tender condition is envisaged.
235	Vol 3	Part I	6.2.15	37	G. Mean Time to repair (MTTR) under corrective maintenance shall be less than 4 hours per year. This time includes diagnosis time, to time to repair / replace/ adjust the equipment , time to restore to service and time to carry out any functional or safety checks. This time excludes the routine maintenance time. MTTR does not include failures due to Acts of God but only failure of the equipment due to normal wear and tear.	Clause 5.11 & 6.2.15.G for MTTR target is contradicting.	No change in tender condition is envisaged.
236	Vol 3	Part I	6.3.2	37	(a) Driving motor shall be of the AC synchronous/asynchronous axial type designed for special duty cycles required for Elevator operation with no slip rings. It should have a high starting torque, high power factor, high efficiency and low energy consumption. The motor efficiency should be not less than 90% and the power factor should be not less than 0.9. The bearing used should be of spherical roller type to ensure longer life. The drive sheave, and deflector sheave (if required) shall be mounted in proper alignment on a common, isolated bedplate.	PM motor with 85% efficiency shall be acceptable as per specification in all other Metro Projects - it is proven design.	No change in tender condition is envisaged.
237	Vol 3	Part I	6.3.2	37	(c) The maximum temperature rise of the winding shall not exceed 50°C above ambient temperature when operated under normal condition. During prototype ambient temperature has to be created as per Kolkata ambient conditions for motor test to validate the requirement.	Ambient temperature for Kolkata ambient condition can not be generated for lift Prototype	No change in tender condition is envisaged.
238	Vol 3	Part I	6.3.2	38	(d) The motor to be tested at full load capacity and maximum temperature rise of the winding shall not exceed 50°C above ambient temperature when operated under normal condition.	Temperature rise to be suitable to class-F insulation. Class F can withstand 155°C temperature. So the temperature rise can go up to 100°C. 50°C is very stringent requirement. Motor size will become bulky	No change in tender condition is envisaged.
239	Vol 3	Part I	6.3.2	38	(g) The Elevator machine shall be fitted with a manual mechanical emergency device capable of having the brake released by hand and requiring a constant effort to keep the brake open. In normal operation, the electromagnetic brake shall only be applied when the lifts has come to complete stands still. The brake shall only be meant for holding the lift in the position at every landing, providing best stopping control without any jerking effect. In case of MRL lifts, the motor brake shall be able to be remotely released outside the lift well.	Emergency manual brake releasing lever will be provided in MAP panel. Note: clause no 6.3.2 is mentioned for both Motor and Brake. Kindly correct it.	Please refer to Addendum No 1 S.No 17
240	Vol 3	Part I	6.3.3	39	Encoder shall be of Direct drive, solid-state, digital type. These shall be able to update car position at each floor and automatically restore after power loss	Encoder specification depends upon the VVVF used for motion control. Manufacturer choice to be allowed there is no separate clause for Encoder in other Metro contract, so this clause can be removed	No change in tender condition is envisaged.
241	Vol 3	Part I	6.8.1	42	Roller type guide shoes	A swivel type (cast iron FG300 (IS 210)) spring loaded, adjustable and slipper type guide shoes are provided Roller guide shoes not required up to 2.5m/s of lift speed.	No change in tender condition is envisaged.
242	Vol 3	Part I	6.8.2	43	A suitable car frame fabricated from galvanized cold rolled steel, bolted, or welded together to form a rigid structure shall be provided.	Hot rolled will be provided Hot rolled will be better option due to its availability as well as to meet the safety factor.	Please refer to Addendum No 1 S.No 32
243	Vol 3	Part I	6.8.4	43	(a) The car platform shall be constructed from spray galvanized cold rolled steel with steel flooring. The platform shall be designed on the basis of the rated load being evenly distributed with a minimum safety factor of five (5). The design of the final floor finish is subject to acceptance by the "Engineer".	Hot rolled will be provided. Hot rolled will be better option due to its availability as well as to meet the safety factor.	Please refer to Addendum No 1 S.No 33
244	Vol 3	Part I	6.8.9	45	The car junction box with IP Class 55 protection, for the traveling cables and car enclosure wiring shall be installed at the car top. Car junction box with IP class 65 shall be used for elevated stations.	Car junction box IP class 55 protection will be sufficient	No change in tender condition is envisaged.

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245	Vol 3	Part I	6.8.10	46	iv. Car Doors - Scratch Resistant Stainless steel, 5WL SS 304 finish with 1 hour fire rated stainless steel of not less than 1.5 mm in thickness - For the glass door, Thickness of glass shall not be less than 10mm and with the stainless steel 304 5WL frame. The fire rating of the glass shall be minimum 1 hour.	Fire rating for car door is not required as per EN and Indian standard This is to be removed	No change in tender condition is envisaged.
246	Vol 3	Part I	6.9.3	49	If the car door is forced open, the Elevator shall stop and the alarm activated (even when the Elevator is out of order) until the door is fully closed. The audio-visual alarm signal shall be sent to the relevant landing as well as to SCR and CC rooms.	If the car door is forced open, then the lift stopped and fault code is generated. Audio and visual signal sent to SCR by RMS.	No change in tender condition is envisaged.
247	Vol 3	Part I	6.11.3	50	(b) A red "Car Overload" indicating lamp with buzzer and announcement in Hindi, English & Bengali Language.	Car overload can be displayed in car display. No separate indicating lamp required.	No change in tender condition is envisaged.
248	Vol 3	Part I	6.11.4	51	(d) "UP/DOWN" buttons which shall cause a car to travel in the desired direction. These buttons shall be operative only during the "Attendant" operation.	UP and Down button shall not be separately provided for attendant operation. Use floor buttons for attendant operation	No change in tender condition is envisaged.
249	Vol 3	Part I	6.12	51	Car Position Indicator Floor numbers shall be digitally displayed using 5 "x 7" LCD. There shall also be an arrow in motion vividly and dynamically indicating car movement and direction. It shall also be capable of displaying simple message such as, floor names like Over Load, Ground level, "Concourse, Platform", " Out of service", under maintenance" etc.The surface of the display unit shall be non-glare type.	16 x72 square dot matrix display provided	No change in tender condition is envisaged.
250	Vol 3	Part I	6.12	52	A voice announcer, in English, Hindi & Bengali shall be provided to indicate operation of the doors and the floors where the elevator stops and the direction of the elevator. It shall also announce Over load, "Seismic", "Fire" ARD function when applicable. The announcement shall be 100% synchronized with the actual operation of the elevator. During PA Speaker is announcement, Lift announcement should stop automatically.	Announcement in three languages practically cannot be synchronised with the actual operation, Since the announcement time become longer. With two languages somewhat we can manage to synchronise	No change in tender condition is envisaged.
251	Vol 3	Part I	6.16	55	Where the gap between the car door sill and surface of the Elevator shaft wall exceed 125 mm, galvanized sheet steel fascia plates of not less than 1.5 mm thick shall be provided. These shall be fixed between the undersides of landing entrance sills and the top of the door hanger case to form a flush surface in the path of travel at the car entrance. The plates shall cover the whole width of the landing door and extend by 150 mm on each side of the door. It shall be rigid and properly reinforced. The fascia plate shall be painted in a accepted colour.	As per EN81 clause no. 11.2.1 (c) this point is not applicable if car door lock is provided	No change in tender condition is envisaged.
252	Vol 3	Part I	6.18.4	59	An automatic re-leveling device shall be provided which returns the Elevator to the floor automatically should the Elevator creep down or move up from floor level for any distance from 6 mm to 50 mm. This device shall be operative at all floors served whether the landing and car doors are opened or closed.	Re-Leveling may not be required for stations, since the total travel is very less, so the rope elasticity also negligible. Re-leveling can be removed	No change in tender condition is envisaged.
253	Vol 3	Part I	6.18.7	60	As in the case of Power failure (including single phasing / unbalanced phase) elevator should operate in the EBD mode with EBD battery backup. This software for providing this feature is subject to the Employer's acceptance. The batteries status of charge/discharge shall be communicated to RMS/BMS.	Fault code for "ARD Battery Failure is available.	No change in tender condition is envisaged.
254	Vol 3	Part I	6.19.2 & 7	61	The shaft lighting (Lux requirement as per the IS), Ventilation arrangement and pit socket outlets shall be provided by the Elevator Contractor. The Fixtures and cables will need to get approval from the Employer. 6.19.7 Not used. Shaft Lighting shall be in scope of lift contractor by maintaining the lux level as per statutory requirement and Indian standards.	Shaft lighting will be CFL type and Lux level will be as per IS	No change in tender condition is envisaged.
255	Vol 3	Part I	6.20.1	62	The RMS will be provided by the designated contractor. However, the Contractor shall provide/receive the following status monitoring points and control points to the RMS in the form of interface voltage free contacts. Fault data logging should have Date & Time stamping facility. a. Provision of elevator fault/trip signal b. Provision of elevator car alarm signal c. Provision of power available and failure status d. Provision of elevator under maintenance signal e. Receiving remote control signal for parking on/off operation	Kindly clarify details of scope of RMS System in ISMS Contractor for both Lifts and Escalators. The specification in the Tender is confusing and leading to litigations during Contract Execution. Please clarify if ISMS contractor will provide the RMS software to run on ISMS PC and Lift and Escalator contractors will provide interface signals. Whether Lift RMS and Escalator RMS are separate and independent or both are in one RMS System with integrates Software. Without above clarifications it is impossible to consider tender submissions. Volt free contacts are not extended to SCR, MODBUS RTU / MODBUS TCP / IP signals will be provided as interface to RMS System	No change in tender condition is envisaged.

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256	Vol 3	Part I	6.24.1	66	Oil buffers shall be provided in the Elevator pit.	Spring Buffer will be provided for 1.0m/s speed	No change in tender condition is envisaged.
257	Vol 3	Part I	6.30.3	71	The conductor shall be of stranded conductor composed of plain annealed copper wire complying with IEC 228, Class 2.	IEC 60228/ IS 8130/ IS 1554/ IS 694 shall be considered to meet the requirements.	No change in tender condition is envisaged.
258	Vol 3	Part I	6.30.4	72	The insulation shall consist of an extruded layer of cross-linked polyethylene complying with IEC 502.	IS 7098 can be considered to meet the voltage grade of 1100 V	No change in tender condition is envisaged.
259	Vol 3	Part I	6.30.5	72	All cables shall be manufactured from fire retardant, low smoke, halogen free materials for underground lifts. The Contractor may propose to use cables manufactured from fire retardant materials only in elevated stations and above ground open areas.	All cables are FRLS ZH.	No change in tender condition is envisaged.
260	Vol 3	Part I	6.30.6	72	Fire retardant, low smoke, halogen free materials shall meet the following requirements:- (a) London Transport Executive Three Metre Cube Smoke Emission Test, using optical measuring instruments. The maximum value of absorbance AO (ON), AO (OFF) shall be 0.8 & 1.2 respectively. (b) The US National Bureau of Standard Smoke Chamber Test, used to evaluate plaque samples of materials of constant thickness. (NFPA-258 Smoke Generation of Solid Materials 1982). The maximum specific optical density shall be 170 under the non-polluted condition. (c) The flame propagating criteria of US IEEE Standard 383, with a minimum test short circuit time of five minutes, in the IEEE Standard 383 test. (d) IEC 332 Parts 1 and 3, Category B, tests on single and bunched cables under fire conditions. (e) Limiting Oxygen Index of at least 30, to ASTM D-2863. (f) A temperature index (TI) of 260°C to ASTM D-2863. (g) All insulation is to be moisture and heat resistant, with temperature ratings appropriate to the application conditions, and in no case lower than 120°C. (h) When a sample of the cable is subjected to a combustion test for the determination of the amount of halogen acid gases (other than hydrofluoric acid) as set out in IEC 754 - Part 1 the halogen acid evolved shall not exceed a maximum of 0.5%	(a) & (b) - IEC 61034 Global standard followed by all cable manufacturer (c) & (d) - IEC 60332 part 1 and 3, standard followed by all cable manufacturer Note: These applicable standards to be included. Error continuing in all Metro contracts.	No change in tender condition is envisaged.
261	Vol 3	Part I	7.2.2	75	Escalators shall be designed for installation and operation at an angle of inclination of 30°.for concourse to platform and 30°.for ground to concourse escalators.	Please confirm all escalators are 30°? As per EN115 all public Escalators shall be 30 deg inclination	Please refer to Addendum No 1 S.No 22
262	Vol 3	Part I	7.2.1	75	Escalators shall be heavy duty, reversible type and capable of operating safely, smoothly and continuously in both directions for a period of not less than 20 hours a day, seven (7) days a week with a alternating passenger load reaching 100% of Contract Load (120kg per step) for three hour and 50% of Contract Load for the following hour within the environmental conditions as stated in the General Specification and at the location where the Escalators are to be installed.	100% of Contract Load (120kg per step) for three hour? As per EN115-1, the escalators are suitable for intensive use, regularly operating for approximately 140 h/week with a load reaching 100 % of the brake load for a total duration of at least 0.5 h during any time interval of 3 h	No change in tender condition is envisaged.
263	Vol 3	Part I	7.2.6	76	Ceiling intersection guards and anti-slide devices shall be provided where necessary. The anti-slide devices shall be constructed from 1.2 mm stainless steel of grade 304. They shall be located not more than 1.8m apart along the decking, where (a) The outer edge is more than 300 mm from the centerline of the handrail. (b) The distance between centerline of handrails of two adjacent Escalators is more than 400 mm. (c) Child Barrier, Fill Panels, Wedge guards, Deflectors to be provided.	It is possible to consider price if it is added as BoQ item, request to include item rates in price schedule to operate later as per site requirements.	No change in tender condition is envisaged.
264	Vol 3	Part I	7.2.11	77	(b) Tracks and handrail guide. : Zinc plated steel profiles.	handrail guide will be of stainless steel	No change in tender condition is envisaged.
265	Vol 3	Part I	7.2.11	77	(f) All bolts, nuts, shims and other hardware: Zinc plated	From aesthetics, Stainless steel fasteners for visible part is better	No change in tender condition is envisaged.

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266	Vol 3	Part I	7.2.11	77	(g) Balustrade supports and all other parts: All parts constructed from steel or sheet steel shall be either galvanized by hot-dipped process complying with BS 729 or fabricated from hot galvanized sheet steel or with epoxy powder coated finishes. Cast iron assemblies shall be cleaned and painted with corrosion resistant paint	If hot dip galvanized applied, it will follow standard of GBT9799 which is equivalent with ISO 2081	No change in tender condition is envisaged.
267	Vol 3	Part I	7.2.11	77	(h) Balustrade profiles, decking panels, skirt panel, outer cladding panels.: 2.0mm thick for skirt panels & 1.5mm thick for remaining panels, grade stainless steel in accordance with ASTM A 182-61T or F-304H or ASTM A 167-61T T- 304 or DIN 1.4301 or equivalent.	please confirm all the thickness means nominal thickness and can follow related Chinese standard or international standard which allows tolerance on both sides.	No change in tender condition is envisaged.
268	Vol 3	Part I	7.2.12	78	Controller : Protection IP Class 55 or 54. Isolating Switches : Protection Class 67 if outside and IP55 if inside controller. All safety switches and interface boards : Protection IP Class 67. Safety switches and control equipment coming on the lower pit or likely to be submerged in water shall be IP 67	Our Controller Protection's IP Class is IP55, the interface board and control equipment coming on the lower inside controller cabin also IP Class is IP55	No change in tender condition is envisaged.
269	Vol 3	Part I	7.3.8	78	If any obstacle such as intersecting floor slab, is less than 600mm from the center line of the nearer handrail, a intersection guard fabricated by light weight material reviewed without objection by the "Engineer", shall be provided in accordance with EN115.	It should be indicated as BoQ item for item rate, otherwise it not possible to do pricing	No change in tender condition is envisaged.
270	Vol 3	Part I	7.3.2	79	Truss shall be supported at both ends (and at intermediate support for vertical rises above 6m) with resilient supports and bearing plates.	Please confirm whether intermediate support for vertical rise below 6m is allowed or not allowed. Specification of loads and dimensions of Escalators without intermediate support will be completely different and cost will be very high	No change in tender condition is envisaged.
271	Vol 3	Part I	7.3.3	79	The lower constant lengths from the edge of support to Escalator working point will be assumed as 3347mm while the pit sizes will be assumed as 1750mm (W) x 1350mm (D) x 6500mm (L) for the preparation of civil works. The upper constant length will be assumed as 4000mm for vertical rises below 7.5m, 4500mm for vertical rises between 7.5m to 10m and 4850mm for vertical rises above 10m up to 15m,	1. The pit size here is different from that in "Elevated Stations - Schedule of Escalators Suitable For Metro Station Operation", please double check and confirm which information is correct? 2. Consider the stability and machine room space, the lower constant length and upper constant length are recommended to follow manufacturer standard	Please refer to Addendum No 1 S.No 23
272	Vol 3	Part I	7.3.6	80	Stainless steel (SS 304) surface comb plates with yellow – colored die cast. The alternatives like colored fiber, for the Comb plate is subject to the Employers acceptance at the design stage. Corrosion resisting aluminum alloy comb teeth shall be provided at both landings of each Escalator.	For outdoor environment, aluminum comb plate is recommended which has better corrosion resisting feature than Stainless steel	Please refer to Addendum No 1 S.No 24
273	Vol 3	Part I	7.3.7	80	Escalator landings shall be provided with easily open able, hinged landing plates suitable for access to the drive mechanism. Landing plates shall have a non-slip, stainless steel surface (complying to SS 304) that will facilitate sectional replacement. Lifting handles shall be provided to facilitate opening of the landing plate. Means, such as hydraulic cylinders, shall be provided so that the force required to lift the floor plate is not more than 200N.	For outdoor environment, aluminum landing plate is recommended which has better corrosion resisting feature than Stainless steel	No change in tender condition is envisaged.
274	Vol 3	Part I	7.3.9	81	(a) Handrail decks profile: Minimum 1.5mm thick stainless steel, and hairline finish(Grade 304)	please confirm all the thickness means nominal thickness and can follow related Chinese standard or international standard which allows tolerance on both sides.	No change in tender condition is envisaged.
275	Vol 3	Part I	7.3.9	81	(b) Inner panels: For stainless steel panels, minimum 1.5 mm thick stainless steel, hairline finish (Grade 304), with reinforcement and sprayed-on fire resistant vibration/ sound attenuating backing subject to the acceptance of the "Engineer".	please confirm all the thickness means nominal thickness and can follow related Chinese standard or international standard which allows tolerance on both sides.	No change in tender condition is envisaged.
276	Vol 3	Part I	7.3.9	81	(c) Outer cladding panels Minimum 1.5mm thick stainless steel with hairline finish (Grade 304) in Visible Section and Cold rolled steel galvanized sheet (with minimum 85µm thick Galvanizing) in Non – visible section as per approval of "Engineer". (The price adjustment per Sq. mm for the cost difference between Stainless Steel and Galvanized Sheet (with minimum 85µm thick Galvanizing) be submitted in the form of tender. Payment will be adjusted based on actual measurement) Panels shall be with reinforcement and sprayed – on fire resistant vibration / sound attenuating backing material subject to the acceptance of the "Engineer". The cladding shall be provided on all three sides including bottom side	1. Different requirements for panel thickness, please confirm all the thickness means nominal thickness and can follow related Chinese standard or international standard which allows tolerance on both sides. 2. Cladding for non-visible section is not necessary, please check if we can cancel the cladding for non-visible section?	No change in tender condition is envisaged.

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277	Vol 3	Part I	7.3.9	81	(d) Skirt panels Minimum 2.0 mm thick stainless steel, hairline finish, with a material of low coefficient of friction such as Teflon or equivalent as reviewed without objection by the "Engineer" applied on the surface.	1. Different requirements for panel thickness, please confirm all the thickness means nominal thickness and can follow related Chinese standard or international standard which allows tolerance on both sides. 2. Cladding for non-visible section is not necessary, please check if we can cancel the cladding for non-visible section?	No change in tender condition is envisaged.
278	Vol 3	Part I	7.3.10.	81	The starting point of inner decking shall have width of same 1010 mm. But the distance between points on the inner decking below the handrail shall be 1200 mm. This implies that the inner decking has a slope component of approx. 95 mm on each side (under the handrail) and then becomes flat to meet the balustrade.	Can't understand, please give more explanation with drawing for better understanding	No change in tender condition is envisaged.
279	Vol 3	Part I	7.3.11.	82	Where necessary, all outer sides of the balustrades and truss shall be provided with reinforced claddings. The gap between Escalators and the sides of Escalator and the adjoining walls/ parapet walls shall be provided with decking extensions. The Contractor shall allow a gap of approximately 15mm between the decking and the adjacent walls/ parapet walls. The gap shall be filled up by the Escalator Contractor with flexible sealant subject to review without objection by the "Engineer". The claddings and decking extensions shall be fabricated from 1.5 mm thick stainless steel (complying with SS 304) hairline finish. The inner surface shall be reinforced to prevent warping. It shall be sprayed with fire resistant vibration/sound attenuating backing material to the acceptance of the "Engineer". The claddings and decking extensions shall have tight butt joint and be fastened to the truss with concealed stainless steel bolts, nuts and washers.	Decking extension is not standard feature of Escalators. It is a part of Building finishes / architecture. However It is possible to consider the costs if separate BoQ is available. Request for BoQ items to included item rates, which can be operated as per site requirements.	No change in tender condition is envisaged.
280	Vol 3	Part I	7.3.11	82	The joint line shall be perpendicular to the Escalator step nose line without any longitudinal joints. All joint lines of interior decking, exterior decking/decking extension shall be aligned and staggered in arrangement in line with the joint line of interior panel. For SS Balustrade joints of, skirt panel, inner panel, top decking, outer cladding etc. should be in one line & for glass balustrade joints of, skirt panel, inner decking, glass joint, outer decking and outer cladding should be in one line. The design and the fixing details are subject to the acceptance by the "Engineer".	Fixing will be problem if skirting and cladding also in one line. We will make inner panel and top decking in one line for SS Balustrade and inner decking, glass panel and outer decking in one line for gals Balustrade	No change in tender condition is envisaged.
281	Vol 3	Part I	7.3.13.	82	b. Glass and glazing shall gently comply with BS 952 Part 1, BS 5713, BS 6206 and BS6206 and BS 6262.	BS 952 Part 1, BS 5713, BS 6206, BS 6262 and BS EN 14449 are building glass standard, it's not applicable for escalator, escalator glass will follow EN12150	No change in tender condition is envisaged.
282	Vol 3	Part I	7.3.13.	82	d. The balustrade shall be glazed at the entire section from upper to lower newel ends.	Glazed balustrade at the entire section from upper to lower newel ends will be not possible if use V type handrail, in order to make complete glazed balustrade, we recommend use C type handrail, please check and confirm	No change in tender condition is envisaged. Please refer to Addendum No. 1 Sl. No. 25 for handrails.
283	Vol 3	Part I	7.4.1	83	Balustrades shall be provided with smooth and continuous handrails moving in the same direction and at the same speed as the steps with tolerance of 0% to 2% of the speed of the steps. The handrail shall have a life span of at least seven (7) years under operating conditions as stated in clause 7.2.1. The color of the handrails shall be black but the Employer reserves the right to select other colors or designs at no extra cost. The escalators shall be provided with V type hand rail for all the rises		Please refer to Addendum No 1 S.No 25
284	Vol 3	Part I	7.5.1.	84	Step dimensions shall have a tread width of at least 400 mm deep and not more than 210 mm high. Steps and step chains arrangement provided should be easy to maintain.	If 35° is required, then the step height will be about 229mm more than 210mm	No change in tender condition is envisaged.
285	Vol 3	Part I	7.5.5	85	Step chains shall be of the endless roller type located on both sides of the moving step. The chains shall be provided in matched lengths and be of high quality steel construction incorporating links, pins, bushes, axles and rollers with three pitches between adjacent rollers. The step rollers shall be located outside the chain links and shall be easily replaceable without dismantling the links. All chain pins shall be circlipped. Each step chain shall be provided with an automatic tension device to ensure proper tension under varying load conditions. A method shall be provided to shorten the chain by one step to compensate for chain elongation.	Please confirm is it required step rollers outside the chain links? Or step chain rollers outside the chain links?	Please refer to Addendum No 1 S.No 26
286	Vol 3	Part I	7.5.9.	85	The shore hardness of the tyre materials shall be 92o ± 3oA when cured.	The tyre material hardness will be 95 ±2 A. It is a better specification than 92. The tolerance on + side shall be omitted.	No change in tender condition is envisaged.

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287	Vol 3	Part I	7.6.3	86	An oil level switch shall be provided to monitor the gearbox oil level.	Suitable oil level checking method will be provided such as oil level checking window. Oil level switch is not available at present	No change in tender condition is envisaged.
288	Vol 3	Part I	7.6.7	86	At rated frequency and at rated voltage, the speed, measured under no load condition in the direction of movement of the steps, shall not deviate from the rated speed by a maximum of $\pm 3\%$.	As per EN115-1, (5.4.1.2.1) The nominal speed shall not deviate by more than $\pm 5\%$ at nominal frequency and nominal voltage.	No change in tender condition is envisaged.
289	Vol 3	Part I	7.6.9	87	Power factor at any load shall be $\geq 95\%$	The power factor will be 0.8	No change in tender condition is envisaged.
290	Vol 3	Part I	7.6.20	88	The worms and gears of the machine shall comply with BS721	The gearbox will follow gearbox manufacturer standard or its related international standard	No change in tender condition is envisaged.
291	Vol 3	Part I	7.6.23	88	An oil gauge shall be provided in the gear housing to clearly indicate the oil level. An inspection plate shall be provided to check the condition of the gear.	Suitable oil level checking method like small window will be provided. The gears are working in oil and can't be seen from outside, if want to check gear condition, please open the motor and gearbox	No change in tender condition is envisaged.
292	Vol 3	Part I	7.8.15	92	Handrail Speed Detection Device Each handrail shall be fitted with a device, which shall stop the Escalator when the handrail speed exceeds $\pm 30\%$ of the rated speed.	As per EN115: A handrail speed monitoring device stop the escalator or moving walk in the event of a hand rail speed deviation of more than -15% to the actual speed for more than 15 s while the escalator or moving walk is in motion	Please refer to Addendum No 1 S.No 34
293	Vol 3	Part I	7.10.4	95	The Contractor shall provide a PC based Remote Monitoring and Control System (RMS) to be run on the computer of Integrated Station Management System (ISMS) system in the Station Control Room being provided by Designated ISMS Contractor. The RMS shall provide continuous monitoring and controlling of the Escalators.	Kindly clarify details of scope of RMS System in ISMS Contractor for both Lifts and Escalators. The specification in the Tender is confusing and leading to litigations during Contract Execution. Please clarify if ISMS contractor will provide the RMS software to run on ISMS PC and if Lift and Escalator contractors will only provide interface signals, Whether Lift RMS and Escalator RMS are separate and independent (in both hardware and software parts) or both are in one RMS System with integrated Software. Without above clarifications it is impossible to consider tender submissions.	No change in tender condition is envisaged.
294	Vol 3	Part I	7.10.4	95	The following monitoring function shall be provided for RMS. j- Start override indicator The following control function shall be provided for RMS: (a) Remote stop control (b) Override control switches to prevent unauthorised starting of the Escalator for both normal run and inspection run locally. This shall only function when the Escalator has been stopped. A by-pass (Local/Remote) switch with illuminated indication which shall by-pass this function shall be provided in the controller. (c) Remote re-setting of trip (fault) signal (b) Override control switches to prevent unauthorised starting of the Escalator for both normal run and inspection run locally. This shall only function when the Escalator has been stopped. A by-pass (Local/Remote) switch with illuminated indication which shall by-pass this function shall be provided in the controller. (d) Remote starting comprising of option to select Up / Down direction of movement for Escalators. (e) Upon receiving a fire alarm signal all escalators going against the direction of egress at that time will stop. All escalators going in the direction of egress will continue to operate.	We suggest the client shall cancel the requirement of remote control for the escalator in the tender. It is hard to see in the monitor room if the escalator is transporting the passengers even the video camera installed also has the blind angle. This function is very dangerous and it may cause incident. Please be responsible for all the incidents happening by client if remote control function is recommended by tender requirement.	No change in tender condition is envisaged.
295	Vol 3	Part I	7.13.12.	100	The Escalator controller shall be housed in an IP55 spray painted, 1.5mm thick galvanized sheet (with minimum 85 μ m thick Galvanizing)	controller cabin material replaced by Stainless steel 304 which performance index is better than galvanized sheet	No change in tender condition is envisaged.
296	Vol 3	Part I	7.22	103	Maintenance Barrier A barrier shall be provided for both Escalator landings, which shall prevent people for entering the pits and Escalator. The barrier shall be painted yellow, made from aluminum and be of minimum height 900mm.	The barriers shall one set for each station which is sufficient for O&M.	No change in tender condition is envisaged.
297	Vol 3	Part I	10.1.1	119	(viii) Step and chain rollers-840 (ix) Handrail-740	Please confirm which value is correct?	Please refer to Addendum No 1 S.No 30

CLARIFICATIONS TO PRE - BID QUERIES

KOLKATA METRO RAIL CORPORATION LIMITED

Contract-UG/EL-L & E (R) – Detailed Design, Detailed Engineering, Prototype, Manufacture, Supply, Delivery and Storage at Site, Installation, Testing And Commissioning (including integrated testing & commissioning), Training of Personnel, Demonstration of Performance of System/ Equipment & Annual Maintenance Contract of Lift & Escalator System (L & E) of Two Underground and Six Elevated Stations of Kolkata Metro East-West Line Project (Phase1)

KMRCL / CONTRACT – UG/EL-L & E (R)

Sr. No.	VOL.	SECTION	CLAUSE No. / Sub Head / BOQ Sr. No.	PAGE No.	DESCRIPTION AS PER CONTRACT	QUERY	CLARIFICATION
298	Vol 3	Part I	13.4	157	Harmonic distortion The total harmonic distortion (THD) caused by the elevator equipment to the supply mains at the power supply input terminals of the elevator shall not exceed the following values when the elevator is travelling up at full load and rated speed: Rated load Current (IL) THD (%) 200A ≤ IL < 400 A < 12.0 20A ≤ IL < 200A < 15.0 IL < 20A < 20.0	This chapter 13 seems fit for both elevators and escalators. In this clause, the tender only requires the elevator to meet the THD requirement, we need the client to confirm if the escalators also need to meet the THD requirement as tender mentioned.	This clause relates to elevator.
299	Vol 3	Part I	14	159-190	MATERIALS AND WORKMANSHIP REQUIREMENTS	Due to there is almost no supplier manufacture his products follow British Standard in Chinese market, the materials and workmanship will follow related Chinese standard or international standard	No change in tender condition is envisaged. Please refer to the Clauses 1.5 and 14 including the sub-clauses for better understanding.
300	Vol 3	Part I	9.4	118	Interface with Integrated Station Management System (SCADA) 9.4.3 The equipment on the side of the interface receiving the information shall provide the power supply and all infrastructure support for operation/control/monitoring requirements and the sending side shall provide Ethernet or the serial data link. The physical characteristics and data transmission protocol proposed shall conform to an internationally recognized publicly available standard e.g. RS485. It will be the responsibility of the contractor to interface and co-ordinate to mutually finalize the type of interface, data transmission speed etc. with the Integrated Station Management System and Designated contractor. The interface shall have the following features: i) The Contractor shall provide isolated 'voltage – free' dry contacts, each rated at nominal 24V 1A dc, for the SCADA transfer points. Each point shall be terminated at the interface board through an individually shielded twisted-pair screen wire. The 24V dc power supply for relay contact integration and conversion to serial data link shall be provided by the ISMS / Contractor. ii) Common return wires shall not be used.	Clause 9.4.3 says serial data link, but as per sub clause (i) 1. says voltage free contacts. Contradiction to be corrected. 2. Interface location is not specified. (MAP panel of each lift or SCR) MODBUS RTU or MODBUS TCP/IP is better option.	No change in tender condition is envisaged.
301	Vol 3	Part I	APPENDIX A	221	1. Interface Specification L&E Contractor and Civil as well as E&M Contractors. LE Contactor responsibilities Provide data cable for control from station control room including requirements of BMS and Integrated Station Management System contractor.	Cable up to SCR in L&E contractor scope	No change in tender condition is envisaged.
302	Vol 3	Part I	APPENDIX A	224	3. Interface Specification L&E Contractor and Integrated Station Management System (ISMS) Contractors. L&E responsibilities Design ; - PC based RMS software to jointly operate the functions of control & signaling for lifts in the SCR on the PC being provided by ISMS contractor.	Main clause 6.20 describe that the RMS will be provided by designated contractor. Contradiction to be corrected It is better the ISMS to develop the software to run on their PC. L&E contractor scope only to give signal. This is an Error continuing in all Metro Contracts. Practically very difficult to execute.	Please refer to Addendum No 1 S.No 31
303	Vol 6	Price Schedule	H	3	Mode of Payment In case of JV/consortium payments shall be made in the name of the same JV/consortium.	In case of Consortium, it is not possible to accept Payments in the name of Consortium. Hence the payments shall be made in the name of Lead Member or individual members as per requirement of Tenderers	Please refer clause A3.2 last para and clause A5.2 (a) of Volume 1 which states that the JV/consortium shall be duly registered in India before issuing the Letter of Acceptance. No change in tender condition is envisaged.
304	Vol 6	Price Schedule	Appendix Ax.x Bx.x		Schedule of prices in to sub items of Lifts and Escalators	Pricing schedule is very complicated and will lead to computational errors, execution litigations etc. This type of price schedule is never followed. We request for simple price schedule as used in other Metro projects - which is practical to follow in tendering and execution of the contracts	No change in tender condition is envisaged.

CLARIFICATIONS TO PRE - BID QUERIES

KOLKATA METRO RAIL CORPORATION LIMITED

Contract-UG/EL-L & E (R) – Detailed Design, Detailed Engineering, Prototype, Manufacture, Supply, Delivery and Storage at Site, Installation, Testing And Commissioning (including integrated testing & commissioning), Training of Personnel, Demonstration of Performance of System/ Equipment & Annual Maintenance Contract of Lift & Escalator System (L & E) of Two Underground and Six Elevated Stations of Kolkata Metro East-West Line Project (Phase1)

KMRCL / CONTRACT – UG/EL-L & E (R)

Sr. No.	VOL.	SECTION	CLAUSE No. / Sub Head / BOQ Sr. No.	PAGE No.	DESCRIPTION AS PER CONTRACT	QUERY	CLARIFICATION
305	Vol 6	Price Schedule	Appendix Ax.x Bx.x		Schedule of prices in to sub items of Lifts and Escalators	It is not possible to bifurcate prices of Lifts and Escalators as scheduled. Lifts and Escalators are delivered as single units, Lifts are delivered as per bill of materials but the prices will be provided as unit rates for supply and unit rates for installation, testing and commissioning. Taxes are also paid as per unit rates for whole item. Bifurcation of the Lifts and Escalators in to separate work items will complicate Execution, Delivery, Invoicing and Tax and Duty payments. Request for revision of Price Schedule as per other Metro, Airport, Railways and CPWD norms.	No change in tender condition is envisaged.
306	Vol 6	Price Schedule	Appendix Ax.x Bx.x		Travel heights and vertical rise of Lifts and Escalators	for pricing purpose all Lifts and Escalators shall be considered with vertical rise/travel as whole Meters X +/- 0.5 M. Accordingly (X + 0.5) M and below will be considered as X and above (X + 0.5) will be considered as (X + 1). It is followed in all Metros. Request for revision of the Price Schedule accordingly	No change in tender condition is envisaged.
307	Vol 6	Price Schedule	Appendix C		<p>Details and Taxes and Duties Page 1 of 302. b) All other Custom related duties on assemblies/Components that go in the manufacture of Lift and Escalator equipment if any, along with rates.</p> <p>Notes: (a) Basic Custom duty on assemblies/components that go in the manufacture of L&E equipment, if any along with rate. (b) All other Custom related duties on assemblies/components that go in the manufacture of L&E equipment, if any along with rates. (k) The Tenderer shall provide details with reference to the respective rules when completing Column (7). 3. The rates inserted in this table shall only be considered for payment on actual basis unless otherwise stated elsewhere in the document and it shall be based on the submission of the original documentation.. 4. All Taxes / Levies should be in INR only and are subject to ceiling of the amounts indicated in the above Table</p>	Details of Taxes and Duties will be provided on final supplies only. it is not possible to include Duties and Taxes on components and assemblies of Lifts and Escalators or any other bifurcation. It can not be supported with Document proof. Please revise the Tax Schedule and the Notes to it.	No change in tender condition is envisaged.
308	Vol 6	Price Schedule	Appendix G3		Consumable Spares, Unit Exchange Spares, Mandatory Spares	DLP & AMC is part of the Tender Scope with all necessary spares for maintenance of Escalators up to 10 years. Additional Contract spares will be wasted as the same can not be used by Contractors during DLP / AMC. Repletion of these spares in contract supply scope can be avoided.	No change in tender condition is envisaged.
309	Vol 6	Price Schedule	Appendix G4		DLP Spares	DLP Spares are included in the DLP Maintenance in Contractors scope. Additional list of DLP spares is leading to confusion and redundancy. Request for deletion of the List	No change in tender condition is envisaged.
310	Vol 6	Price Schedule	Appendix G5, G6, G7		Ten Year Spares, Special Tools and Tackles, Ten year AMC spares	DLP & AMC is part of the Tender Scope for maintenance of Escalators up to 10 years beyond DLP. Additional Spares, Tools list is redundant and will be wasted as the same can not be operated during DLP / AMC. Repletion of these Spares and Tools List in Tender pricing schedules shall be avoided.	No change in tender condition is envisaged.