MUMBAI METRO RAIL CORPORATION LIMITED



DETAILED TENDER DOCUMENT

Supply, Installation, Testing and Commissioning of 12
nos. of Lifts/Elevators (6nos. of 612Kg / 9Person, and
6nos. of 408Kg/6 Person) including 2 years AMC
of
work at Rehabilitation site of Mumbai Metro Rail
WorkWorkCorporation Limited at Building No. 10 A to F Wing (2
lifts in each wing) situated in HDIL Premier
Compound, Kurla, Mumbai, Pin code:- 400070

2019

NIT Ref. No.: MMRC/Planning/NIT/LiftsKurla/19/07

Advisor (Coordination)

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	मुंबई मेट्रो रेल कॉपोरिशन लिमिटेड (भारत सरकार आणि महाराष्ट्र शासन ह्यांचा संयुक्त उपक्रम) मारत, प्लॉट क्र. आर-१३, 'ई' ब्लॉक, बांद्रे-कुर्ला संकुल, बांद्रे (पू), मुंबई - ४०००५९
MMRC	दूरांचनी: +९१-२२-२६३८४६९१ ईमेल: anil.kamble@mmrcl.com संकेतस्थळ: www.mmrcl.com
No./PRO/MMF	RC/40
	निविदा आमंत्रण सूचना
(समन्वय), खाली सार्वजनिक बांधक	ालिका मुंबई मेट्रो रेल कॉर्पोरेशन लि. यांच्या वतीने, सल्लागा ल कामासाठी सीपीडब्ल्यूडी, एम.ई.एस., रेल्वे, एम.सी.जी.एम म विभाग आणि इतर शासकीय विभागांमार्फत योग्य वर्गामध त्र कंत्राटदारांकडून ऑनलाईन निविदा आमंत्रित करत आहेत:
एनआईटी क्र.	: MMRC/Planning/NIT/LiftsKurla/19/07
कामाचे नाव	मुंबई मेट्रो रेल कॉर्पोरेशन लिमिटेडच्या पुनर्वसन इमार क्र. १० एचडीआईएल प्रीमियर कमपाउंड, कुर्ला, मुंबई पिन ४०००७० येथे १२ पेसैन्जेर लिफ्ट/इलिव्हेटर (६१२ किलोग्रॅम/९ व्यक्तीकरिता – ६ लिफ्ट व ४०० किलोग्रॅम /६ व्यक्तीकरिता – ६ लिफ्ट) चे पुरवठा स्थापना, चाचणी आणि कमिशिनिंग सोबत २ वर्षाकरित वार्षिक देखभाल करारे करण्याबाबत.
अंदाजी किंमत	: ₹२,७३,००,०००/-
बयाणा रक्तम	: ₹२,७३,०००/-
कार्य पूर्ण करण्याचे	ो अवधि: १० महीने (पावसाळ्यासहित)
निविदा	१२/०६/२०१९ पासून ऑनलाईन उपलब्ध होईल.
एमएमआरसी ऑपि	बठैक दिनांक १८/०६/२०१९ दुपारी ३:०० वाजता फ्स, बीकेसी, बांद्रा (पूर्व), मुंबई येथे आयोजित केली जाईल
	ण्याचा अंतिम दिनांक ११/०७/२०१९ दुपारी ३ वाजे पर्यंत.
शुध्दीपत्रक	/परिशिष्ट (जर असल्यास) फक्त खालील वेबसाइटवर प्रकाशित केले जाईल.
	निविदा प्रपत्र आणि इतर तपशील वेबसाइट
	tenderwizard.com/MMRC वरून प्राप्त होईल
प्रेस नोटीस	www.mmrcl.com या वेबससाईट वर उपलब्ध आहे

Advisor (Coordination)

3

NIT (Part I) Technical Bid

Advisor (Coordination)

CHAPTER 1

INFORMATION AND INSTRUCTIONS FOR BIDDERS

Advisor (Coordination)

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1. INSTRUCTIONS TO BIDDERS FORMING PART OF BID DOCUMENT

The Advisor (Coordination), MMRCL invites online the bids from firms/contractors of repute for the following work:

NIT No.	
Name of Work and Location	Supply, Installation, Testing and Commissioning of 12 nos. of Lifts/Elevators (6nos. of 612Kg / 9Person, and 6nos. of 408Kg/6 Person) including 2 years AMC work at Rehabilitation site of Mumbai Metro Rail Corporation Limited at Building No. 10 A to F Wing (2 lifts in each wing) situated in HDIL Premier Compound, Kurla, Mumbai, Pincode:- 400070
Estimated Cost put to bid	Rs.2,73,00,000/-
Earnest Money	Rs.2,73,000/-
Period of Completion	300 Days (including monsoon)
Tender Document Fee	₹5,000/- + ₹900/- (GST @ 18%) = ₹5,900/-
Last date & time of submission of bid	11/07/2019 till 3.00 PM
Time and date of opening of technical bid	11/07/2019 after 4.00 PM

- 1. Contractors who fulfil the following requirements shall be eligible to apply. Joint ventures are not accepted.
 - Enlistment in CPWD/PWD/or other govt. departments.
 - Should have satisfactorily completed the works as mentioned below during the last Seven years ending previous day of last date of submission of bids.
 - i. Three similar works each costing not less than Rs.1,09,20,000/-, or two similar works each costing not less than Rs.1,36,50,000/- one similar work costing not less than Rs.2,18,40,000/-.

Similar work shall mean works of Supply Installation Testing and Commissioning of lifts for 6 and above storey buildings. The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum; calculated from the date of completion to last date of receipt of applications for bids.

- Should have had average annual financial turnover of Rs. 81,90,000/- of similar works during the last three financial years ending 31st March 2018. (Scanned copy of Certificate from CA to be uploaded)
- Should not have incurred any loss during the last three years ending 31st March 2018.
- Should have a solvency of Rs.1,09,20,000/- (Scanned copy of original solvency to be uploaded) for the current financial year.

- The bidder must have valid ISO 9001, ISO 14001 and OHSAS 18001 or the bidder must have IMS certification. This certificate(s) must be valid on the date of opening of tender. As proof of validity, the bidder must attach a copy of the certificate issued by the certifying agency and also the last surveillance audit report, if applicable. Surveillance Audit and Recertification, if due during the currency of the contract, will have to be ensured by the contractor.
- 2. The intending bidder must read the terms and conditions of NIT carefully. He should only submit his bid if he considers himself eligible and he is in possession of all the documents required.
- 3. Information and Instructions for bidders posted on website shall form part of bid document.
- 4. The bid document consisting of specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website www.tenderwizard.com/MMRC or www.mmrcl.com free of cost.
- 5. Those contractors not registered on the website mentioned above, are required to get registered beforehand. If needed they can be imparted training on online bidding process as per details available on the website.
- 6. The intending bidder must have valid class-III digital signature to submit the bid.
- 7. On opening date, the contractor can login and see the bid opening process. After opening of bids, he will receive the competitor bid sheets.
- 8. Contractor can upload documents in the form of JPG format and PDF format.
- 9. Certificate of Financial Turn Over: At the time of submission of bid contractor may upload Affidavit/Certificate from CA mentioning Financial Turnover of last 3 years or for the period as specified in the bid document and further details if required may be asked from the contractor after opening of technical bids. There is no need to upload entire voluminous balance sheet.
- 10. The Technical bid shall be opened first on due date and time as mentioned above. The time and date of opening of price bid of contractors qualifying the technical bid shall be communicated to them at a later date.
- 11. Pre- Bid conference shall be held in the MMRC Office on 18/06/2019 at 3.00 PM to clear the doubt of intending bidders, if any.
- 12. The department reserves the right to reject any prospective application without assigning any reason and to restrict the list of qualified contractors to any number deemed suitable by it, if too many bids are received satisfying the laid down criterion.

S. No.	Submission Required
1	Receipt of Tender Document Fee paid online
2	Receipt of online payment against EMD (or MSME/NSIC Certificate if exempted from payment of EMD)
3	Enlistment Certificate/order
4	Certificates of Work Experience duly certified by competent authority
5	Certificate of completion of work clearly indicating date of completion of work, nature of work & that the work is completed satisfactorily
6	List of Works Presently in Hand
7	Bid Capacity
8	Certificate of Financial Turnover from Chartered Accountant along with Profit & Loss statement for last 3 financial years
9	Bank Solvency Certificate
10	Affidavit as per provisions of clause 1.2.1 of NIT
11	Certificate of Registration for Goods & Services Tax.
12	ISO Certifications (ISO 9001, 14001, 18001)
13	EPFO, ESIC, BOCW, Labour Licenses
14	Proformas (I to V)
15	Undertaking that the firm/institution is not blacklisted by any Government or its agencies including Central/State Level Public Enterprises
16	Authority Letter clearly mentioning details of authorized representative
17	Letter declaring offer to be unconditional, confirming its validity for 90 days
18	Any other Document as specified in the press notice

Minimum eligibility criteria for qualifying for opening of part II of tender Price Bid:

GUIDELINES FOR E-TENDERING

"All documents related to this bid document are available on the MMRC e-tendering portal www.tenderwizard.com/MMRC, without registration. All bidders must note that this being E-tender, bids received only through online on E-tendering portal www.tenderwizard.com/MMRC shall be considered as an offer. Any bid submitted in paper form will not be received and opened and shall be summarily rejected. To participate applicant / bidders is required to register and bid using following steps.

Step 1: Registration of Applicants/Bidders

- Go to website: www.tenderwizard.com/MMRC.
- Click on "Register Me" button.
- Fill in their desired User ID, Company Details by their own.
- Vendor in possession of DSC Class III may insert Digital Signature Certificate token in computer's USB drive, and click on "Update Digital Signing Certificate Serial No. From USB token". A new PKI based "Signer Certificate" window will open. Browse your Signer Certificate, enter token password and click on Register.
- For those without DSC, it is mandatory to apply for the DSC.
- Do not enter special character(s) in any field except "Email Address", "Website (URL)" and "Alternative Email Address".
- Then click on "Create profile".
- You will be forwarded to "Document Upload" screen. Upload documents as specified in previous page. After uploading is completed, click on "Finish Upload".
- You will be forwarded to Payment screen. Make registration payment.
- The User ID and system generated password with payment confirmation will appear on the next screen which can be printed for future reference.
- For enabling the User ID, forward the registration acknowledgement to twhelpdesk680@gmail.com and twhelpdesk753@gmail.com along with a Request Letter.
- Download the format for Request letter from Home page (available under Click to view Latest Circulars / Format). Letter should be duly signed with rubber stamp.

Step 2: Apply digital signature (known as "digital signature certificate"): following registration a token (data card) will be issued to the registered company.

- Applying Class III Digital Signature Certificate: (token issued upon registration)
- The applicant/bidder is required to apply for a class III Digital Signature Certificate (DSC). Digital Signature Certificate which is obtainable from either the authorized agencies of CCA (Controller of Certifying Authorities in India www.cca.gov.in).
- Procedure for submission of E-tender by bidder:
- Interested bidders who wish to participate should visit website http://www.tenderwizard.com/MMRC which is the ONLY website for bidding their offer. Further, the procedure is as follows:
- Register your company in website www.tenderwizard.com/MMRC for obtaining a Login ID and Password (after paying necessary registration charges). This is one time annual payment and applicable for bidding other tenders also.

- Using the login ID, password and digital signature, enter the tender portal to purchase the tender document.
- Pay processing fees and tender cost through e-payment gateway.
- With the payment of processing fee and tender cost, the bidder can download the 'Technical bid' (Microsoft Excel file 'Technicalbid.xls') and 'price bid' (Microsoft Excel file 'Financialbid.xls') by clicking on the link "Show Form".
- Download the 'Technical bid' and 'price bid' and save them without changing the file name. Fill up your quotations, save them. Then upload the 'Technical bid' and 'price bid' in appropriate links.
- Attach supporting documents first in "Document Library". Then attach them by selecting in particular tender.
- On Submission of tender a system generated "Acknowledgement Copy" of tender submission will be received.
- Bidder can change quoted rates any time before closing date & time.
- Bidder must submit the offer before the online closing date & time. The website will automatically stop accepting the offer after online closing date and time.
- Bidder manual & system requirement is available on website www.tenderwizard.com/MMRC for necessary help.
- All Bids must be uploaded on-line on E-Tendering portal. www.tenderwizard.com/MMRC before the time and date specified in the prequalification Data sheet / Bid Data sheet.
- Being e-tenders the bidders will not be able to upload bids after the designated time of bid submission.
- The Applicants/Bidders are advised to regularly visit the e-tendering portal www.tenderwizard.com/MMRC for updates.
- N.B: Bidders are requested to refer to the Vendor's manual by downloading the Vendor's Manual by visiting www.tenderwizard.com/MMRC and clicking on "Help Manuals".
- Bidder may contact ITI representative at (7980042472/8356932487) for any assistance. Contact Timings-India 09.00 Hrs. 20.00Hrs (GMT +5.30)

Bidder/ Agencies are advised to study this bid document carefully before submitting their proposals in response to the NIT. Submission of a proposal in response to this notice shall be deemed to have been done after careful study and examination of this document with full understanding of its terms, conditions and implications. Prospective bidders are advised to check the minimum qualification criteria before participating in the bidding process. This Bid Document is not transferable and the name of the bidder who purchases and submits the same bid shall be unchanged."

<u>CHAPTER 2</u>

NOTICE INVITING TENDER

Contractor

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Advisor (Coordination)

2. NOTICE INVITING TENDER

1	Item rate tenders are invited from approved and eligible contractors having registration/license in appropriate class of CPWD, M.E.S., BSNL, Railway, MCGM, State P.W.D. and other State Govt.'s Department dealing with
	lifts/electrical/mechanical, for the work of <u>"SITC of 6 Nos. 6 Passenger and 6</u>
	Nos. 10 Passenger Lifts at MMRCL Rehabilitation site at Building No. 10,
	(Wing A to F) HDIL Premier Compound, Kurla, Mumbai - 400070" The
	enlistment of the contractors should be valid on the last date of submission of
	tenders. In case the last date of submission of tender is extended, the enlistment of
	contractor should be valid on the original date of submission of tenders.
1.1	The work is estimated to cost Rs.2,73,00,000/ This estimate, however, is given
	merely as a rough guide.
1.2	Intending tenderer is eligible to submit the bid provided he has definite proof from
	the appropriate authority, which shall be to the satisfaction of the competent
	authority, of having satisfactorily completed similar works of magnitude specified
	below: -
1.2.1	Three similar works each of value not less than Rs. 1,09,20,000.00
	OR
	Two similar work each of value not less than Rs. 1,36,50,000.00
	OR One similar work of value not less than Bs 2 19 40 000 00
	One similar work of value not less than Rs. 2,18,40,000.00 in last 7 years ending last day of the month previous to the one in which
	the tenders are invited.
	To become eligible, the tenderer shall have to furnish an affidavit as under: -
	I/We undertake and confirm that eligible similar works(s) has/have not been got
	executed through another contractor on back to back basis. Further that, if such a
	violation comes to the notice of Department, then I/we shall be debarred for
	tendering in MMRCL in future forever. Also, if such a violation comes to the notice
	of Department before date of start of work, the Engineer-in-Charge shall be free to
	forfeit the entire amount of Earnest Money Deposit/Performance Guarantee.
2	(Scanned copy to be uploaded at the time of submission of bid).
2	Agreement shall be drawn with the successful tenderer on prescribed Form.
	Tenderer shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.
3	The time allowed for carrying out the work will be 300 days from the date of start
5	or from the first date of handing over of the site, whichever is later, in accordance
	with the phasing, if any, indicated in the tender documents.
4	The site for the work is available. However, all the six wings of the building are
	fully occupied and the contractor shall be deemed to be have visited the site.
5	The tender document consisting of specifications, the schedule of quantities of
	various types of items to be executed and the set of terms and conditions of the
	contract to be complied with and other necessary documents.
6	After submission of the bid the contractor can re-submit revised bid any number
	of times but before last time and date of submission of bid as notified.

7	While submitting the revised bid, contractor can revise the rate any number of times (he need not reenter rate of all the items) but before last time and date of
	submission of bid as notified.
8	Earnest Money shall be paid online on the e-tender portal and the receipt generated through payment gateway shall be scanned and uploaded to the e- tendering website within the period of tender submission. Copy of Enlistment Order and certificate of work experience and other documents as specified in the tender document shall be scanned and uploaded to the e- Tendering website within the period of bid submission. Online bid documents submitted by intending bidders shall be opened only of those bidders, whose EMD receipt and other documents scanned and uploaded are found in order.
0	The bid submitted shall be opened after 04:00 PM on 11/07/2019
9	The bid submitted shall become invalid if:
	 (i) The bidder is found ineligible. (ii) The bidder does not upload all the documents (including GST registration) as stipulated in the bid document including the copy of receipt for deposition of original EMD.
	(iii) If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted physically by the lowest bidder in the office of tender opening authority.
	(iv) The financial offer of the bidder is mentioned anywhere in the technical bid.
10	The contractor whose bid is accepted will be required to furnish performance guarantee of 5% (Five Percent) of the bid amount within the period indicated in LOA. This guarantee shall be in the form Demand Draft of any Scheduled Bank/ Fixed Deposit Receipts of any Scheduled Bank/Bank Guarantee of any scheduled Bank. In case the contractor fails to deposit the said performance guarantee within the period as indicated in LOA, including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor. The Contractor whose bid is accepted will also be required to furnish either copy of applicable licenses / registrations or proof of applying for obtaining labour licenses, registration with EPFO, ESIC and BOCW Welfare Board including provident Fund code No. if applicable and also ensure the compliance of aforesaid provisions by the sub-contractors, if any engaged by the contractor for the said work and Programme Chart (Time and Progress).
11	Description of Work: Supply, Installation, Testing and Commissioning of 12 nos. of Lifts/Elevators (6nos. of 612Kg / 9Person, and 6nos. of 408Kg/6 Person) including 2 years AMC work at Rehabilitation site of Mumbai Metro Rail Corporation Limited at Building No. 10 A to F Wing (2 lifts in each wing) situated in HDIL Premier Compound, Kurla, Mumbai, Pin code:- 400070. This also includes the buy-back of the existing arrangements of lifts. Intending Tenderers are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their

Advisor (Coordination)

	tender. A tenderer shall be deemed to have full knowledge of the site whether he
12	inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The tenderer shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a tender by a tenderer implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work. The competent authority on behalf MD, MMRC does not bind itself to accept the
	lowest or any other tender and reserves to itself the authority to reject any or all the tenders received without the assignment of any reason. All tenders in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the tenderer shall be summarily rejected.
13	Canvassing whether directly or indirectly, in connection with tenderers is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.
14	The competent authority on behalf of MD, MMRC reserves to himself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rate quoted.
15	The contractor shall not be permitted to tender for works in the MMRCL responsible for award and execution of contracts, in which his near relative is posted a Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any gazette officer in the MMRCL or in the Ministry of Urban Development. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Department.
16	No Engineer of gazetted rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government service, without the previous permission of the Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India as aforesaid before submission of the tender or engagement in the contractor's service.
17	The bid for the works shall remain open for acceptance for a period of Ninety (90) days from the date of opening of bids. If any bidder withdraws his bid before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the bid which are not acceptable to the department, then the Government shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the bidders shall not be allowed to participate in the rebidding process of the work.

18	 This notice inviting Tender shall form a part of the contract document. The successful tenderer/contractor, on acceptance of his tender by the Accepting Authority shall within 15 days from the stipulated date of start of the work, sign the contract consisting of: - a) The Notice Inviting Tender, all the documents including additional conditions, specifications and drawings, if any, forming part of the tender as uploaded at the time of invitation of tender and the rates quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto. b) Agreement form
19	In case any discrepancy is noticed between the documents as uploaded at the time of submission of the bid, then the bid submitted shall become invalid and the Government shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the tenderer shall not be allowed to participate in the retendering process of the work.

<u>Header Data</u>

NIT Ref. No.	
Name of Organization	MUMBAI METRO RAIL CORPORATION LIMITED.
Subject	Supply, Installation, Testing and Commissioning of
	12 nos. of Lifts/Elevators (6nos. of 612Kg /
	9Person, and 6nos. of 408Kg/6 Person) including
	2 years AMC work at Rehabilitation site of Mumbai
	Metro Rail Corporation Limited at Building No. 10
	A to F Wing (2 lifts in each wing) situated in HDIL
	Premier Compound, Kurla, Mumbai, Pin code:-
	400070. This also included the buy-back of the
	existing arrangements of lifts.
Cost of Tender	2,73,00,000/-
Cost of E-Tender (Estimated Cost)	
Bid Security Deposit/ EMD	Rs. 2,73,000/-
Date of issue and sale of tender	10/06/2019
Last date & time for sale of tender	11/07/2019@15:00hrs
& Receipt of Bid Security Deposit	
Pre-Bid Meeting	18/06/2019 at 3.00 PM
Opening of Technical Bid	11/07/2019 after 4.00 PM
Opening of Price Bid	Will be communicated later
	Mumbai Metro Rail Corporation,
	NaMTTRI Bldg., Plot No. R-13, E Block,
	Bandra Kurla Complex,
Address for communication	Bandra East, Mumbai – 400 051
Venue for opening of bid	

CHAPTER 3

FORM OF AGREEMENT

Advisor (Coordination)

3. FORM OF AGREEMENT

CONTRACT AGREEMENT

THIS AGREEMENT is made the _____ day of _____, 2019

BETWEEN

(1) Mumbai Metro Rail Corporation Ltd., a corporation incorporated under the laws of India and having its principal place of business at Mumbai Metro Rail Corporation Ltd. (MMRC) NaMTTRI Building, Plot No. R-13, 'E'- Block, Bandra Kurla Complex, Bandra (East), Mumbai 400051, India (hereinafter called "the Employer"),

AND

(2) (-----name of Contractor-----), a corporation incorporated under the laws of (-----Country of Contractor-----) and having its principal place of business at (---- address of Contractor------) (hereinafter called "the Contractor").

WHEREAS the Employer desires to engage the Contractor to "Supply, Installation, Testing and Commissioning of 12 nos. of Lifts/Elevators (6nos. of 612Kg / 9 Person, and 6nos. of 408Kg/6 Person) including 2 years AMC work at Rehabilitation site of Mumbai Metro Rail Corporation Limited at Building No. 10 A to F Wing (2 lifts in each wing) situated in HDIL Premier Compound, Kurla, Mumbai, Pincode:- 400070" (hereinafter called "the Facilities"), and the Contractor has agreed to such engagement upon and subject to the terms and conditions hereinafter appearing.

NOW IT IS HEREBY AGREED as follows:

Article 1.	1.1 Contract Documents:
Contract	The following documents shall constitute the Contract
Documents	between the Employer and the Contractor, and each shall be
	read and construed as an integral part of the Contract:
	a. This Contract Agreement and the Appendices hereto
	b. The Letter of Acceptance
	c. NIT (Part I) - Technical Bid
	d. NIT (Part II) - Price Bid
	e. Clarifications & Response consequent to Pre-Bid.
	f. Other completed Bidding Forms submitted with the
	Bid
	1.2 Order of Precedence:
	In the event of any ambiguity or conflict between the Contract
	Documents listed above, the order of precedence shall be the
	order in which the Contract Documents are listed in Article
	1.1 (Contract Documents) above.
Article 2.	2.1 Contract Price:
Contract Price	The Employer hereby agrees to pay to the Contractor the
and Terms of	Contract Price in consideration of the performance by the
Payment	Contractor of its obligations hereunder. The Contract Price
	shall be (amount in local currency in words and figures
), or such other sums as may be determined in accordance
	with the terms and conditions of the Contract.
	10

	2.2 Terms of Payment (Clause 3 of Commercial and Additional
	Conditions):
	The Contract Price shall be paid by the Employer to the
	Contractor at the times, in the manner, and in accordance
	with the provisions of Appendix 1 (Terms and Procedures of
Article 3.	Payment) hereto. 3.1 Effective Date:
Effective Date	The Effective Date from which the Time for Completion of the
Lifective Date	Facilities shall be counted is the date when this Contract
	Agreement has been duly executed for and on behalf of the
	Employer and the Contractor. The Employer undertakes to
	ensure that the conditions listed below in this Article 3
	(Effective Date) shall all have been fulfilled:
	a. The Contractor has submitted to the Employer the
	performance guarantee within the period specified in
	LOA
Article 4.	4.1 The address of the Employer for notice purposes, Mumbai
Communications	Metro Rail Corporation Ltd. (MMRC) NaMTTRI Building, Plot
	No. R-13, 'E'-Block, Bandra Kurla Complex, Bandra (East), Mumbai 400051, India.
	4.2 The address of the Contractor for notice purposes is (
	Contractor's address).
Article 5.	5.1 The Appendices listed in the attached List of Appendices shall
Appendices	be deemed to form an integral part of this Contract
	Agreement.
	5.2 Reference in the Contract to any Appendix shall mean the
	Appendices attached hereto, and the Contract shall be read
	and construed accordingly.

IN WITNESS WHEREOF the Employer and the Contractor have caused this Agreement to be duly executed by their duly authorized representatives the day and year first above written.

Signed by, for and on behalf of the Employer _____[Signature] [Title]

in the presence of

Signed by, for and on behalf of the Contractor

[Signature] [Title]

in the presence of

APPENDICES APPENDIX 1 TERMS AND PROCEDURES OF PAYMENT APPENDIX 2 INSURANCE REQUIREMENTS APPENDIX 3 TIME SCHEDULE

Appendix 1 Terms and procedures of Payment

In accordance with the provisions of Commercial and Additional Conditions Clause 3 (Terms of Payment), the Employer shall pay the Contractor in the following manner and at the following times. Applications for payment in respect of part deliveries may be made by the Contractor as work proceeds.

TERMS OF PAYMENT

Schedule No. 1. Plant and Equipment Supplied from within the Country

In respect of plant and equipment supplied from within the Employer's country, the following payments shall be made:

Eighty percent (80%) of the total or pro rata for (Delivery at MMRCL Site) amount, upon delivery at MMRCL Site within forty-five (45) days after receipt of invoice and documents as instructed by Engineer-in-Charge including but not limited to railway consignment note, road consignment note, insurance certificates, proof of delivery at MMRCL site and required inspection certificates.

Ten percent (10%) of the total amount of total price after completion of installation in all respect, within forty-five (45) days after receipt of invoice.

Ten percent (10%) of the total amount of total price after testing, commissioning trial run, obtaining all necessary approvals and licenses and certificates and handing over to MMRC for beneficial use, within forty-five (45) days after receipt of invoice.

The Employer reserves the right to carry out a post payment audit and/or technical examination of the Facilities, and the Final account, including all supporting vouchers, abstracts, etc., and to make a claim on the Contractor for the refund of any excess amount paid to him, if as a result of such examination, any over-payment to him is discovered to have been made in respect of any work done or alleged to have been done by the Contractor, under the Contract. If any under-payment is discovered, the Employer shall pay the same to the Contractor. Such payments or recoveries, however, shall not be subject to any interest.

Appendix 2 Insurance Requirements

1. Insurances to be Taken Out by the Contractor

In accordance with the provisions of Commercial and Additional Conditions Clause 4, 20 and 24 the Contractor shall at its expense take out and maintain in effect, or cause to be taken out and maintained in effect, during the performance of the Contract, the insurances set forth below in the sums and with the deductibles and other conditions specified. The identity of the insurers and the form of the policies shall be subject to the approval of the Employer, such approval not to be unreasonably withheld.

a. <u>Cargo Insurance</u>

Covering loss or damage occurring, while in transit from the supplier's or manufacturer's works or stores until arrival at the site, to the facilities (including spare parts therefore) and to the construction equipment to be provided by the contractor or its subcontractors.

The Contractor shall insure the plants, Facilities, all material and contractor's document for not less than the full replacement cost including costs of demolition, removal and professional fee and profit.

b. Installation All Risks Insurance

Covering physical loss or damage to the Facilities at the Site, occurring prior to Operational Acceptance of the Facilities, with an extended maintenance coverage for the Contractor's liability in respect of any loss or damage occurring during the defect liability period while the Contractor is on the Site for the purpose of performing its obligations during the defect liability period.

The Contractor shall insure the Works, plant, Material and Contractor's document including fire, theft, accidental damages and other natural calamities for not less than the full reinstatement cost including costs of demolition, removal and professional fee and profit.

c. Third Party Liability Insurance

Covering bodily injury or death suffered by third parties (including the Employer's Personnel) and loss of or damage to property (including the Employer's property and any parts of the Facilities that have been accepted by the Employer) occurring in connection with the supply and installation of the Facilities.

The Insurance shall cover for 38 Lakhs for any one incident and for unlimited number of incidents.

d. Automobile Liability Insurance

Covering use of all vehicles used by the Contractor or its Subcontractors (whether or not owned by them) in connection with the supply and installation of the Facilities. Comprehensive insurance in accordance with statutory requirements. Automobile Liability should confirm to requirements of Indian Motor Vehicles Act.

e. Workers' Compensation

In accordance with the statutory requirements applicable in any country where the Facilities or any part thereof is executed. Each worker shall be insured as per "The Workmen's Compensation Act, 1923" as and for not less than ₹8 Lakhs.

f. Employer's Liability

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In accordance with the statutory requirements applicable in any country where the Facilities or any part thereof is executed. Each worker shall be insured as per "The Workmen's Compensation Act, 1923" as and for not less than ₹8 Lakhs.

g. Professional indemnity

The Contractor shall provide insurance cover for not less than 3% (three percent) of the Contract sum. The cover is for the financial consequences of professional negligence, following a breach of professional duty by way of neglect, error or omission, additionally, cover is provided in respect of any legal and other costs and expenses incurred, occurring in connection with the design and construction of the temporary and permanent works of the Facilities.

The Employer shall be named as co-insured under all insurance policies taken out by the Contractor, except for the Workers' Compensation and Employer's Liability Insurances, and the Contractor's Subcontractors shall be named as co-insured under all insurance policies taken out by the Contractor, except for the Cargo, Workers' Compensation and Employer's Liability Insurances. All insurer's rights of subrogation against such co-insured for losses or claims arising out of the performance of the Contract shall be waived under such policies.

2. Insurances - To be taken out by the Employer

The Employer will not take out any insurance during the performance of the Contract and will not pay any excesses.

The Contractor shall at its own expense take out, including paying any excesses for any claim and maintain in effect during the performance and including the defect liability period of the Contract all insurances as stated in the Specification and Contract Agreement.

Appendix 3 Time Schedule

[The contractor shall be required to submit with its Bid a detailed program, normally in the form of a bar chart, showing how and the order in which it intends to perform the Contract and showing the key events requiring action or decision by the Employer. The attached schedule shall adhere to the Time(s) for Completion given in the Bid Data Sheet/ Particular Conditions. The Time Schedule submitted by the selected Contractor and amended as necessary prior to award of Contract will be included as Appendix 3]

<u>CHAPTER 4</u>

GENERAL CONDITIONS OF CONTRACT

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General Conditions of Contract

A. General

1. Definitions

1.1 Terms which are defined in the Contract Data are not also defined in the Conditions of Contract but keep their defined meanings. Capital initials are used to identify defined terms.

"MMRC or MMRCL or Corporation" shall means Mumbai Metro Rail Corporation Limited, a 50:50 Joint Venture Company of Government of India and Government of Maharashtra.

The "**Contract**" shall mean the tender and acceptance thereof and the formal agreement if any, executed between the Contractor, and the MMRC together with the documents referred to therein including these conditions and appendices and any special conditions, the specifications, designs, drawings, price schedules, bills of quantities and schedule of rates. All these documents taken together shall be deemed to form one Contract and shall be complementary to one another.

The "Contract Data" defines the documents and other information which comprise the Contract.

The "**Contractor**" shall mean the individual or firm or company whether incorporated or not, whose tender has been accepted by the employer and the legal successor of the individual or firm or company, but not (except with the consent of the Employer) any assignee of such person.

The **"Bidder"** is a person or corporate body who has desired to submit Bid to carry out the Works, including routine maintenance till the tender process is concluded.

The **Contractor's Bid** is the completed bidding document submitted by the Contractor to the Employer.

The "**Contract Sum**" means the sum named in the letter of acceptance including Physical contingencies subject to such addition thereto or deduction there-from as may be made under the provisions hereinafter contained.

Note: The contract sum shall include the following –

- In the case of percentage rate contracts the estimated value of works as mentioned in the tender adjusted by the Contractor's percentage.
- In the case of item rate contracts, the cost of the work arrived at after finalization of the quantities shown in schedule of items / quantities by the item rates quoted by the tenderers for various items and summation of the extended cost of each item.
- In case of lump sum contract, the sum for which tender is accepted.
- Special discount / rebate / trade discount offered by the tenderer if any and accepted by the Corporation.
- Additions or deletions that are accepted after opening of the tenders.

The "Contract Cost" means the Contract Sum plus Price Variation. This cost shall be included in the letter of acceptance.

A **Defect** is any part of the Works not completed in accordance with the Contract.

The **Defects Liability Certificate** is the certificate issued by the Engineer, after the Defect Liability Period has ended and upon correction of Defects by the Contractor.

Drawings means all the drawings, calculations and technical information of a like nature provided by the Engineer to the Contractor under the Contract and all drawings, calculations, samples, patterns, models, operation & maintenance manual and other

technical information of like nature submitted by the Contractor and approved by the Engineer.

The Authority shall mean Mumbai Metro Rail Corporation Limited (MMRC).

The "**Employer**" shall mean the Mumbai Metro Rail Corporation Limited (MMRC) for the time being holding the said office and also its successors.

The **Engineer in-charge** shall mean the Assistant General Manager (Civil) in executive charge of the works and shall include the superior officers of the Engineering department and shall mean and include all the successors in MMRC.

The **Engineer's Representative** shall mean the Deputy Engineer, Jr. Engineer in direct charge of the works and shall include.

The "Engineer" shall mean any officer nominated by MMRCL.

Contractor's Equipment means all appliances and things of whatsoever nature required for the execution and completions of the Works and the remedying of any defects therein but do not include plant material or other things intended to form or forming part of the Permanent Works.

The **Initial Contract Price** is the Contract Price listed in the Employer's Letter of Acceptance. The **Intended Completion Date** is the date on which it is intended that the Contractor shall complete the construction works. The Intended Completion Date is specified in the Contract Data. The Intended Completion Date may be revised only by the Engineer by issuing an extension of time.

Materials are all supplies, including consumables, used by the Contractor for incorporation in the Works and works of routine maintenance.

Plant is any integral part of the Works that shall have a mechanical, electrical, electronic, chemical, or biological function.

Routine Maintenance is the maintenance of activities of the completed structure for two years as specified in the Contract Data.

The "Site" shall mean the land and other places including water bodies more specifically mentioned in the tender, on, under, in or through which the permanent works or temporary works are to be executed and any other lands and places provided by the MMRC for working space or any other purpose as may be specifically designated in the contract as forming part of the site.

Site Investigation Reports are those that were included in the bidding documents and are reports about the surface and subsurface conditions at the Site.

"Specification" shall mean the specification referred to in the tender and any modification thereof or addition or deduction thereto as may from time to time be furnished or approved in writing by the Engineer.

The **Start Date/Commencement Date** is given in the Contract Data. It is the date when the Contractor shall commence execution of the Works. It does not necessarily coincide with any of the Site Possession Dates.

A **Nominated Sub-Contractor** is a person or corporate body who has a Contract with the Contractor to carry out a part of the construction work and/or routine maintenance in the Contract, which includes work on the Site.

Temporary Works are works designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the Works.

Variation means a change to the:-

i. Specification and /or Drawings (if any) which is instructed by the Employer.

ii. Scope in the Contract which is instructed by the Employer.

iii. Price in the Contract which is instructed by the Employer.

The **Works**, as defined in the Contract Data, are what the Contract requires the Contractor to construct, install, maintain, and turn over to the Employer. Routine maintenance is defined separately.

Jurisdiction: In case of any claim, dispute or difference arising in respect of a contract, the cause of action thereof shall be deemed to have arisen in Mumbai and all legal proceedings in respect of any claim, dispute or difference shall be instituted in a competent court in the City of Mumbai only.

2. Interpretation

- 2.1 In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Engineer will provide instructions clarifying queries about these Conditions of Contract.
- 2.2 If sectional completion is specified in the Contract Data, references in the Conditions of Contract to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).
- 2.3 The documents forming the Contract shall be interpreted in the following documents: (1) Agreement, (2) Letter of Acceptance, (3) Notice to Proceed with the Work/Work Order, (4) Contractor's Bid, (5) Contract Data, (6) General Conditions of Contract (7) Specifications, (8) Drawings, (9) Bill of Quantities, and (10) Any other document listed in the Contract Data.

3. Engineer's Decisions

- 3.1 Except where otherwise specifically stated, the Engineer will decide contractual matters between the Employer and the Contractor in the role representing the Employer. However, if the Engineer is required under the rules and regulations and orders of the Employer to obtain prior approval of some other authorities for specific actions, he will so obtain the approval, before communicating his decision to the Contractor.
- 3.2 Except as expressly stated in the Contract, the Engineer shall not have any authority to relieve the Contractor of any of his obligations under the contract.

4. Delegation

- 4.1 The Engineer, with the approval of the Employer, may delegate any of his duties and responsibilities to other person(s), after notifying the Contractor, and may cancel any delegation after notifying the Contractor.
- 5. Communications All certificates, notices or instructions to be given to the Contractor by Employer/ Engineer shall be sent on the address or contact details given by the Contractor of Bid. The address and contact details for communication with the Employer/ Engineer shall be as per the details given in Contract Data. Communications between parties that are referred to in the conditions shall be in writing. The Notice sent by facsimile (fax) or other electronic means shall be effective on confirmation of the transmission. The Notice sent by Registered post or Speed post shall be effective on delivery or at the expiry of the normal delivery period as undertaken by the postal service.
- 6. Subcontracting Not Allowed

7. Other Contractors

7.1 The Contractor shall cooperate and share the Site with other Contractors, public authorities, utilities, and the Employer between the dates given in the Schedule of Other Contractors. The Contractor shall also provide facilities and services for them as described in the Schedule. The Employer may modify the Schedule of Other Contractors and shall notify the Contractor of any such modification.

7.2 The Contractor should take up the works in convenient reaches as decided by the Engineer to ensure there is least hindrance to the smooth flow and safety of traffic including movement of vehicles and equipment of other Contractors till the completion of the Works.

8. Personnel

- 8.1 The Contractor shall employ for the work and routine maintenance the key personnel including technical personnel named in the Contract Data or other personnel approved by the Engineer. The Engineer will approve any proposed replacement of technical personnel only if their relevant qualifications and abilities are substantially equal to those of the personnel stated in the Contract Data.
- 8.2 The Contractor's personnel shall appropriately be qualified, skilled and experienced in their respective trades or occupations. The Engineer shall have authority to remove, or cause to be removed, any person employed on the site or works, who carries out duties incompetently or negligently and persists in any conduct which is prejudicial to safety, health or the protection of the environment.
- 8.3 If the Engineer asks the Contractor to remove a person who is a member of the Contractor's staff or work force, stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the Works in the Contract.
- 8.4 The Contractor shall not employ any retired Gazetted officer who has worked in the Engineering Department of the MMRC /State Government and has either not completed two years after the date of retirement or has not obtained MMRC/State Government's permission to employment with the Contractor.

9. Employer's and Contractor's Risks

9.1 The Employer carries the risks which this Contract states are Employer's risks, and the Contractor carries the risks which this Contract states are Contractor's risks.

10. Employer's Risks

10.1 The Employer is responsible for the excepted risks which are (a) in so far as they directly affect the execution of the Works in the Employer's country, the risks of war, invasion, act of foreign enemies, rebellion, revolution, insurrection or military or usurped power, civil war, riot, commotion or disorder (unless restricted to the Contractor's employees) and contamination from any nuclear fuel or nuclear waste or radioactive toxic explosive, or (b) a cause due solely to the design of the Works, other than the Contractor's design.

11. Contractor's Risks

11.1 All risks of loss of or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract other than the excepted risks, referred to in clause 11.1, are the responsibility of the Contractor.

12. Insurance

12.1 The Contractor at his cost shall provide, in the joint names of the Employer and the Contractor, insurance cover as specified in the Appendix 2 of Chapter 3 of the bid document.

13. Site Investigation Reports

13.1 The Contractor, in preparing the Bid, may rely, at his own risk, on any Site Investigation Reports, supplemented by any other information available to him, before submitting the bid.

14. Queries about the Contract Data

14.1 The Engineer will clarify queries on the Contract Data.

15. Deleted.

16. The Works and Routine Maintenance to be completed by the Intended Completion Date

16.1The Contractor may commence execution of the Works on the Start Date and shall carry out the Works and Routine Maintenance, if specified in the tender, in accordance with the Programme submitted by the Contractor, as updated with the approval of the Engineer, and complete them by the Intended Completion Date.

17. Approval by the Engineer

- 17.1The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Engineer, who is to approve them if they comply with the Specifications and Drawings.
- 17.2The Contractor shall be responsible for design and safety of Temporary Works.
- 17.3The Engineer's approval shall not alter the Contractor's responsibility for design and safety of the Temporary Works.
- 17.4The Contractor shall obtain approval of third parties to the design of the Temporary Works, where required.
- 17.5All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Engineer before their use.

18. Safety

- 18.1The Contractor shall be responsible for the safety of all activities on the Site. He shall comply with all applicable safety requirements and take care of safety of all persons entitled to be on the site and the works. He shall use reasonable efforts to keep the site and the works, both during construction and maintenance, clear of unnecessary obstruction so as to avoid danger to the persons and the users.
 - Workers employed on mixing asphalt materials, cement and lime mortars shall be provided with protective footwear and protective goggles.
 - Stone breaker shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
 - The area should be barricaded or cordoned off by suitable means to avoid mishaps of any kind. Power warning signs should be displayed for the safety of the public whenever cleaning works are undertaken during night or day.
 - The workers engaged for cleaning the manholes/sewers should be properly trained before allowing working in the manhole.

18.2Safety Programs

- Have adequate safety supervision in place to ensure that safety programs set up by the firms/agencies are in compliance with prevalent laws and regulations.
- Review safety programs developed by each of the trade firms, prepare and submit a comprehensive safety program.
- Monitor day to day implementation of safety procedures.

18.3First Aid Facilities

- i. At every work place there shall be provided and maintained, so as to be easily accessible during working hours, first-aid boxes at the rate of not less than one box for 150 contract labour or part thereof ordinarily employed.
- ii. The first-aid box shall be distinctly marked with a red cross on white back ground.
- iii. Adequate arrangements shall be made for immediate recoupment of the equipment when necessary.
- iv. Nothing except the prescribed contents shall be kept in the First-aid box.
- v. The first-aid box shall be kept in charge of a responsible person who shall always be readily available during the working hours of the work place.

vi. A person in charge of the First-aid box shall be a person trained in First-aid treatment, in the work places where the number of contract labour employed is 150 or more.

19. Discoveries

19.1Anything of historical or other interest or of significant value unexpectedly discovered on the Site shall be the property of the Employer. The Contractor shall notify the Engineer of such discoveries and carry out the Engineer's instructions for dealing with them.

20. Possession of the Site

20.1The Employer shall handover complete or part possession of the site to the Contractor 7 days in advance of construction programme. At the start of the work, the Employer shall handover the possession of at-least 75% of the site free of all encumbrances, the remaining 25 % of the possession as per contractor's construction programme.

21. Access to the Site

21.1The Contractor shall allow access to the Site and to any place where work in connection with the Contract is being carried out, or is intended to be carried out to the Engineer and any person/persons/agency authorized by: a. The Engineer b. The Employer or authorized by the Employer.

22. Instructions

- 22.1The Contractor shall carry out all instructions of the Engineer, which comply with the applicable laws where the Site is located.
- 22.2The Contractor shall permit the appointed and/or authorized persons to inspect the Site and/or accounts and records of the Contractor and its subcontractors relating to the performance of the Contract, and to have such accounts and records audited by auditors appointed, if so required. The Contractor's attention is invited to Clause of "Fraud and Corruption", which provides, inter alia, that acts intended to materially impede the exercise of the inspection and audit rights provided for under the Clause & constitute a obstructive practice subject to contract termination.
- 22.3Engineer to have power to issue further drawings or instructions:
 - The Engineer shall have the power and authority from time to time and at all times to make and issue such further drawings and to give such further instructions and directions as may appear to him necessary or proper for the guidance of the contractor and the good and sufficient execution of the works according to terms of the specifications and Contractor shall receive, execute, obey and be bound by the same, according to the true intent and meaning thereof, as fully and effectually as though the same had accompanied or had been mentioned or referred to in the specification, and the Engineer may also alter or vary the levels or position of nature of works contemplated by the specifications, or may order any of the works contemplated thereby to be omitted, with or without the substitution of any other works in lieu thereof, or may order any work or any portion of work executed or partially executed, to be removed, changed or altered, added if needful, may order that other works shall be substituted instead thereof and difference of expense occasioned by any such diminution or alteration so ordered and directed shall be added to or deducted from the amount of this Contract. No work which radically changes the original nature of the Contract shall be ordered by the Engineer and in the event of any deviation being ordered which in the opinion of the Contractor changes the original nature of Contract he shall nevertheless carry it out and disagreement as to the nature of the work and the rate to be paid therefore shall be resolved in consultation with the contractor and the directions of Engineer-in-Charge. The time for completion of the Works, shall be in even of any deviations resulting in additional cost over the contract price being ordered, be

extended or reduced reasonably by the Engineer. The Engineer's decision in this case shall be final.

B. Time Control

23. Programme

- 23.1Within the time stated in the Contract Data, the Contractor shall submit to the Engineer for approval a Programme, including Environment Management Plan showing the general methods, arrangements, order, and timing for all the activities in the Works, along with monthly cash flow forecasts for the construction of works. After the completion of the construction works, the programme for the Routine Maintenance Work, showing the general methods, arrangements, order and timing for all the activities involved in the Routine Maintenance will also be submitted by the Contractor to the Engineer for approval if specified in the tender. The programme for Routine Maintenance will be submitted in each year for the period of Maintenance.
- 23.2The Contractor shall submit the list of equipment and machinery being brought to site, the list of key personnel being deployed, the list of machinery/equipment being placed in field laboratory and the location of field laboratory along with the Programme. The Engineer shall cause these details to be verified at each appropriate stage of the programme.
- 23.3An update of the Programme shall be a programme showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining Works, including any changes to the sequence of the activities.
- 23.4The Contractor shall submit to the Engineer for approval an updated Programme at regular intervals no longer than the period stated in the Contract Data. If the Contractor does not submit an updated Programme within this period, the Engineer may withhold the amount stated in the Contract Data from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Programme has been submitted.
- 23.5The Engineer's approval of the Programme shall not alter the Contractor's obligations. The Contractor may revise the Programme and submit it to the Engineer again at any time. A revised Programme shall show the effect of Variations and Compensation Events.
- **24. Extension of Time in Contracts:** Subject to any requirement in the contract as to completion of any portions or portions of the works before completion of the whole, the contractor shall fully and finally complete the whole of the works comprised in the contract (with such modifications as may be directed under conditions of this contract) by the date entered in the contract or extended date in terms of the following clauses:
 - 24.1 Extension attributable to MMRC
 - 24.1.1 Extension Due To Modification: If any modifications have been ordered which in the opinion of the Engineer have materially increased the magnitude of the work, then such extension of the contracted date of completion may be granted as shall appear to the Engineer to be reasonable in the circumstances, provided moreover that the Contractor shall be responsible for requesting such extension of the date as may be considered necessary as soon as the cause thereof shall arise and in any case should not be less than 30 days before the expiry of the date fixed for completion of the works.
 - 24.1.2 Extension For Delay Due To MMRC: In the event of any failure or delay by the MMRC to hand over the Contractor possession of the lands necessary for the execution of the works or to give the necessary notice to commence the works or to provide the

necessary drawings or instructions or any other delay caused by the MMRC due to any other cause whatsoever, then such failure or delay shall in no way affect or vitiate the contract or alter the character thereof or entitle the contractor to damages or compensation therefore, but in any such case, the MMRC may grant such extension(s) of the completion date as may be considered reasonable.

Note: For extension of time period as governed in (i) and (ii) above, any modifications in design/drawings, specifications, and quantities shall be needed to be justified with recorded reasons with approval of Ch. Eng. for not anticipating the same while preparing estimates and draft tender.

24.2

Extension of Time for Delay Due To Contractor: The time for the execution of the work or part of the works specified in the contract documents shall be deemed to be the essence of the contract and the works must be completed no later than the date(s) / the programme for completion of work as specified in the contract. If the contractor fails to complete the works within the time as specified in the contract for the reasons other than the reasons specified elsewhere, the MMRC may, if satisfied that the works can be completed by the contractor within reasonable short time thereafter, allow the contractor for further extension of time as the Engineer may decide. On such extension the MMRC will be entitled without prejudice to any other right and remedy available on that behalf, to recover the compensation. For the purpose of this Clause, the contract value of the works shall be taken as value of work as per contract agreement including any supplementary work order/contract agreement issued. Further, competent authority while granting extension to the currency of contract as above may also consider levy of penalty, as deemed fit based on the merit of the case. Also, the reasons for granting extension shall be properly documented.

25. Delays Ordered by the Engineer

25.1The Engineer may instruct the Contractor to delay the start or progress of any activity within the Works. Delay/delays totaling more than 30 days will require prior written approval of the Engineer-in-Charge.

26. Management Meetings

- 26.1The Engineer may require the Contractor to attend a management meeting. The business of a management meeting shall be to review the plans for progress of the Works.
- 26.2The Engineer shall record the business of management meetings and provide copies of the record to those attending the meeting. The responsibility of the parties for actions to be taken shall be decided by the Engineer either at the management meeting or after the management meeting and stated in writing to all those who attended the meeting.

C. Quality Control

27. Quality Control

27.1Work to be open to Inspection and Contractor or Responsible agent to be present

All works under or in course of execution or executed in pursuance of the contract shall at all times be open to the inspection and supervision of the Eng-in-charge and his subordinates and the contractor shall at all times during the usual working hours, at all other times, during the usual working hours and at all other times at which reasonable notice of the intention of the Eng-in-charge and his subordinates to visit the works shall have been given to the contractor, either himself be present to receive orders and

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instruction or have responsible agent duly accredited in writing present for that purpose. Order given to the contractors" duly authorized agent shall be considered to have the same force and effect as if they had been given to the contractor himself.

27.2Notice to Be Given Before Work Is Covered Up

The contractor shall give not less than ten days" notice in writing to the Eng-In-Charge or his subordinate in charge of the work before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct dimension thereof taken before the same is so covered up or placed beyond the reach of measurements and shall not cover up or place beyond the reach of measurement any work without the consent in writing of the Eng-In-Charge or his subordinate in charge of the work, and if any work shall be covered up or placed beyond the reach of measurement, without such notice having been given or consent obtained the same shall be uncovered at the contractors expenses, and in default thereof no payment or allowance shall be made for such work or for the materials with which the same was executed.

27.3Works to be executed in accordance with specifications / drawings / orders etc.:

The contractor shall execute the whole and every part of the work the most substantial and workman like manner and both has regards material and every other respect in strict accordance with specifications. The contractor shall also confirm exactly, fully and faithfully to the designs, drawings and instructions in writing relating to the work signed by the Engineer In-charge and lodged in his office and to which the contractor shall be entitled to have access for the purpose of inspection at such office, or on the site or work during office hours. The contractor shall be entitled to receive three sets of contract drawings and working drawings as well as one certified copy of the accepted tender along with the work order free of cost.

28. Identifying Defects

- 28.1The Engineer shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Engineer may instruct the Contractor to search for a Defect and to uncover and test any work that the Engineer considers may have a Defect.
- 28.2The Contractor shall permit the Employer's technical person(s) to check the Contractor's work and notify the Engineer and Contractor if any defects that are found.

29. Tests

If the Engineer instructs the Contractor to carry out a test not specified in the Specification/ Quality Assurance Handbook to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples. If there is no defect, the test shall be a compensation event. When required by the Engineer-in-charge the contractor(s) shall supply for the purpose of testing samples of all materials proposed to be used in the works. Samples submitted either to govern bulk supplies or required for testing before use shall be in suitable packages to contain them and shall be provided free of charge by the contractor. The cost of testing shall be borne by the contractor even if the result of the sample confirm or do not confirm to the relevant BIS code specifications.

- 29.1.1 All expenditure required to be incurred for taking the samples conveyance, packing shall be borne by the contractor himself.
- 29.1.2 The failed material shall be removed from the site by the contractor at his own cost within a week time of written order of the Engineer-in-charge.

The contractor shall install testing equipment at site. The contractor shall ensure and certify the calibration of the equipment so installed and shall maintain the same in working order throughout the period of construction. The contractor shall also provide necessary technically

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qualified experienced trained staff for carrying out such tests for using such equipment. The tests shall be carried out under the supervision of the Engineer-in-charge. The calibration shall be checked every twelve months as directed by Engineer-in-charge.

30. Correction of Defects noticed during the Defects Liability Period.

30.1(a) The Engineer shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion and ends after two years. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.

(b) Every time notice of Defect/Defects is given, the Contractor shall correct the notified Defect/Defects within the duration of time specified by the Engineer's notice.

(c) The Engineer may issue notice to the Contractor to carry out removal of defects or deficiencies, if any, noticed in his inspection, or brought to his notice. The Contractor shall remove the defects and deficiencies within the period specified in the notice and submit to the Engineer a compliance report.

31. Uncorrected Defects and Deficiencies

31.1If the Contractor has not corrected a Defect pertaining to the Defect Liability Period under clause and deficiencies in maintenance, to the satisfaction of the Engineer, within the time specified in the Engineer's notice, the Engineer will assess the cost of having the Defect or deficiency corrected, and the Contractor shall pay this amount, on correction of the Defect or deficiency by another agency.

D. Cost Control

32. Variations

The Engineer shall, having regard to the scope of the Works and the sanctioned estimated cost, have power to order, in writing, Variations within the scope of the Works he considers necessary or advisable during the progress of the Works. Such Variations shall form part of the Contract and the Contractor shall carry them out and include them in updated Programmes produced by the Contractor. Oral orders of the Engineer for Variations, unless followed by written confirmation, shall not be taken into account.

33. Payments for Variations

- 33.1If rates for Variation items are specified in the Bill of Quantities, the Contractor shall carry out such work at the same rate.
- 33.2The rate for Extra/Excess shall be governed by direction of Engineer-in-charge. If any extra item to be executed that should be carried out as per the prevailing market rate and mutually agreed by Employer and Contractor.
- **34. Cash Flow Forecasts** When the Programme is updated, the Contractor shall provide the Engineer with an updated cash flow forecast.
- **35. Payment Certificates** The payment to the Contractor will be as follows for construction work:
 - 35.1 A bill shall be submitted by the Contractor monthly or before the date fixed by the Engineer In-charge for all works executed in the previous month, and the Engineer In-charge shall take or cause to be taken requisite measurement for the purpose of having the same verified and the claim, so far as it is admissible, shall be adjusted, if possible, within 10 days from the presentation of the bill. If the contractor does not submit the bill within the time fixed as aforesaid, the Engineer In-charge may depute a subordinate to measure up the said work in the presence of the contractor or his duly authorized agent whose counter signature to the measurement list shall be sufficient warrant, and Engineer In-Charge may prepare a bill from such list which shall be binding on the contractor in all respects.

- 35.2 The Engineer shall check the Contractor's fortnightly/monthly statement within 14 days and certify the amount to be paid to the Contractor.
- 35.3 The value of work executed shall be determined, based on measurements by the Engineer.
- 35.4 The value of work executed shall comprise the value of the quantities of the items in the Bill of Quantities completed.
- 35.5 The value of work executed shall also include the valuation of Variations and Compensation Events.
- 35.6 The Engineer may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information. (g) The contractor shall submit all bills on the printed forms at the office of Engineer In-charge. The charges to be made in the bills shall always be entered at the rates specified in tender.

36. Payments

- 36.1Payments shall be adjusted for deductions for advance payments, retention, security deposit, other recoveries in terms of the Contract and taxes at source, as applicable under the law. The Employer shall pay the Contractor the amounts certified by the Engineer within 15 days of the date of each certificate.
- 36.2All sums payable by a contractor by way of compensation under any of these conditions, shall be considered as a reasonable compensation to be applied to the use of MMRC without reference to the actual loss or damage sustained and whether any damage has or has not been sustained.
- 36.3No payment shall be made for any work estimated to cost less than Rupees One Thousand till after the whole of work shall have been completed and the certificate of completion given. But in the case of works estimated to cost more than Rs. One Thousand, the contractor shall on submitting a monthly bill therefore be entitled to receive payment proportionate to the part of the work than approved and passed by the Engineer In-charge, whose certificate of such approval and passing of the sum so payable shall be final and conclusive against the contractor. All such intermediate payments shall be regarded as payments by way of advance against the final payments only and not as payments for work actual done and completed and shall not preclude the Engineer In-charge from requiring any bad, unsound, imperfect or unskillful work to be removed or taken away and reconstructed or re-erected nor shall any such payment be considered as an admission of the due performance of the contract or any part thereof in any respect or the offering of any claim not shall it conclude, determine or effect in any other way, the powers of the Engineer In-charge as to the final settlement and adjustment of the accounts or otherwise, or in any other way vary or effect the contract. The final bill shall be submitted by the Contractor within one month of the date fixed for the completion of the work otherwise the Engineer In-charge's certificate of the measurements and of the total amount payable for the work shall be final and binding on all parties.
- **37. The Contractor shall not be entitled to compensation** to the extent that the Employer's interests are adversely affected by the Contractor for not having given early warning or not having cooperated with the Engineer.

38. Tax

GST and other state levies/cess which are not subsumed under GST will be applicable. The tenderer shall quote inclusive of all Taxes/Duties/Cess other than GST, if any. Rates accepted by MMRC shall hold good till completion of work and no additional individual claim shall be admissible on account of fluctuations in market rates; increase in taxes/ any

other levies /tolls etc. except that payment/recovery for overall market situation shall be made as per price Variation. The GST shall be reimbursed separately.

39. Currencies

All payments will be made in Indian Rupees.

- **40. Liquidated Damages** Both, the Contractor and the Employer have agreed that it is not feasible to precisely estimate the amount of losses due to delay in completion of works and the losses to the public and the economy, therefore, both the parties have agreed that the Contractor shall pay liquidated damages to the Employer and not by way of penalty, at the rate per week or part thereof stated in the Contract Data for the period that the Completion Date is later than the Intended Completion Date. Liquidated damages at the same rates shall be withheld if the Contractor fails to achieve the milestones prescribed in the Contract Data. However, in case the Contractor achieves the next milestone, the amount of the liquidated damages already withheld shall be restored to the Contractor by adjustment in the next payment certificate. The Employer and the contractor have agreed that this is a reasonable agreed amount of liquidated damage. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor's other liabilities.
- **41.** Cost of Repairs Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at his cost if the loss or damage arises from the Contractor's acts or omissions.

E. Finishing the Contract

42. Completion of Construction and Maintenance

42.1The Contractor shall request the Engineer to issue a certificate of completion of the construction of the works, and the Engineer will do so upon deciding that the works is completed.

43. Taking Over

The Employer shall take over the works within seven days of the Engineer issuing a certificate of completion of works. The Contractor shall continue to remain responsible for its routine maintenance during the maintenance period if specified in the contract.

44. Final Account

Final joint measurement along with the representatives of the contractor should be taken recorded and signed by the Contractors. Contractors should submit the final bill within 1 month of physical completion of the work.

If the contractor fails to submit the final bill within 1 month, the MMRC staff will prepare the final bill based on the joint measurement within next 3 months. Engineer"s decision shall be final in respect of claims for defect and pending claims against contractors.

No further claims should be made by the Contractor after submission of the final bill and these shall be deemed to have been waived and extinguished. Payment of those items of the bills in respect of which there is no dispute and of items in dispute, for quantities and rates as approved by the Advisor (Coordination) shall be made within a reasonable period as may be necessary for the purpose of verification etc.

After payment of the final bill as aforesaid has been made, the contractor may, if he so desires, reconsider his position in respect of a disputed portion of the final bills and if he fails to do so within 84 days, his disputed claim shall be dealt with as provided in the contract.

The contractor has to submit the bill for the work carried out within 15 days from the date of completion of the work to the respective executing department. If the contractor fails to

submit their bills to concerned executing department, penalty or action as shown below will be taken for each delayed bill:-

After 15 days from the date of	Equal to 5% of bill amount
completion/running bill up to certain date,	
up to next 15 days i.e. up to 30 days	
Next 15 days up to 45 days from the date of	Equal to 10% of bill amount
completion/running bill up to specified date	
If not submitted wit in 45 days from the date	Bill will not be admitted for payment
of completion/ R.A. bill	

45. Operating and Maintenance Manuals

- 45.1If "as built" Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the Contract Data.
- 45.2If the Contractor does not supply the Drawings and/or manuals by the dates stated in the Contract Data, or they do not receive the Engineer's approval, the Engineer shall withhold the amount stated in the Contract Data from payments due to the Contractor.

46. Termination

- 46.1The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.
- 46.2Fundamental breaches of Contract shall include, but shall not be limited to, the following:
 - 46.1 the Contractor stops work for 30 days when no stoppage of work is shown on the current Programme and the stoppage has not been authorized by the Engineer;
 - 46.2 the Contractor is declared as bankrupt or goes into liquidation other than for approved reconstruction or amalgamation;
 - 46.3 the Engineer gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Engineer;
 - 46.4 the Contractor does not maintain a Security, which is required;
 - 46.5 the Contractor has delayed the completion of the Works by the number of days for which the maximum amount of liquidated damages can be paid, as defined in relevant clause.
 - 46.6 the Contractor fails to provide insurance cover as required under relevant clause.
 - 46.7 if the Contractor, in the judgment of the Employer, has engaged in the corrupt or fraudulent practices as defined in GCC in competing for or in executing the Contract.
 - 46.8 if the Contractor fails to deploy machinery and equipment or personnel as specified in the Contract Data at the appropriate time.
- 46.3When either party to the contract gives notice of a breach of contract to the Engineer for a cause other than those listed above, the Engineer shall decide whether the breach is fundamental or not.
- 46.4Notwithstanding the above, the Employer may terminate the Contract for convenience.
- 46.5If the Contract is terminated, the Contractor shall stop work immediately, make the Site safe and secure, and leave the Site as soon as reasonably possible.

47. Payment upon Termination

47.1If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Engineer shall issue a certificate for value of the work done and materials ordered less liquidated damages, if any, less advance payments received up to the date of

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the issue of the certificate and less the percentage to apply to the value of the work not completed, as indicated in the Contract Data. If the total amount due to the Employer exceeds any payment due to the Contractor, the difference shall be recovered from the security deposit, and performance security. If any amount is still left un-recovered it will be a debt due from the Contractor to the Employer.

47.2If the Contract is terminated at the Employer's convenience, the Engineer shall issue a certificate for the value of the work done, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the Contract, and less taxes due to be deducted at source as per applicable law.

48. Property

- 48.1All Materials on the Site, Plant, Equipment, Temporary Works, and Works shall be deemed to be the property of the Employer for use for completing balance construction work if the Contract is terminated because of the Contractor's default, till the Works is completed after which it will be transferred to the Contractor and credit, if any, given for its use.
- **49.** Release from Performance If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of the Employer or the Contractor, the Engineer shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which a commitment was made.

E. Other Conditions of Contract

50. Labour

- 50.1The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.
- 50.2The Contractor shall, if required by the Engineer, deliver to the Engineer a return in detail, in such form and at such intervals as the Engineer may prescribe, showing the staff and the number of the several classes of labour from time to time employed by the Contractor on the Site and such other information as the Engineer may require.

51. Compliance with Labour Regulations

- 51.1 During continuance of the Contract, the Contractor and his sub-Contractors shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications and by laws of the State or Central Government or local authority and any other labour law (including rules), regulations, by laws that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or the local authority.
- 51.2 Furthermore, the Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made there under, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/bye laws/Acts/Rules/regulations including amendments, if any,

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on the part of the Contractor, the Engineer/Employer shall have the right to deduct any money due to the Contractor including his amount of performance guarantee. The Employer/Engineer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer.

- 51.3 The Contractor shall require his employees to obey all applicable laws, including those concerning safety at work.
- 51.4 The employees of the Contractor and the Sub-Contractor in no case shall be treated as the employees of the Employer at any point of time.

52. Drawings and Photographs of the Works

- 52.1The Contractor shall do photography/video photography of the site firstly before the start of the work, secondly mid-way in the execution of different stages of work as required by Engineer In-charge and lastly after the completion of the work. No separate payment will be made to the Contractor for this.
- 52.2The Contractor shall not disclose details of Drawings furnished to him and works on which he is engaged without the prior approval of the Engineer in writing. No photograph of the works or any part thereof or plant employed thereon, except those permitted under above clause, shall be taken or permitted by the Contractor to be taken by any of his employees or any employees of his sub-Contractors without the prior approval of the Engineer in writing. No photographs/ Video photography shall be published or otherwise circulated without the approval of the Engineer in writing.
- **53.** The Apprentices Act, 1961 The Contractor shall duly comply with the provisions of the Apprentices Act 1961 (III of 1961), the rules made there under and the orders that may be issued from time to time under the said Act and the said Rules and on his failure or neglect to do so, he shall be subject to all liabilities and penalties provided by the said Act and said Rules.
- **54.** Contract Document: The documents forming the contract are to be taken as mutually explanatory of one another. Unless otherwise provided in the contract, the priority of the documents forming the contract shall be, as follows:
 - 54.1 Contract Agreement (if completed)
 - 54.2 The letter of Acceptance
 - 54.3 Work order
 - 54.4 The Bid
 - 54.5 Addendum to Bid; if any
 - 54.6 Tender Document
 - 54.7 The Bill of Quantities
 - 54.8 The Specification
 - 54.9 Drawings
 - 54.10 General Conditions of Contracts
 - 54.11 All correspondence documents between bidder/contractor and MMRC.

55. Conflict of Interest

The Applicant shall not have a conflict of interest (the "Conflict of Interest") that affects the Bidding Process. Any Applicant found to have a Conflict of Interest shall be disqualified. An Applicant shall be deemed to have a Conflict of Interest affecting the Bidding Process, if

- 55.1 A constituent of such Applicant is also a constituent of another Applicant; or
- 55.2 Such Applicant has the same legal representative for purposes of this Application as any other Applicant; or

- 55.3 Such Applicant, or any Associate thereof has a relationship with another Applicant, or any Associate thereof, directly or through common third party/ parties, that puts either or both of them in a position to have access to each other"s information about, or to influence the Application of either or each other; or
- 55.4 The Applicant shall be liable for disqualification if any legal, financial or technical adviser of the Authority in relation to the Project is engaged by the Applicant, its Member or any Associate thereof, as the case may be, in any manner for matters related to or incidental to the Project. For the avoidance of doubt, this disqualification shall not apply where such adviser was engaged by the Applicant, its Member or Associate in the past but its assignment expired or was terminated 6 (six) months prior to the date of issue of this TENDER. Nor will this disqualification apply where such adviser is engaged after a period of 3 (three) years from the date of commercial operation of the Project.

56. Applications and costs thereof

No Applicant shall submit more than one Application for the Project. An applicant applying individually shall not be entitled to submit another application either individually. The Applicant shall be responsible for all of the costs associated with the preparation of their Applications and their participation in the Bid Process. The Authority will not be responsible or in any way liable for such costs, regardless of the conduct or outcome of the Bidding Process.

57. Acknowledgment by Applicant

It shall be deemed that by submitting the Application, the Applicant has:

- a. made a complete and careful examination of the tender;
- b. received all relevant information requested from the Authority;
- c. accepted the risk of inadequacy, error or mistake in the information provided in the tender or furnished by or on behalf of the Authority relating to any of the matters referred; and
- d. Agreed to be bound by the undertakings provided by it under and in terms hereof.

"The Authority" shall not be liable for any omission, mistake or error in respect of any of the above or on account of any matter or thing arising out of or concerning or relating to the TENDER or the Bidding Process, including any error or mistake therein or in any information or data given by the Authority.

58. Right to accept or reject any or all Applications/ Bids

Notwithstanding anything contained in this TENDER, "The Authority" reserves the right to accept or reject any Application and to annul the Bidding Process and reject all Applications/ Bids, at any time without any liability or any obligation for such acceptance, rejection or annulment, and without assigning any reasons therefore. In the event that the Authority rejects or annuls all the Bids, it may, in its discretion, invite all eligible Bidders to submit fresh Bids hereunder. "The Authority" reserves the right to reject any Application and/ or Bid if:

- a. at any time, a material misrepresentation is made or uncovered, or
- b. the Applicant does not provide, within the time specified by the Authority, the supplemental information sought by the Authority for evaluation of the Application.

In case it is found during the evaluation or at any time before signing of the Agreement or after its execution and during the period of subsistence thereof including the concession thereby granted by "The Authority", that one or more of the pre-qualification conditions have not been met by the Applicant, or the Applicant has made material

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misrepresentation or has given any materially incorrect or false information, the Applicant shall be disqualified forthwith if not yet appointed as the Successful Bidder either by issue of the LOA (Letter of Approval) or entering into of the Agreement, and if the Applicant has already been issued the LOA or has entered into the Concession Agreement, as the case may be, the same shall, notwithstanding anything to the contrary contained therein or in this TENDER, be liable to be terminated, by a communication in writing by "The Authority" to the Applicant, without the Authority being liable in any manner whatsoever to the Applicant and without prejudice to any other right or remedy which the Authority may have under this TENDER, the Bidding Documents, the Concession Agreement or under applicable law.

"The Authority" reserves the right to verify all statements, information and documents submitted by the Applicant in response to the TENDER. Any such verification or lack of such verification by the Authority shall not relieve the Applicant of its obligations or liabilities hereunder nor will it affect any rights of the Authority there under.

59. The bid shall be rejected if the bidder-

- 59.1 Stipulates the validity period less than 90 days.
- 59.2 Stipulates own condition/conditions.
- 59.3 Does not fill and (digital) sign undertaking forms, which are incorporated, in the document.

60. Clarifications

Applicants requiring any clarification on the tender may notify "the Authority" in writing or by fax or e-mail. They should send in their queries before the date specified in the header data. "The Authority" shall Endeavor to respond to the queries within the period specified therein. The responses will be sent by fax and/or e-mail. The Authority will forward all the queries and its responses thereto, to all purchasers of the TENDER without identifying the source of queries. "The Authority" shall Endeavor to respond to the questions raised or clarifications sought by the Applicants. However, the Authority reserves the right not to respond to any question or provide any clarification, in its sole discretion, and nothing in this Clause shall be taken or read as compelling or requiring the Authority to respond to any question or to provide any clarification, but not later than the date provided in header data. "The Authority" may also on its own motion, if deemed necessary, issue interpretations and clarifications to all Applicants. All clarifications and interpretations and information given by Authority or its employees or representatives shall not in any way or manner be binding on the Authority.

61. Amendment of tender

At any time prior to the deadline for submission of Application, the Authority may, for any reason, whether at its own initiative or in response to clarifications requested by an Applicant, modify the tender by the issuance of Addendum.

Any Addendum thus issued will be sent in writing/ Fax/ Email to all those who have purchased the tender.

In order to afford the Applicants a reasonable time for taking an Addendum into account, or for any other reason, the Authority may, in its sole discretion, extend the Application Due Date.

F. Preparation and Submission of Application

62. Language

The Application and all related correspondence and documents in relation to the Bidding Process shall be in English language. Supporting documents and printed literature furnished by the Applicant with the Application may be in any other language provided

that they are accompanied by translations of all the pertinent passages in the English language, duly authenticated and certified by the Applicant. Supporting materials, which are not translated into English, may not be considered. For the purpose of interpretation and evaluation of the Application, the English language translation shall prevail.

63. Format and signing of Application

The Applicant shall provide all the information sought under this TENDER. The Authority will evaluate only those Applications that are received in the required formats and complete in all respects. Incomplete and /or conditional Applications shall be liable to rejection.

The Applicant will upload bid in One Folder in electronic form which shall contain the scanned certified copies of the documents given below and the documents uploaded has to be digitally signed by the bidder. These copies shall be certified by Practicing Notary approved by the Govt. of Maharashtra or Govt. of India with his stamp, clearly stating his name & registration number, except where original documents are demanded.

64. Marking of Applications

The Applicant shall submit the Application in the format specified at Appendix-I, together with the documents, upload in folder as "VENDOR" together with their respective enclosures Applications submitted by fax, telex, telegram shall not be entertained and shall be rejected outright.

65. Late Applications

Applications received by the Authority after the specified time on the Application Due Date shall not be eligible for consideration and shall be summarily rejected.

66. Confidentiality

Information relating to the examination, clarification, evaluation, and recommendation for the short-listed qualified Applicants shall not be disclosed to any person who is not officially concerned with the process or is not a retained professional advisor advising the Authority in relation to or matters arising out of, or concerning the Bidding Process. The Authority will treat all information, submitted as part of Application, in confidence and will require all those who have access to such material to treat the same in confidence. The Authority may not divulge any such information unless it is directed to do so by any statutory entity that has the power under law to require its disclosure or is to enforce or assert any right or privilege of the statutory entity and/ or the Authority or as may be required by law or in connection with any legal process.

67. Clarification of Financial Bids

To assist in the examination, evaluation and comparison of Bids, the Engineer may, at his discretion, ask any bidder for clarification of his Bid, including breakdown of unit rates. The request for clarification and the response shall be in writing or by post/facsimile/e-mail. No Bidder shall contact the Engineer on any matter relating to his bid from the time of the bid opening to the time the contract is awarded. Any effort by the Bidder to influence the Engineer in the Engineer's bid evaluation, bid comparison or contract award decisions may result in the rejection of the Bidder's bid.

68. Inspection of site and sufficiency of tender:

1. The Contractor shall inspect and examine the site and its surrounding and shall satisfy himself before submitting his tender as to the nature of the ground and subsoil (so far as is practicable), the form and nature of the site, the quantities and nature of the work and materials necessary for the completion of the works and means of access to the site, the accommodation he may require and

in general shall himself obtain all necessary information as to risk, contingencies and other circumstances which may influence or affect his tender. He shall also take into consideration the hydrological and climatic conditions.

- 2. The Employer may make available to the Contractor data on hydrological and sub-surface conditions as obtained by or on his behalf from investigations relevant to the works but the Contractor shall be responsible for his own interpretation thereof. The contractor shall engage his investigating agency with prior approval of the Engineer from the approved list of such agencies by MMRC or Govt. at his cost initially before commencing actual work and which shall be reimbursed immediately subject to satisfaction of the Engineer for faithful compliance and submission of required data regarding such investigation within specified time.
- 3. The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices quoted in the schedule of works / items / quantities, or in Bill of Quantities, which rates and prices shall, except as otherwise provided cover all his obligations under the Contract and all matters and things necessary for proper completion and maintenance of the works. No extra charges consequent on any misunderstanding.
- 4. Not Foreseeable Physical Obstructions or Conditions: If, however, during the execution of the Works the Contractor encounters physical obstructions or physical conditions, other than climatic conditions on the Site, which obstructions or conditions were, in his opinion, not foreseeable by an experienced contractor, the Contractor shall forthwith give notice thereof to the Engineer. On receipt of such notice, the Engineer shall, if in his opinion such obstructions or conditions could not have been reasonably foreseen by an experienced contractor, after due consultation with the Contractor, determine:
 - any extension of time to which the Contractor is entitled and
 - The amount of any costs which may have been incurred by the Contractor by reason of such obstructions or conditions having been encountered, which shall be added to the Contract Price.
 - and shall notify the Contractor accordingly. Such determination shall take account of any instruction which the Engineer may issue to the Contractor in connection therewith, and any proper and reasonable measures acceptable to the Engineer which the Contractor may take in the absence of specific instructions from the Engineer. However such costing shall be got approved by the competent authority as governed vide rules prevailing with authority.

69. Official Secrecy:

The Contractor shall of all the persons employed in any works in connection with the contract that the India Official Secrets Act 1923 (XIX of 1923) applies to them and will continue to apply even after execution of the said works and they will not disclose any information regarding this contract to any third party. The contractor shall also bring into notice that, any information found to be leaked out or disclosed the concern person as well as the Contractor will be liable for penal action; further the Corporation will be at liberty to terminate the contract without notice.

70. Subsequent Legislation:

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If on the day of submission of bids for the contract, there occur changes to any National or State stature, Ordinance, decree or other law or any regulation or By-laws or any local or other duly constituted authority or the introduction of any such National or State Statute, Ordinance, decree or by which causes additional or reduced cost to the Contractor, such additional or reduced cost shall, after due consultation with the Contractor, be determined by the concerned Engineering Department of MMRC and shall be added to or deducted from the Contract Price with prior approval of competent authority and the concerned Engineering Department shall notify the Contractor accordingly with a copy to the Employer. MMRC reserve the right to take decision in respect of addition/reduction of cost in contract.

71. Patent, Right and Royalties:

The contractor shall save harmless and indemnify the Corporation from and against all claims and proceedings for or on account of infringement of any Patent rights, design trademark or name of other protected rights in respect of any constructional plant, machine work, or material used for or in connection with the Works or any of them and from and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto. Except where otherwise specified, the contractor shall pay all tonnage and other royalties, rent and other payments or compensation, if any, for getting stone, sand, gravel, clay or other materials required for the works or any of them.

72. Payments, Tax and Claims:

• The limit for unforeseen claims

Under no circumstances whatever the contractor shall be entitled to any compensation from MMRC on any account unless the contractor shall have submitted a claim in writing to the Eng-in-change within 1 month of the case of such claim occurring.

• No interest for delayed payments due to disputes, etc.

It is agreed that the MMRC or its Engineer or Officer shall not be liable to pay any interest or damage with respect of any moneys or balance which may be in its or its Engineer's or officer's hands owing to any dispute or difference or claim or misunderstanding between the MMRC or its Engineer or Officer on the one hand and the contractor on the other, or with respect to any delay on the part of the MMRC or its Engineer or Officers in making periodical or final payments or in any other respect whatever.

73. Settlement of Disputes:

• Termination of contract for death

If the Contractor is an individual or a proprietary concern and the individual or the proprietor dies and if the Contractor is a partnership concern and one of the legal representative of the individual Contractor or the proprietor of the proprietary concern and in case of partnership, the surviving partners, are capable of carrying out and completing the contract, the Advisor (Coordination) shall be entitled to cancel the contract as to its uncompleted part without the Corporation being in any way liable to payment of any compensation to the estate of the deceased Contractor and or to the surviving partners of the Contractor's firm on account of the cancellation of the contract. The decision of the Advisor (Coordination) that the legal representative of the deceased Contractor or surviving partners of the Contractor's firm cannot carry out and complete the contract shall be final and binding on the parties. In the event of such cancellation the Advisor (Coordination) shall not hold estate of the deceased Contractor and or surviving partners of the Contractor's firm liable in damages for not completing the contract.

• Settlement of Disputes:

If any dispute or differences of any kind whatsoever other than those in respect of which, the decision of any person is, by the Contract, expressed to be final and binding) shall arise between the Employer and the Contractor or the Engineer and the Contractor in connection with or arising out of the Contract or carrying out of the Works (Whether during the progress of the Works or after their completion and whether before or after the termination, abandonment or breach of the Contract) it, the aggrieved party may refer such dispute within a period of 7 days to the Executive Director (Planning), MMRC who shall constitute a committee comprising of three officers i.e. Advisor (Coordination), Chief Project Manager other than the Contract and GM (Finance), MMRCL. The Committee shall give decision in writing within 60 days. Appeal on the Order of the Committee may be referred to the Managing Director, MMRC within 7 days. Thereafter the Managing Director, MMRC shall constitute a Committee comprising of three Directors including Director in charge of Finance Department. The Managing Director, MMRC within a period of 90 days after being requested to do so shall give written notice of committee's decision to the Contractor. Save as herein provided such decision in respect of every matter so referred shall be final and binding upon both parties until the completion of the works.

74. Jurisdiction: The law of union od India shall be applicable.

75. Copyright:

The copyright of all drawings and other documents provided by the Contractor under the contract shall remain vested in the Contractor or his sub-contractors as the case may be the employer shall have a license to use such drawings and other documents in connection with the design, construction, operation, maintenance of the works. At any time the Employer shall have further license without additional payment to the Contractor to use any such drawings or documents for the purpose of making any improvement of the works or enlargement or duplication of any part thereof, provided that such improvement, enlargement, or duplication by itself or in conjunction with the further license does not result in the duplication of the works.

76. Receipts to be signed in firm's name by any one of the partners:

Every receipt for money which may become payable or for any security which may become transferable to the Contractor under these present shall, if signed in the partnership name by any one of the partners, be a good and sufficient discharge to the MMRC in respect of the money or security purporting to be acknowledged thereby, and in the event of death of any of the partners during the pendency of this contract, it is hereby expressly agreed that every receipt by any one of the surviving partners shall, if so signed as aforesaid, be good and sufficient discharge as aforesaid provided that nothing in this clause contained shall be deemed to prejudice or effect any claim which the Managing Director, MMRC or the Corporation may hereafter have against the legal representatives of any partners so dying or in respect of any breach of any of the conditions thereof, provided also that nothing in this clause contained shall be deemed prejudicial or affect the respective rights or obligations of the Contractors and of the legal representatives of any deceased Contractors interest.

77. Proprietary data

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All documents and other information supplied by the Authority or submitted by an Applicant to the Authority shall remain or become the property of the Authority. Applicants are to treat all information as strictly confidential and shall not use it for any purpose other than for preparation and submission of their Application. The Authority will not return any Application or any information provided along therewith.

78. Correspondence with the Applicant

Save and except as provided in this TENDER, the Authority shall not entertain any correspondence with any Applicant in relation to the acceptance or rejection of any Application.

- 79. Deleted.
- 80. Deleted.
- 81. Payment
 - As per the Appen dix 1 of Chapter 3
- 82. Deleted

83. Joint Ventures are not allowed.

84. Compensation for delay:

If the Contractor fails to complete the works and clear the site on or before the Contract or extended date(s) / period(s) of completion, he shall, without prejudice to any other right or remedy of MMRC on account of such breach, pay as agreed compensation, amount calculated as stipulated below (or such smaller amount as may be fixed by the Engineer) on the contract value of the whole work or on the contract value of the time or group of items of work for which separate period of completion are given in the contract and of which completion is delayed for every week that the whole of the work of item or group of items of work concerned remains uncompleted, even though the contract as a whole be completed by the contract or the extended date of completion. For this purpose, the term Contract Value shall be the value of the work at Contract Rates as ordered including the value of all deviations ordered:

- Completion period for projects (originally stipulated or as extended) not exceeding 6 months: to the extent of maximum 1 percent per week.
- Completion period for projects (originally stipulated or as extended) exceeding 6 months and not exceeding 2 years: to the extent of maximum ¹/₂ percent per week.
- Completion period for projects (originally stipulated or as extended) exceeding 2 years: to the extent of maximum ¹/₄ percent per week.

When the delay is not a full week or in multiple of a week but involves a fraction of a week the compensation payable for that fraction shall be proportional to the number of days involved. Provided always that the total amount of compensation for delay to be paid this condition shall not exceed the under noted percentage of the Contract Value of the item or group of items of work for which a separate period of completion is given.

- i. Completion period (as originally stipulated or as extended) not exceeding 6 months: 10 percent.
- ii. Completion period (as originally stipulated or as extended) exceeding 6 months and not exceeding 2 years: 7½ percent.
- iii. Completion period (as originally stipulated or as extended) exceeding 2 years: 5 percent.

The amount of compensation may be adjusted set off against any sum payable to the contractor under this or any other contract with the MMRC.

85. Action and Compensation Payable in Case of Bad Work and Not Done As Per Specifications

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All works under or in course of execution or executed in pursuance of the contract, shall at all times be open and accessible to the inspection and supervision of the Engineer-incharge, his authorized subordinates in charge of the work and all the superior officers, officer of the MMRC or any organization engaged by the MMRC for Quality Assurance and the contractor shall, at all times, during the usual working hours and at all other times at which reasonable notice of the visit of such officers has been given to the contractor, either himself be present to receive orders and instructions or have a responsible agent duly accredited in writing, present for that purpose. Orders given to the Contractor's agent shall be considered to have the same force as if they had been given to the contractor himself. If it shall appear to the Engineer-in-charge or his authorized subordinates in-charge of the work or to the officer of Vigilance Department, that any work has been executed with unsound, imperfect or unskillful workmanship or with materials of any inferior description, or that any materials or articles provided by him for the execution of the work are unsound or of a quality inferior to that contracted for or otherwise not in accordance with the contract, the contractor shall, on demand in writing which shall be made within twelve months of the completion of the work from the Engineer-in-Charge specifying the work, materials or articles complained of notwithstanding that the same may have been passed, certified and paid for forthwith rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require or as the case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own charge and cost. In the event of the failing to do so within a period specified by the Engineer-in-Charge in his demand aforesaid, then the contractor shall be liable to pay compensation as per the direction of Engineer-in-charge.

86. Contractors remain liable to pay compensation: In any case in which any of the powers conferred upon the Engineer In-charge by the relevant clauses in documents that form a part of contract as exercised or is exercisable in the event of any future case of default by the Contractor, he is declared liable to pay compensation amounting to the whole of his security deposit. The liability of the Contractor for past and future compensation shall remain unaffected. In the event of the Executive Engineer taking action against these relevant clauses, he may, if he so desires, take possession of all or any tools and plant, materials and stores in or upon the work of site thereof or belonging to the Contractor or procured by him and intended to be used for the execution of the work or any part thereof paying or allowing for the same in account at the contract rates, or in the case of contract rates not being applicable at current market rates to be certified by the Executive Engineer, may after giving notice in writing to the Contractor or his staff of the work or other authorized agent require him to remove such tools and plants, materials or stores from the premises within a time to be specified in such notice and in the event of the Contractor failing to comply with any such requisition, the Executive Engineer may remove them at the contractors expense of sell them by auction or private sell on account of the Contractor at his risk in all respects and certificate of the Executive Engineer as to the expense of any such removal and the amount of the proceeds an expense of any such sell be final and conclusive against the Contractor.

87. No Claim to Any Payment or Compensation or Alteration in or Restriction of Work

a. If at any time after the execution of contract documents, the Engineer shall for any reason whatsoever, desires that the whole or any part of the works specified in the Tender should be suspended for any period or that the whole or part of the work should not be carried out, at all, he shall give to the Contractor a Notice in

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writing of such desire and upon the receipt of such notice, the Contractor shall forthwith suspend or stop the work wholly or in part as required after having due regard to the appropriate stage at which the work should be stopped or suspended so as not to cause any damage or injury the work already done or endanger the safety thereof, provided that the decision of the Engineer as to the stage at which the work or any part of it could be or could have been safely stopped or suspended shall be final and conclusive against the contractor. The Contractor shall have no claim to any payment or compensation whatsoever by reason of or in pursuance of any notice as aforesaid, on account of any suspension, stoppage or curtailment except to the extent specified hereinafter.

- b. Where the total suspension of Work Order as aforesaid continued for a continuous period exceeding 90 days the contractor shall be at liberty to withdraw from the contractual obligations under the contract so far as it pertains to the unexecuted part of the work by giving 10 days prior notice in writing to the Engineer within 30 days of the expiry of the said period of 90 days, of such intention and requiring the Engineering to record the final measurement of the work already done and to pay final bill. Upon giving such Notice, the Contractor shall be deem to have been discharged from his obligations to complete the remaining unexecuted work under his contract. On receipt of such notice the Engineer shall proceed to complete the measurement and make such payment as may be finally due to the contractor within a period of 90 days from the receipt of such Notice in respect of the work already done by the contractor. Such payment shall not in any manner prejudice the right of the contractor to any further compensation under the remaining provisions of this clause.
- c. Where the Engineer required to Contractor to suspend the work for a period in excess of 30 days at any time or 60 days in the aggregate, the Contractor shall be entitled to apply to the Engineer within 30 days of the resumption of the work after such suspension for payment of compensation to the extent of pecuniary loss suffered by him in respect of working machinery remained ideal on the site of on the account of his having an to pay the salary of wages and labour engaged by him during the said period of suspension provided always that the contractor shall not be entitled to any claim in respect of any such working machinery, salary or wages for the first 30 days whether consecutive or in the aggregate or such suspension or in respect of any such suspension whatsoever occasion by unsatisfactory work or any other default on his part, the decision of the Engineer in this regard shall be final and conclusive against the contractor.

88. Contractor to supply plant, ladder, scaffolding, etc and is liable for damages arising from non-provision of lights, fencing, etc.

The Contractor shall supply at his own cost all material, plant, tools, appliances, implements, ladders, cordage, tackle scaffolding and temporary works requisite or proper for the proper execution of the work, whether, in the original altered or substituted form and whether included in the specification of other documents forming part of the contract or referred to in these conditions or not and which may be necessary for the purpose of satisfying or complying with the requirements of the Eng-In-Charge as to any matter as to which under these conditions is entitled to be satisfied, or which is entitled to require together with the carriage therefore to and from the work.

The Contractor shall also supply without charge, the requisite number of person with the means and materials necessary for the purpose of setting out works and counting, weighing and assisting in the measurements of examination at any time and from time to

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time of the work or materials, failing which the same may be provided by the Engineer In-charge at the expense of the contractor and the expenses may be deducted from any money due to the contractor under the contract or from his security deposit or the proceeds of sale thereof, or offers sufficient portion thereof.

The contractor shall provide all necessary fencing and lights required to protect the public from accident and shall also be bound to bear the expenses of defense of every suit, action or other legal proceedings, that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay any damages and cost which may be awarded in any such suit action or proceedings to any such person or which may with the consent of the contractor be paid for compromising any claim by any such person.

89. Prevention of Fire:

The contractor shall not set fire to any standing jungle, trees, brushwood or grass without a written permit from the Engineer In-charge. When such permit is given, and also in all cases when destroying cut or dug up trees brushwood, grass, etc., by fire, the contractor shall take necessary measure to prevent such fire spreading to or otherwise damaging surrounding property. The Contractor shall make his own arrangements for drinking water for the labour employed by him.

- **90. Compensation for all damages** done intentionally or unintentionally by contractor's labour whether in or beyond the limits of MMRC property including any damage caused by spreading the fire shall be estimated by the Engineer In-charge or such other officer as he may appoint and the estimate of the Engineer in-charge to the decision of the Dy. Chief Engineer on appeal shall be final and the contractor shall be bound to pay the amount of the assessed compensation on demand failing which the same will be recovered from the Contractor as damages or deducted by the Engineer In-charge from any sums that may be due or become due from MMRC to contractor under this Contract or otherwise. Contractor shall bear the expenses of defending any action or other legal proceedings that may be brought to prevent the spread of fire and he shall pay any damages and costs that may be awarded by the Court in consequence.
- **91.** In the case of Tender by partners, any change in the constitution of the firm shall be forthwith, notified by the contractor through the Engineer In-charge for his information.

92. Action where no specifications:

In the case of any class of work for which there is no such specifications, such works shall be carried out in accordance with the specifications and in the event of there being no such specifications, then in such case, the work shall be carried out in all respects in accordance with all instructions and requirements of the Engineer In-charge.

93. Safety and medical help:

- i. The Contractor shall be responsible for and shall pay the expenses of providing medical help to any workmen who may suffer a bodily injury as a result of an accident. If such expenses are incurred by MMRC, the same shall be recoverable from the contractor forthwith and be included without prejudice to any other remedy of MMRC from any amount due or that may become due to the Contractor.
- ii. The contractor shall provide necessary personal safety equipment and first-aid box for the use of persons employed on the site and shall maintain the same in condition suitable for immediate use at any time.
- iii. The workers shall be required to use the safety equipment so provided by the contractor and the contractor shall take adequate steps to ensure the proper use of equipment by those concerned.

- iv. When the work is carried on in proximity to any place where there is risk or drawing all necessary equipment shall be provided and kept ready for use and all necessary steps shall be taken for the prompt rescue of any person in danger.
- **94.** No compensation shall be allowed for any delay caused in the starting of the work on account of acquisition of land or in the case of clearance of works, on account of any delay in according to sanction of estimates.

95. Anti-malaria and other health measures:

Anti-Malaria and other health measures shall be taken as directed by the Engineer-in-Charge. Contractor shall see that mosquito genic conditions are created so as to keep vector population to minimum level. Contractor shall carry out anti-malaria measures in the area as per the guidelines issued by the Executive Health Officer of MCGM from time to time. In case of default, in carrying out prescribed anti-malaria measures resulting in increase in malaria incidence, contractor shall be liable to pay MCGM on anti-malaria measures to control the situation in addition to fine.

Items marked "N/A" do not apply in this Contract	Clause reference with respect to Definitions, Section – 3 i), ii), iii)
The Employer is	Definitions [1.1]
Name: Managing Director, Mumbai Metro Rail Corporation Limited	
Address: Mumbai Metro Rail Corporation Ltd, NAMTTRI Bldg., Plot No. R-13, E Block, Bandra -Kurla Complex, Bandra East, Mumbai – 400 051	
The Engineer is or "Engineer-in-charge" as used in the tender papers shall mean any officer nominated by MMRC.	Definitions [1.1]
Address: MMRC, Mumbai Metro Rail Corporation, NaMTTRI Bldg., Plot No. R-13, E Block, Bandra Kurla Complex, Bandra East, Mumbai – 400 051 Ph +91- 22-26384691 Email – anil.kamble@mmrcl.com	[Cl. 1.1, 5]
The Defects Liability Period is 24 Months from the date of Completion.	[Cl. 1.1]
The Start Date shall be the date of issue of the Work Order.	[Cl.1.1]
The Intended Completion Date for the whole of the Works is 300 Days including monsoon period after start of work with the following milestones:	[Cl.1.1] [Cl.2.2, & 40]

Contract Data

N	Milestone	Activity	Targeted date	Penalty per day
N	Milestone	Submission of	15days after date of	₹2000
1	L	complete layout drawings of the	issue of work order	
		lifts to MMRC for		
		approval		
N	Milestone	Supply of materials on site	120 days from the	₹2000
2	2	on site	date of approval of	
			layout drawing	
	Milestone	Installation of lift	120 days from the	₹2000
3	3		date of supply of	
		Testing 0	materials	
	Milestone	Testing & Commissioning of	45 days from the date	₹2000
4	ł	Commissioning of lift	of installation	
N	Milestone	Handover	10 Months (300	₹2000
5	5		days)	
	The work	consists of:		[Cl.1.1]
			d Commissioning of 12	
			of 612 Kg / 9 Person, and	1
		, ,	cluding 2 years AMC wor	
			ai Metro Rail Corporation	
			F Wing (2 lifts in each	
		uated in HDIL Premier		
	Mumbai,	Pin code:- 400070	-	
	The follo	wing documents also f	form part of the Contract:	[Cl. 2.3(10)]
	a) Agreement			
	b)	Letter of Acceptance)	
	c)	Work Order		
	d)	Qualification inform	ation and other forms	
	e)	Condition of contrac	t	
	f)	Contract Data		
	g)	Scope of Work		
	h)	Specification		
	i)	Form of Bid		
	j)	Securities and other	forms	
	2	Integrity Pact		
	l)	Drawings		
	m		listed in the Contract	
		Data as forming part		
	0	TC – 2 No. Graduate E	6	[Cl. 8]
		, ,	xperience in SITC of Lifts.	
	-		2 shifts daily for duratio	n
		th (including Sunday)	2	
		od for submission of th		[Cl. 23.1]
			5 days from the issue of	
	Work Ore		1. 1.11. 2.2	
	_	od between programm	ne updates shall be 30	[Cl. 23.4]
	day.			
	The amo	unt to be withheld for	late submission of an	[Cl. 23.4]

update programme sha		
Amount of liquidated damages for delay in completion of works	(I) for Whole of work (As Stated in Milestones _ Clause no. 2.2)	[Cl. 40]
The Schedule of Operat	ing and Maintenance Manuals	[Cl. 45]
The date by which directed) in 2 sets ar issue of certificate of o the work, as the case m	[Cl. 45.1]	
The amount to be wi built" drawings by the	[Cl. 45.2]	
The Percentage to ap completed representir for completing the Wor	[Cl. 47.1]	

CHAPTER 5

COMMERCIAL AND ADDITIONAL CONDITIONS

Advisor (Coordination)

5. COMMERCIAL AND ADDITIONAL CONDITIONS

1. General

1.1 This specification covers manufacture, testing as may be necessary before dispatch, delivery at site, all preparatory work, assembly and installation, commissioning putting into operation of Lifts & Escalators.

1.2 Location

The Lifts will be installed at Rehabilitation site of Mumbai Metro Rail Corporation Limited at Building No. 10 A to F Wing (2 lifts in each wing) situated in HDIL Premier Compound, Kurla, Mumbai, pin code:- 400070.

- 1.3 The work shall be executed as per CPWD General Specifications for Electrical Works (Part III Lifts & Escalators—2003) as amended up to date as per relevant IS and as per directions of Engineer-in-Charge. These additional specifications are to be read in conjunction with above and in case of variations, specifications given in this Additional conditions shall apply. However, nothing extra shall be paid on ac-count of these additional specifications & conditions as the same are to be read along with schedule of quantities for the work.
- 1.4 The tenderer should in his own interest visit the site and familiarizes himself with the site conditions before tendering.
- 1.5 No T&P shall be issued by the Department and nothing extra shall be paid on account of this.

2. Commercial Conditions

2.1 Type of contract

The work to be awarded by this tender shall be treated as indivisible works contract.

- 2.2 Submission and opening of Tenders:
- 2.2.1 The tender is in two parts:
- 2.2.1.1 Part I Technical Bid
- 2.2.1.2 Part II Price Bid
- 2.2.2 Tender documents for Technical Bid will be available online on MMRCL website & e-tendering portal of MMRCL. The date of sale, receipt and opening of the technical bids is available in NIT. The technical bid will have to be uploaded online by the tenderers complete with the following:
- 2.2.2.1 Complete tender document (Part-I), as available on MMRCL e-tendering portal including the -schedule of work (**without indicating the price**) duly signed for acceptance of all terms and conditions.
- 2.2.2.2 Complete technical particulars of all equipment & materials as per list attached.
- 2.2.3 The tenderers are advised not to deviate from the technical specifications/ items, commercial terms and conditions of NIT: Hike terms of payment, guarantee, escalation etc.
- 2.2.4 The Technical Bid only, shall be opened first on the due date and time, as specified in NIT in the presence of tenders or their authorized representatives, who wish to remain present.

- 2.2.5 Scrutiny/evaluation of the Technical Bid shall be done by MMRCL. In case it is found that the technical bid of a tenderer is not in line with NIT specification requirements and/or contains many deviations, the department reserves the right to reject the technical bid of such firms (s) without making any reference to the tenderer (s).
- 2.2.6 The part II of the tender i.e. price bid will be opened by the Competent Authority in the presence of the representatives of the tenderers who wish to be present.
- 2.2.7 The tenderers will have to fill up their rates only in the Price Bid (Part II of tender) available online in stipulated format. Tenders in which the price bids are given in any other format are liable to be rejected.
- 2.2.8 In the price bid, there shall be no conditions whatsoever. In case any tenderer mentions any condition including conditional rebates in their price part, tender shall be rejected forthwith. A tenderer will also not be allowed to withdraw or modify any condition at a time after the technical bids have been accepted and the decision to open the price bid has been taken by the department.
- 2.2.9 The department reserves the right to reject any, or all the Price bids and call for fresh prices/tenders as the case may be without assigning any reason.

3. Terms of Payment:

The following percentage of contract rates for the various items included in the contract shall be payable against the stage of work shown herein.

- 3.1 80% after initial inspection and delivery at site in good condition on pro-rata basis.
- 3.2 10% after completion of installation in all respect.
- 3.3 Balance 10% will be paid after testing, commissioning trial run & handing over to the department for beneficial use.
- 3.4 Security Deposit: Security Deposit shall be deducted from each running bill and the final bill to the extent of 10% of the gross amount payable subject to maximum limit of 5% of the tendered value of work. The earnest money deposit (EMD) shall be adjusted against this security deposit. The security deposit shall be released on the expiry of defect liability period stipulated in the contract.

4. Rates:

- 4.1 The rates quoted by the tenderer, shall be firm and inclusive of all taxes (excluding GST), duties and levies and all charges for packing forwarding, insurance, freight and delivery, installation, testing, commissioning etc. at site i/c temporary constructional storage, risks, overhead charges general liabilities/obligations and clearance from local authorities. However, the GST shall be paid separately and will **not** be part of Price Bid.
- 4.2 The contractor has to carry out routine & preventive maintenance for 12 months from the date of handing over. Nothing extra shall be paid.

5. Completeness of tender:

All sundry equipment, fittings, unit assemblies, accessories, hardware items, foundation bolts, termination lugs for electrical connections, and all other items which are useful and necessary for efficient assembly and installation of equipment

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and components of the work shall be deemed to have been included in the tender irrespectively of the fact whether such items are specifically mentioned in the tender documents or not.

6. For item/ equipment requiring initial inspection at manufacturer's works the contractor will intimate the date of testing of equipment at the manufacturer's works before dispatch. MMRCL also reserves the right to inspect the fabrication job at factory and the successful tenderer has to make the arrangement for the same. The successful tenderer shall give sufficient advance notice regarding the dates proposed for such tests/ inspection to the department's representative(s) to facilities his presence during testing/ fabrication. The Engineer-in-charge at his discretion' may Witness such testing/ fabrication. The cost of the Engineer's visit to the factory will be borne by the Department. Also equipment may be inspected at the Manufacturer's premises, before dispatch to the site by the contractor.

7. Storage and custody of materials:

The Lift machine room may be used for storage of sundry materials and erection equipment if available or else the agency has to make his own arrangement. No separate storage accommodation shall be provided by the department. Watch and ward of the stores and their safe custody shall be the responsibility of the contractor till the final taking over of the installation by the department.

8. Care of the Building:

Care shall be taken by the contractor while handling and installing the various equipment and components of the work to avoid damage to the building. He shall be responsible for repairing all damages and restoring the same to their original finish at his cost. He shall also remove at his cost all unwanted and waste materials arising out of the installation from the site of work.

9. Completion of period

The completion period of 300 days (Including Monsoon) indicated in the tender documents is for the entire work of planning, designing, supplying, installation, testing, commissioning and handing over of the entire system to the satisfaction of the Engineer-in-charge.

10. Performance Guarantee:

- 10.1The tender shall guarantee among other things, the following
- 10.1.1 Quality, strength and performance of the materials used
- 10.1.2 Safe mechanical and electrical stress on all parts under all specified conditions of operation
- 10.1.3 Satisfactory operation during the maintenance period
- 10.2The successful tenderer shall submit an irrevocable performance guarantee of 5% of the tendered amount in addition to other deposits mentioned elsewhere in the contract for his proper performance of the-contract agreement within 15 days of issue of letter of acceptance. This guarantee shall be in the form of government securities or fixed deposit receipts or guarantee bonds of any scheduled bank or the State Bank of India in the specified format. The performance guarantee shall be initially valid up to the stipulated date of completion plus 60 days beyond. This bank guarantee shall be kept valid till the recording of completion certificate for the work by the competent authority.

11.Guarantee

11.1 All equipment shall be guaranteed for a period of 24 months from the date of taking over the installation by the department against unsatisfactory performance and/or break down due to defective design, workmanship of material. The equipment or components, or any part thereof, so found defective during defect liability period shall be forthwith repaired or replaced free of cost, to the satisfaction of the Engineer-in-Charge. In case it is felt by the department that undue delay is being caused by the contractor in doing this, the same will be got done by the department at the risk and cost of the contractor. The decision of the Engineer-in-Charge in this regard shall be final.

12. Power Supply

Electric: Contractor should make their own arrangement for electricity required for installation charges.

13. Water Supply

No Water supply shall be made available by MMRCL.

14. Data Manual and Drawings to be furnished by the tenderers:

- 14.1 With Tender: The tenderer shall furnish along with the tender, detailed technical literature, pamphlets and performance data for appraisal and evaluation of the offer.
- 14.2 After Award of work
 - 14.2.1 The successful tenderer would be required to submit the following drawings within 15 days of award of work for approval before commencement of installation.
 - 14.2.1.1 All general arrangement drawings.
 - 14.2.1.2 Details of foundations for the equipment, load data, location etc. of various assembled equipment as may be needed generally by other agencies for purpose of their work. The data will include breaking load on guides, reaction of buffers on lift pits reaction on support points in machine room, lift well etc.
 - 14.2.1.3 Complete layout dimensions for every unit/ group of units with dimensions required for erection purposes.
 - 14.2.1.4 Any other drawing/ information not specifically mentioned above but deemed to be necessary for the job by the contractor.
- **15.** The successful tenderer should furnish well in advance Eight (8) copies of detailed instructions and manuals of manufacturers for all items of equipment regarding installation, adjustments operation and maintenance i/c preventive maintenance & trouble shooting together with all the relevant data sheets, safe parts catalogue and workshop procedure for repairs, assembly and adjustment etc. all in triplicate.

16. Extent of work

16.1 The work shall comprise of entire labour including supervision and all materials necessary to make a complete installation and such tests and adjustments and commissioning as may be required by the department. The term complete

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installation shall not only mean major items of the plant and equipment covered by specifications but all incidental sundry components necessary for complete execution and satisfactory performance of installation with all layout charts whether or not those have been mentioned in details in the tender document in connection with this contract.

- 16.2 Minor building works necessary for installation of equipment, foundation, making of opening in walls or in floors and restoring to their original condition, finish and necessary grouting etc. as required.
- 16.3 Maintenance (Routine & preventive) for two years from date of completion and handing over.
- 16.4 The work is turnkey project. Any item required for completion of the project but left inadvertently shall be executed with- in the quoted rates.

17.Inspection and testing:

- 17.1 Copies of all documents of routine and type test certificates of the equipment carried out at the manufacturer's premises shall be furnished to the Engineer-in-charge and consignee.
- 17.2 After completion of the work in all respect the contractor shall offer the installation for testing and operation.

18.Validity

Tenders shall be valid for acceptance for a period of 90 days from the date of opening of price bid. In exceptional circumstances, prior to expiry of the original time limit, the Employer may request that the bidders may extend the period of validity for a specified additional period. The request and the bidders" responses shall be made in writing or by cable. A bidder may refuse the request without forfeiting his Bid Security. A bidder agreeing to the re-quest will not be required or permitted to modify his bid but will be required to extend the validity of his bid security for a period of the extension.

19. Compliance with Regulations and Indian standards

- 19.1 All works shall be carried out in accordance with relevant regulation, both statutory and those specified by the Indian Standards related to the works covered by this specification. In particular, the equipment and installation will comply with the following: -
 - (i) Factories Act.
 - (ii) Indian Electricity Rules
 - (iii) I.S. & BS Standards as applicable
 - (iv) Workmen's compensation Act
 - (v) Statutory norms prescribed by local bodies like SRA, PWD, MCGM, etc.
- 19.2 Nothing in this specification shall be construed to relieve the successful tenderer of his responsibility for the design, manufacture and installation of the equipment with all accessories in accordance with currently applicable statutory regulations and safety codes.
- 19.3 Successful tenderer shall arrange for compliance with statutory provisions of safety regulations and requirements of safety codes in respect of labour employed on the work by the tenderer. Failure to provide such safety requirement would make the

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tenderer liable for penalty of 350,000/- for each default. In addition, the department will be at liberty to make arrangement for the safety requirements at the cost of tenderer and recover the cost thereof from him.

20. Indemnity

The successful tenderer shall at all times indemnify the department, consequent on this works contract. The successful tenderer shall be liable, in accordance with the Indian Law and Regulations for any accident occurring due to any cause and the department shall not be responsible for any accident or damage incurred or claims arising therefrom during the period of erection, construction and putting into operation the equipment and ancillary equipment under the supervision of the successful tenderer in so far as the latter is responsible. The successful tenderer shall also provide all insurance including third party insurance as may be necessary to cover the risk. No extra payment would be made to the successful tenderer due to the above.

21.Erection Tools

No tools and tackles either for unloading or for shifting the equipment for erection purposes would be made available by the department. The successful tenderer shall make his own arrangement for all these facilities.

22. Cooperation with other agencies

The successful tender shall co-ordinate with other contractors and agencies engaged in the

building, if any, and exchange freely all technical information so as to make the execution of this contract smooth. No remuneration should be claimed from the department for such technical cooperation. If any unreasonable hindrance is caused to other agencies and any completed: portion of the work has to be dismantled and redone for want of cooperation and coordination by the successful tenderer during the course of work, such expenditure incurred will be recovered from the successful tenderer if the restoration work to the original condition or specification of the dismantled portion of the work was not undertaken by the successful tenderer himself.

23. Mobilization Advance

No mobilization advance shall be paid for this work.

24. Insurance and Storage

All consignments are to be duly insured up to the destination from warehouse to warehouse at the cost of the supplier. The insurance covers shall be valid till the equipment is handed over duly installed, tested and commissioned.

25. Verification of correctness of Equipment at Destination

The contractor shall have to produce all the relevant records to certify that the genuine equipment from the manufacturers has been supplied and erected.

26. Painting

This shall include cost of painting of entire exposed iron work complete in the installation. All equipment works shall be painted at the works before dispatch to the site.

27.Training

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The scope of works includes on job technical training of two persons at site. Nothing extra shall be payable on this account.

28. Maintenance

- 28.1 Sufficient trained and experienced staff shall be made available to meet any exigency of work during the defect liability period of two years from the handing over of the installation.
- 28.2 The maintenance, routine as well as preventive for two years from the date of taking over the installation as per manufacturer's recommendation shall be carried out and the record of the same shall have to be maintained.

29. Interpreting Specifications

In interpreting the specifications, the following order of decreasing importance shall be followed in case of contradictions:

- (a) Schedule of quantities
- (b) Technical specifications
- (c) Drawing (if any)
- (d) General Specifications
- (e) Relevant IS or other international code in case IS code is not available.
- **30.** A separate supplementary agreement shall be made with the successful tenderer for sub head II of schedule-of work i.e. Comprehensive Maintenance for 2 years along with defect liability period of 2 years. The payment for comprehensive maintenance shall be made quarterly after the end of each quarter.

<u>CHAPTER 6</u> <u>SCOPE OF WORK AND TECHNICAL</u> <u>PARTICULARS</u>

Contractor

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6. SCOPE OF WORK AND TECHNICAL PARTICULARS

A. <u>Scope of Work:</u>

- Supply, Installation, Testing and Commissioning of 12 nos. of Lifts/Elevators (6nos. of 612Kg / 9Person, and 6nos. of 408Kg/6 Person) including 2 years AMC work at Rehabilitation site of Mumbai Metro Rail Corporation Limited at Building No. 10 A to F Wing (2 lifts in each wing) situated in HDIL Premier Compound, Kurla, Mumbai, pin code:- 400070.
- 2. The work also includes buyback of existing lift units installed at the site, for this contactors are requested to visit the site and carry out the detailed inspection and quote the price accordingly.
- 3. The contractor shall provide modern and Eco-Efficient technology Elevators constructed to comply with the specification and recognised standards and designed for safe efficient operation taking into account the specific characteristics of the operating environment of Mumbai. Regenerative solutions and LED lighting system shall be incorporated.
- 4. The contractor shall be responsible for the provision of complete installation of Lifts/Elevators in total conformity with the Codes. It is the Contractor's responsibility to comply with all Codes requirements even if the same is not specifically mentioned in this specification. It is the Contractor's responsibility to coordinate and cooperate with the other contractors on issues related to the safety of the installation works at all stages.
- 5. The Contractor shall be fully responsible for obtaining relevant safety certificate or license or any other documents required from statutory authorities for commissioning the regular operation of Lifts/Elevators. The renewal of the license/safety certificate during AMC if required will also be the responsibility of the contractor. Fee, if any for obtaining such license/ certificate shall be borne by the contractor.
- 6. All minor civil works will have to be done by the contractor including holes for armoured cable entry, louvers and cut-outs etc. or modifications required for installation of the equipment and restoring to final finishes.
- 7. The proposed capacities, sizes, ratings of equipment in lift/elevator system, as a result of the design development shall be demonstrated by a proper design and testing / simulation study and subject to review by the MMRC.
- 8. The Defect Liability Period will be of 02 Years, post successful handing over of the Lifts/Elevators. The contractor shall also provide the liftmen as stated in contract data at his cost and risk. Accordingly, the cost shall be quoted in the price bid.

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B. <u>Technical Particulars</u>

A. 612 Kg/ 09 Passengers Lift, Total Floor: 12, Total Stops: 13, Height of Travel: 34 mtrs.

Sl. No.	ITEM DESCRIPTION		For 612Kg/ 09 Passengers Lift
DESIGN CRITER	IA & PERFORMANCE		
1	Rated Load, Q	kg	612
2	Rated Speed	m/s	1
3	Car Size (Width x Depth)	mm	1000 x 1600
	Shaft Size(Width x Depth)		1700 x 2000
4	Levelling Accuracy (Typical)	mm	± 5
5	Max. Sill Load (Car and Landing)	kg	400
7	Motor Insulation Class	-	F
8	Safety Factor of Suspension Ropes(Min.)	-	12
	Type and No. of ropes:		Flat Belt type and numbers as per IS 14665
9	All Operating Push Buttons	-	50mm Square
RIDE COMFORT			
10	Acceleration/Decele ration Rate (Adjustable)	m/s2	0.5
11	Max. Jerk	m/s3	2
12	Max. Vertical Vibration In Car	Gal	20 Pk -Pk (1 -100 Hz)
13	Max. Lateral Quaking	Gal	12 Pk-Pk
14	Noise In Car (with Fan in operation)	dB(A)	Mean 55
SHAFT EQUIPM	• • • • • •		ŀ
15	Min. Size of Car Guide Rails	mm	As per IS 14665
16	Min. Size for Counterweight Guide Rails	mm	As per IS 14665
17	Car Buffer		Spring/Oil Buffer

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18	Counterweight Buffer		Spring/Oil Buffer
19	Car Sling		Fabricated from Sheet steel. Cold Rolled Steel up to 4mm and Hot Rolled Steel above 4 mm thick
20	Counterweight frame		Fabricated from Sheet steel. Cold Rolled Steel up to 4mm and Hot Rolled Steel above 4 mm thick
21	Over speed Governor with Type	est groove -	Centrifugally operated
22	Car Safety Gear -		Progressive type
23	Counterweight - Safety Gear		Progressive type
24	Over Speed Governor (O weight switch	SG) tension	Required

26	Water Sensor In	Pit	Required
27	Verticality Tolerance	%	3
CAR			
28	Guide shoes		Spring loaded guide shoe with replaceable liners
29	Car panel thickne	ess	Minimum 1.5mm thick
30	Car Fan	-	Cross Flow Fan with Stainless Steel Blade -Min 2 no's and fulfilling air change requirement with auto cut off in no command stage within 45 sec.
31	Car Junction box	Protection	IP55
32	Car Handrail		On both sides (size and position as per IS 14665)
33	Buffer Rail		On the rear side of car
34	Mirror		Min 8 mm thick Laminated safety type
DOORS			
35	Car Doors	-	Centre opening VF drive with close loop power doors 800 mm Wide x 2000 mm High
36	Landing Doors	-	Centre opening ,both door panels mechanically and electrically locked individually

37	Protection class for Car and Landing doors	IP54 or as per IS 14665
38	Steel Door thickness	Minimum 1.5 mm thick Stainless Steel sheet
39	Fire rating for landing & car doors	(Car doors) Stainless steel Scratch Resistant with 1 hrs. Fire rated. (Landing doors) Stainless steel Scratch Resistant with 1 hrs. Fire rated.
40	Car door lock	Required (Double lock) or as per IS 14665
41	Door Safety - Devices	3D Curtain of light, Door pressure limiter & 2 Photo cells in car front wall.

42	Landing - Architraves	Frame in the landings to house the landing signalization
Machine	1	
43	Motor	Permanent Magnet Synchronous Motor (P.M.S.M)
44	Motor-Insulation Class / Type of Enclosure	Class F / IP21
LIFT MAJOR COMPONENTS	FINISH	
45	Car panel	Stainless steel Scratch Resistant
46	Car entrance panel	Stainless steel Scratch Resistant
47	Car operating panel	Stainless steel Scratch Resistant
48	Car ceiling	Stainless steel Scratch Resistant
49	Handrail	Stainless steel Mirror polished
50	Car flooring	20 mm thick Granite flooring matches to the lift lobby floor finish
51	Landing entrance frame	Stainless steel Scratch Resistant
52	Landing Architrave	Stainless steel Scratch Resistant

53	Doors-Car & Landing	(Landing doors)	
		1. Stainless steel Scratch	
		Resistant with 1 hrs. Fire	
		rated.	
		Concourse to Platform	
		(Car doors)	
		1. Stainless steel Scratch	
		Resistant with 1 hrs. Fire	
		rated	
54	Guide Bracket Assembly	Hot dip Galvanized/Spray	
		Galvanized	
55	Car/Counter weight guide	Machined surfaces -Rust	
	rail	protective Film; Other	
		Surfaces Epoxy painted.	
56	Counter weight Guard	Spray Galvanized	
57	Counter weight frame	Hot dip Galvanized / Spray	
		Galvanized	
58	Filler Weight	Epoxy Painted.	
59	Sling	Hot dip Galvanized /Spray	
	_	Galvanized	
60	Floor Assembly	Spray Galvanized	
61	Roof Assembly	Spray Galvanized	

ELECTRICAL BUILDI	NG INTERFACE		
62	Mains Supply Voltage	-	415 VAC, 3 -phase (- 15%, +10%)
63	Frequency	-	50 Hz ± 3%
64	Diversity Factor In Common Feeder	-	1 for one; 0.9 for two and 0.8 for three Lifts
65	Main Fuses	Amps	As per Applicable statutory act or Manufacturer's specification
66	Main Switch Rating	Amps	As per Applicable statutory act or Manufacturer's specification
67	Main Switch Position (External)	-	Recommended on Top most landing
68	Shaft Lighting	-	Required
69	Signalization Voltage	-	12 to 30 VDC
70	ELCB rating in Isolate	or Panel	As per Applicable statutory act or Manufacturer's specification
CONTROL SYSTEMS			

Contractor

71	Control Type		Full Collective Simplex
			control system for Single
			Lifts and Duplex control
			system for two lifts (side
			by side)
72	Controller	-	Microprocessor based
			with Serial
			Communication.
			Controller in shaft and
			user interface in landing.
73	Drive System	_	Variable Frequency
, 5			Regenerative Drive (VF)
			with feedback control
			(closed loop)
74	Power Factor		0.9 and above
75	Auto Fan Cut-Off	-	Automatically cuts off
75		-	fan when there is no
			calls for a set time
	MC		
CODES AND NOR			
76	Safety Codes		IS:15785; IS:15530 ;
			IS:14665,
77	Electrical Protection	n	IP21 for Panels/Boxes
			above Top terminal
			Landing and IP54 for
PERIPHERAL			
FUNCTIONS			
78	Communication Sy	stem	Intercom – Hands free in
			Car (with feedback),
79	Alarm		In each landing and SCR ,
			activated by Alarm
			button in Car

/9	Alarm	In each landing and SCR,
		activated by Alarm
		button in Car
80	Attendant Function	Operated with Key
		switch
81	LAS (lift announcement system)	English and Hindi
82	Load Weighing Device (Overload)	Audio Visual indication
		in English and
		Hindi/Marathi with
		Music (Programmable
		and field adjustable)
83	Full Load Bypass	By passes landing calls
		when load in car exceeds
		80% - 100% of rated
		load (field adjustable)
84	Automatic Rescue Device	Required
85	Fireman Drive	Required
86	Surge Suppressor / Over Voltage	Required

	Drotaction	
87	Protection	Required concretely for
07	Surge Suppressor / Over Voltage Protection	Required separately for Control Circuit also
88	Battery power supply for Car lights,	Required
	Intercom, Cabin Fans.	
89	Anti man-trap features	Lift shall have the
		following software
		features to avoid
		Mantrap situation.
		1. The doors shall open
		and close once after
		power up. (only on next
		level) 2. The doors shall open
		on pressing door open
		button and close after
		completion of correction
		drive.
		3. The doors shall open
		and close once after
		completion of sync.
		Drive.
		4. The Lift doors shall
		open automatically if the
		Lift is at a floor level and
		the safety chain is
		broken.
SIGNALISATION		
90	Car Operating Panel	Handicapped feature
		with Braille Buttons
91	COP finish	Stainless steel Scratch
		Resistant
92	Car Indicator	TFT LCD Display
93	Landing Indicator	TFT LCD Display
VENTILATION 94	Air Chango	20 Air Change per hour
95	Air Change Noise Level of Fan used for Ventilation	20 All Change per noul
75		The noise level of Fan
		used for ventilation shall
		not exceed 55 dB at a
		distance of 1 meter away
		from the fan inside the
		Lift car.

B. 408 Kg/ 06 Passengers Lift , Total Floor: 12, Total Stops: 13, Height of Travel: 34 mtrs.

Sl. No.	ITEM DESCRIPTION	ITEM DESCRIPTION	
DESIGN CRITE	ERIA & PERFORMANCE		·
1	Rated Load, Q	kg	408
2	Rated Speed	m/s	1
3	Car Size (Width x Depth)		1100(W) x 1000 (D)
	Shaft Size(Width x Depth)		1640mm(W) x 1740mm(D)
4	Levelling Accuracy (Typical)	mm	± 5
5	Max. Sill Load (Car and Landing)	kg	400
7	Motor Insulation Class	-	F
8	Safety Factor of Suspension Ropes(Min.)	-	12
	Type and No. of ropes:		Flat Belt type and numbers as per IS 14665
9	All Operating Push Buttons	-	50mm Square
RIDE COMFOR	RT	•	
10	Acceleration/Decele ration Rate (Adjustable)	m/s2	0.5
11	Max. Jerk	m/s3	2
12	Max. Vertical Vibration In Car		20 Pk -Pk (1 -100 Hz)
13	Max. Lateral Quaking	Gal	12 Pk-Pk
14	Noise In Car (with Fan in operation)	dB(A)	Mean 55
SHAFT EQUIP	MENT		
15	Min. Size of Car Guide Rails	mm	As per IS 14665
16	Min. Size for Counterweight Guide Rails	mm	As per IS 14665
17	Car Buffer		Spring/Oil Buffer
18	Counterweight Buffer	•	Spring/Oil Buffer
19	Car Sling		Fabricated from Sheet steel. Cold Rolled Steel up to
		69	4mm and Hot

			Rolled Steel above 4 mm thick
20	Counterweight frame		FabricatedfromSheetsteel.ColdRolledSteelupto4mmandHotRolledSteelabove4 mmthick
21	Over speed Governor with test groove - Type		Centrifugally operated
22	Car Safety Gear	-	Progressive type
23	Counterweight Safety Gear	-	Progressive type
24	Over Speed Governor switch	(OSG) tension weight	Required

26	Water Sensor In Pit	Required
27	Verticality % Tolerance	3
CAR		
28	Guide shoes	Spring loaded guide shoe with replaceable liners
29	Car panel thickness	Minimum 1.5mm thick
30	Car Fan -	Cross Flow Fan with Stainless Steel Blade -Min 2 no's and fulfilling air change requirement with auto cut off in no command stage within 45 sec.
31	Car Junction box Protection	IP55
32	Car Handrail	On both sides (size and position as per IS 14665)
33	Buffer Rail	On the rear side of car
34	Mirror	Min 8 mm thick Laminated safety type
DOORS		

35	Car Doors -	Centre opening VF
		drive with close
		loop power doors
		800 mm Wide x
		2000 mm High
36	Landing Doors -	Centre opening
		,both door panels
		mechanically and
		electrically locked
		individually
37	Protection class for Car and Landing doors	IP54 or as per IS
		14665
38	Steel Door thickness	Minimum 1.5 mm
		thick Stainless Steel
		sheet
39	Fire rating for landing & car doors	(Car doors)
		Stainless steel
		Scratch Resistant
		with 1 hrs. Fire
		rated.
		(Landing doors)
		Stainless steel
		Scratch Resistant
		with 1 hrs. Fire
		rated.
40	Car door lock	Required (Double
		lock) or as per IS
		14665
41	Door Safety -	3D Curtain of light,
	Devices	Door pressure
		limiter & 2 Photo
		cells in car front
		wall.
		TT GITT

42	Landing	-				Frame in the landings
	Architraves					to house the landing
						signalization
Machine						
43	Motor					Permanent Magnet
						Synchronous Motor
						(P.M.S.M)
44	Motor-Insulation	Class	/	Туре	of	Class F / IP21
	Enclosure					
LIFT MAJOR COMPONE	NTS FINISH					
45	Car panel					Stainless steel
						Scratch Resistant

4.0		
46	Car entrance panel	Stainless steel Scratch Resistant
47	Car operating panel	Stainless steel
		Scratch Resistant
48	Car ceiling	Stainless steel
		Scratch Resistant
49	Handrail	Stainless steel Mirror
		polished
50	Car flooring	20 mm thick Granite
		flooring matches to
		the lift lobby floor
		finish
51	Landing entrance frame	Stainless steel
		Scratch Resistant
52	Landing Architrave	Stainless steel
		Scratch Resistant
53	Doors-Car & Landing	(Landing doors)
		1. Stainless steel
		Scratch Resistant
		with 1 hrs. Fire rated.
		Concourse to
		Platform
		(Car doors)
		1. Stainless steel
		Scratch Resistant
		with 1 hrs. Fire rated
54	Guide Bracket Assembly	Hot dip
		Galvanized/Spray
		Galvanized
55	Car/Counter weight guide rail	Machined surfaces -
		Rust protective Film;
		Other Surfaces Epoxy
		painted.
56	Counter weight Guard	Spray Galvanized
57	Counter weight frame	Hot dip Galvanized /
50		Spray Galvanized
58	Filler Weight	Epoxy Painted.
59	Sling	Hot dip Galvanized
		/Spray Galvanized
60	Floor Assembly	Spray Galvanized
61	Roof Assembly	Spray Galvanized

ELECTRICAL BUILDING INTERFACE			
62	Mains Supply	-	415 VAC, 3 -phase (-15%,
	Voltage		+10%)
63	Frequency	-	50 Hz ± 3%
64	Diversity Factor In	-	1 for one; 0.9 for two and

act or Main facturer'specification 66 Main Switch Rating Amps As per Applicable statutor act or Manufacturer'specification 67 Main Switch Position (External) - Required 68 Shaft Lighting - Required 69 Signalization - 12 to 30 VDC 70 ELCB rating in Isolator Panel As per Applicable statutor act or Manufacturer'specification 70 ELCB rating in Isolator Panel As per Applicable statutor act or Manufacturer'specification 71 Control Type Full Collective Simple control system for Singlu Lifts and Duplex control system for two lifts (side b side) 72 Controller - Microprocessor based with Serial 73 Drive System - Q9 and above 75 Auto Fan Cut-Off - Automatically cuts off fan when there is no calls for a se time 76 Safety Codes IS:15785; IS:15530 IS:14665, IS:14665, 77 Electrical Protection IP21 for Panel/Boxes abov Top terminal Landing an IP54 for 78 Communication System Intercom – Hands free in Ca (with feedback), 79 Alarm In each landing and SCR				
66 Main Switch Rating Amps Act or Manufacturer'specification 67 Main Switch Rating Amps As per Applicable statutor act or Manufacturer'specification 67 Main Switch - Recommended on Top mos landing 68 Shaft Lighting - Required 69 Signalization - 12 to 30 VDC 70 ELCB rating in Isolator Panel As per Applicable statutor act or Manufacturer'specification 71 Control Type Full Collective Simple control system for two lifts (side bridge) 71 Control Type Full Collective Simple control system for two lifts (side bridge) 72 Controller - 73 Drive System - 74 Power Factor - 75 Auto Fan Cut-Off - 74 Power Factor - 75 Auto Fan Cut-Off - 76 Safety Codes IS:15785; IS:15530 77 Electrical Protection IP21 for Panels/Boxes abov Top terminal Landing and PERIPHERAL 79 Alarm In each landing and SCR activated by Alarm button in Car 80 Attendant Function Operated with Key switch		Common Feeder		0.8 for three Lifts
act or Manufacturer' specification 67 Main Switch Position (External) 68 Shaft Lighting 69 Signalization Voltage 70 ELCB rating in Isolator Panel 70 ELCB rating in Isolator Panel 71 Control Type 71 Control Type 72 Control Type 73 Drive System 74 Power Factor 75 Auto Fan Cut-Off 76 Safety Codes 77 Electrical Protection 78 Communication System 79 Alarm 80 Attendant Function	65	Main Fuses	Amps	
Position (External)landing68Shaft Lighting-69Signalization-12 to 30 VDCVoltage-70ELCB rating in Isolator PanelAs per Applicable statutor, act or Manufacturer' specificationCONTROL SYSTEMS71Control TypeFull Collective Simple control system for Single Lifts and Duplex control system for two lifts (side by side)72Controller-73Drive System-74Power Factor-75Auto Fan Cut-Off-76Safety CodesIS:15785; IS:15780 IS:14665,77Electrical Protection PeruptalIS:15785; IS:15530 IS:14665,77Electrical ProtectionIP:21 for Panels/Boxes abov, Top terminal Landing and IP:54 for78Communication SystemIntercom - Hands free in Ca (with feedback),79AlarmIn each landing and SCR activated by Alarm button in Car80Attendant FunctionOperated with Key switch	66	Main Switch Rating	Amps	
69 Signalization Voltage - 12 to 30 VDC 70 ELCB rating in Isolator Panel As per Applicable statutor act or Manufacturer' specification CONTROL SYSTEMS - Full Collective Simple control system for Single Lifts and Duplex control system for two lifts (side by side) 72 Controller - Microprocessor based with Serial Communication Controller in shaft and use interface in landing. 73 Drive System - Variable regenerative Drive (VF) with feedback control (closed loop) 74 Power Factor - 0.9 and above 75 Auto Fan Cut-Off - Automatically cuts off fan when there is no calls for a se time CODES AND NORMS - IS:15785; IS:15530 IS:14665, IS:15785; IS:15530 IS:14665, 77 Electrical Protection IP21 for Panels/Boxes abov Top terminal Landing and IP54 for 78 Communication System Intercom - Hands free in Ca (with feedback), 79 Alarm In each landing and SCR activated by Alarm button in Car 80 Attendant Function Operated with Key switch	67		-	Recommended on Top most landing
69 Signalization Voltage - 12 to 30 VDC 70 ELCB rating in Isolator Panel As per Applicable statutor act or Manufacturer' specification CONTROL SYSTEMS - Full Collective Simple control system for Single Lifts and Duplex control system for two lifts (side by side) 72 Controller - Microprocessor based with Serial 73 Drive System - Variable 74 Power Factor - 0.9 and above 75 Auto Fan Cut-Off - Automatically cuts off fan when there is no calls for a se time CODES AND NORMS - IS:15785; IS:15530 IS:14665, IS:15785; IS:15530 IS:14665, 77 Electrical Protection IP21 for Panels/Boxes abov Top terminal Landing and IP54 for 78 Communication System Intercom - Hands free in Ca (with feedback), 79 Alarm In each landing and SCR activated by Alarm button in Car	68	Shaft Lighting	-	Required
CONTROL SYSTEMS act or Manufacturer's specification 71 Control Type Full Collective Simple: control system for Singh Lifts and Duplex control system for two lifts (side by side) 72 Controller - 73 Drive System - 74 Power Factor - 75 Auto Fan Cut-Off - 76 Safety Codes IS:15785; IS:15530 IS:14665, 77 Electrical Protection IP21 for Panels/Boxes abov. Top terminal Landing and IP34 for 78 Communication System Intercom – Hands free in Ca (with feedback), 79 Alarm In each landing and SCR active dy Alarm button in Car 80 Attendant Function Operated with Key switch	69	Signalization	-	
71Control TypeFull Collective Simple: control system for Single Lifts and Duplex control system for two lifts (side by side)72Controller-Microprocessor based with Serial Communication Controller in shaft and use interface in landing.73Drive System-Variable Regenerative Drive (VF) with feedback control (closed loop)74Power Factor-0.9 and above75Auto Fan Cut-Off-Automatically cuts off fan when there is no calls for a se time76Safety CodesIS:15785; IS:15530 IS:14665,77Electrical ProtectionIP21 for Panels/Boxes abov. Top terminal Landing and IP54 for78Communication SystemIntercom - Hands free in Ca (with feedback),79AlarmIn each landing and SCR activated by Alarm button in Car80Attendant FunctionOperated with Key switch	70	ELCB rating in Isolat	or Panel	
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73Drive System-Variable Regenerative Drive (VF) with feedback control (closed loop)74Power Factor-0.9 and above75Auto Fan Cut-Off-Automatically cuts off fan when there is no calls for a se timeCODES AND NORMSAutomatically cuts off fan when there is no calls for a se time76Safety CodesIS:15785; IS:15530 	72	Controller	-	Serial Communication. Controller in shaft and user
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Year(with feedback),79AlarmIn each landing and SCR activated by Alarm button in Car80Attendant FunctionOperated with Key switch				
activated by Alarm button in Car 80 Attendant Function Operated with Key switch	78	Communication Syste	m	Intercom – Hands free in Car (with feedback),
				In each landing and SCR , activated by Alarm button in Car
81 LAS (lift announcement system) English and Hindi				
73	81	LAS (lift announceme		English and Hindi

Advisor (Coordination)

82	Load Weighing Device (Overload)	Audio Visual indication in English and Hindi/Marathi with Music (Programmable and field adjustable)
83	Full Load Bypass	By passes landing calls when load in car exceeds 80% - 100% of rated load (field adjustable)
84	Automatic Rescue Device	Required
85	Fireman Drive	Required
86	Surge Suppressor / Over Voltage Protection	Required
87	Surge Suppressor / Over Voltage Protection	Required separately for Control Circuit also
88	Battery power supply for Car lights, Intercom, Cabin Fans.	Required
89	Anti-man-trap features	Lift shall have the following software features to avoid Mantrap situation. 1. The doors shall open and close once after power up. (only on next level) 2. The doors shall open on pressing door open button and close after completion of correction drive. 3. The doors shall open and close once after completion of sync. Drive. 4. The Lift doors shall open automatically if the Lift is at a floor level and the safety chain is broken.
SIGNALISATION		
90	Car Operating Panel	Handicapped feature with Braille Buttons
91	COP finish	Stainless steel Scratch Resistant
92	Car Indicator	TFT LCD Display
93	Landing Indicator	TFT LCD Display
VENTILATION		
94	Air Change	20 Air Change per hour
95	Noise Level of Fan used for Ventilation	The noise level of Fan used for ventilation shall not exceed 55 dB at a distance of 1 meter away from the fan inside the Lift car.
	74.	

CHAPTER 7

<u>Terms/conditions/specifications i.e. (scope</u> <u>of work) for servicing and maintenance of</u> <u>lifts</u>

Advisor (Coordination)

PREAMBLE

It will be sole responsibility of the contractor to keep the Lift in safe working condition at all the time as per relevant Standards, Rules and Regulations in force. The contractor should have License from the Lift inspector and permission from the appropriate authorities to service and maintain adequate number of lifts.

- 1. The contractor shall use the services of trained, appropriately skilled personnel who shall be directly employed and appointed by the contractors. They shall be qualified and experienced to keep the entire Lift and its equipment in proper working condition. They will also take all reasonable care to maintain the equipment properly adjusted and they will take all reasonable care to maintain the Lifts in efficient, reliable, neat, tidy and safe operational condition so as to meet all the P.W.D.'s / Lift Inspectors requirements.
- 2. The contractors shall give service and maintenance program every month in advance. The contractor shall direct their said personnel as per scheduled program given and approved by user department to the above said Lifts once in a month during working hours to examine, lubricate and adjust the equipment of the Lifts in presence of either MMRC Engineer or concerned person of user department. The contractors shall obtain signature from person of user department on the servicing/maintenance documents with Names, Designation etc. on the letter head of the contractors for each monthly servicing repair and maintenance and produce the same in every quarter along with bills.
- 3. The contractor shall check, adjust, clean and lubricate all the items mentioned below and necessary entry shall be made in the logbook and signed, at least once a month.
 - 1. Abrasion in main Diverter sheaves.
 - 2. Wear and Tear in Main Ropes.
 - 3. Break setting and leveling.
 - 4. Normal operations of all gates.
 - 5. Gate Lock inter-locking of all gates.
 - 6. Guide shoes, gate lock ram checking.
 - 7. Three phase safety tipping
 - 8. Over speed governor checking
 - 9. Buttons, Signal checking of all floors.
 - 10. Condition of cable wiring etc.
 - 11. All contacts, circuits, relay should be checked for physical condition and their settings.
 - 12. Condition of motor, driver and all major equipment with proper oiling and greasing of the same.
 - 13. Machine, thrust bearings, bushings worm shaft and wheel.
 - 14. Lift motor, motor generator, motor windings, rotating element,

commutator

and bearings.

15. Controller, P.C.B. Drives, transducer, resistors, condenser, power amplifier,

transformers, coils, contacts, leads, tinning device, dash pots etc.

16. Governor, Governor sheave, shaft assembly, bearings, contacts and Governor

jaw.

- 17. Car and all landing gates, hoist way door, interlocks, door hangers, door contacts, auto doors safety shoes, deflector or secondary shoes.
- 18. Guide rails, car & counterweight and their guide shoes, buffer springs.
- 19. Break safety system break contact lining and components.
- 20. Clean the lift well properly.
- 21. Clean the cabin cage from inside and outside, the fan, the Lift pit etc. properly.
- 22. Car and hall buttons, position indicators, hall lanterns, direction indicators,

landing signals fixtures, top and bottom safety switches etc.

- 23. Examine the ropes and their attachments, safety devices, door locks, worms and gears, all moving parts etc. and functioning of overload indication devices.
- 4. If the armature winding of Lift motor is found burnt during normal use, the same shall be replaced/ repaired immediately at the cost of contractor. The contractor shall replace all the spare parts free of cost immediately for normal wear and tear whenever necessary. The yearly cost of the service and maintenance shall be inclusive of the above. In case the above becomes necessary due to reasons beyond the control of the contractors, Rewinding/Replacement charges will be borne by MMRC in which case the decision of Advisor (Coordination) shall be final.
- 5. The contractor shall arrange to direct the maintenance personnel to attend the Lifts immediately after receipt of break down call from the MMRC Engineer or authorized representative of the user department. The contractors shall give priority in their service, repair and manufacturing facilities to restore the equipment to normal service. In no case, the breakdown shall be kept unattended for more than two hours.
- 6. The contractors shall attend to any number of breakdown calls between 6.00 A.M. to 10.00 P.M. on all days including Sundays and Holidays and in case of Emergency during night hours under unavoidable circumstance.
- 7. The contractor shall arrange to repair the Lift installation expeditiously without causing any inconvenience to the user department, failing which the repairs shall be got done at risk and cost of the contractors. However, in case of any major breakdown the contractor shall consult the Engineer concerned to carry out the repairs, which shall be completed within a day. If any of the lift installation is not attended or not repaired for more than 15 days, penalty of Rs. 200/- per day will be charged, till the lift is put back in operation after due repairs. The contractor shall not be paid the corresponding repair charges proportionately for the said lift. Lifts shall be normally painted after through scrapping once in two years. P.V.C. flooring shall be replaced once in two years. The selection of the Lifts for above works will be made by MMRC authorities.
- 8. The contractors shall inspect the Lift with Engineer concerned along with the Inspector of Lifts of P.W.D. and see that license is renewed with all compliance of P.W.D. requirement whenever called for.

- 9. The contractors shall have to carry out the work of repairs, maintenance and replacement of parts in good workmanship manner as per standard practice & Rules & Regulations of Lift Rules enforce.
- 10. The contractor shall maintain record of all the repair, servicing and maintenance works carried out and shall submit the necessary log- cards duly signed and stamped by MMRC Engineer or authorized person of user department to the office of Deputy General Manager (Civil), Maintenance Cell in MMRC Office at the end of each quarter.

The contractor will furnish the program of servicing and maintenance of Lifts for the whole year with date and timing etc. immediately on receipt of work order to the user department with a copy to Deputy General Manager (Civil), Maintenance Cell in MMRC Office within a week. Any changes in the above scheduled program shall be informed in Advance.

- 11. The contractors shall have to carry out any other work which is not included in the above terms and conditions under the instructions from Deputy General Manager (Civil), Maintenance Cell in MMRC Office with due approval of rates etc. for the satisfactory working of Lifts.
- 12. Before quoting the rates the Tenderers shall inspect the Lift installations. No extra claim whatsoever will be entertained later on during the contract period.
- 13. The contractor will replace all the parts (including indication lamps switches wire, cables, emergency lights batteries etc.) whenever found necessary due to normal wear and tear at their cost.

Further, though the costs of replacement of the following items are not charged extra as the replacement of the same is covered under comprehensive maintenance contract for the normal working of Lifts with usual wear and tear, the contractor shall specifically quote the rates for the following which may become necessary in unusual circumstances:-

- i) Replacement of Ropes.
- ii) Repairs to collapsible gates of car.
- iii) Repairs to collapsible gates of landings
- iv) Car enclosure (removable panels) door panels, hung ceiling, light diffuser, handrails, frames, sills etc.
- v) Automatic Rescue Device.
- vi) Audio Video overload warning indicator.
- vii) Infrared Light Curtain. (for passenger cum stretcher lifts)
- viii) Repairs to cabin fans.
- ix) Rewinding of motors.
- x) Any other items.

The above rates will be applicable when repairs and replacement becomes necessary due to accidents, leakage / seepage of water or such reasons which are beyond the control of contractor. The Engineer of contract will decide the responsibility in such cases whose decision will be final.

14. The complete safety of human Life and the machinery and other parts of the lifts while carrying out the service and maintenance of the Lift will be the responsibility of the contractor. Any damages caused to the property will be recovered from the bills.

- 15. The contract is terminable by either party, giving one calendar months' Notice in writing to his intention to discontinue it.
- 16. In case of disputes Managing Director, MMRC's decision will be final and binding to both parties.
- 17. The tenderer shall specifically state there past experience in maintaining such lifts and also furnish the detailed List of Lifts maintained by them.
- 18. Attend the complaints free of cost whenever called by Corporation.
- 19. Whenever found necessary, the Contractor shall replace the spares and other parts of all the equipment's integrated to the lift operation, safety and statutory requirement free of cost.
- 20. The contractor shall check the performance of the lift after servicing by noting various operating parameters such as temperature control, load, setting etc.
- 21. The contractor shall invariably clean the premises of lift car top, lift pit and lift shaft, after carrying out the servicing work.
- 22. The contractor shall submit a preventive maintenance schedule for each lift and get it approved from the user dept.
- 23. The contractor shall submit the copies of service reports (duly signed by the user dept.) to DGM (Maint.), MMRCL every month.
- 24. The contractor shall have setup to receive & attend the complaints 24 hours a day. The break-down complaint shall be attended within 2 hours from intimation.
- 25. The contractor/firm has to arrange a technically qualified liaison officer in respect of day to day servicing and maintenance of lifts, who will keep regular contact with central office of DGM (Maint.), MMRCL and attend to the defects informed to him immediately. He shall give feedback to MMRC after complying with the rectification / repairs.
- 26. The contractor shall arrange for annual inspection of lifts by the lift inspector, PWD Govt. of Maharashtra during defect liability period. The inspection charges for the same shall be borne by contractors.

<u>CHAPTER 8</u> <u>SCHEDULE OF COMPLETION WORK</u>

Advisor (Coordination)

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Schedule of Completion

Sr.		
No.	Requirement	As offered by the tenderer
	Submission of complete layout drawings of the lifts to	
	MMRC for approval:	
1	15days after date of issue of work order	
	Supply of materials on site:	
2	120 days from the date of approval of layout drawing	
	Installation of lift:	
3	120 days from the date of supply of materials	
	Testing & Commissioning of lift:	
4	45 days from the date of installation	
	Total Contract period:	
5	10 Months (300 days)	

Seal &Signature of Tenderer

Advisor (Coordination)

CHAPTER 9

PRE-CONTRACT INTEGRITY PACT

Advisor (Coordination)

PRE-CONTRACT INTEGRITY PACT

The Bidder commits himself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of his bid or during any pre-contract or post-contract stage in order to secure the contract or in furtherance to secure it and in particular commits himself to the following:-

- 1. The Bidder will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the MMRC, connected directly or indirectly with the bidding process, or to any person, organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the Contract.
- 2. The Bidder further undertakes that he has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the MMRC or otherwise in procuring the Contract or forbearing to do or having done any act in relation to the obtaining or execution of the Contract or any other Contract with the Government for showing or forbearing to show favour or disfavour to any person in relation to the Contract or any other Contract with the Government.
- 3. The Bidder will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.
- 4. The Bidder will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.
- 5. The Bidder, either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or intends to make to officials of the MMRC or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.
- 6. The Bidder shall not use improperly, for purposes of competition or personal gain, or pass on to others, any information provided by the MMRC as part of the business relationship, regarding plans, technical proposals and business details, including

information contained in any electronic data carrier. The Bidder also undertakes to exercise due and adequate care lest any such information is divulged.

- 7. The Bidder commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.
- 8. The Bidder shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.
- 9. The Bidder and their respective officers, employees, agents and advisers shall observe the highest standard of ethics during the Bidding Process. Notwithstanding anything to the contrary contained herein, the Authority may reject an Application without being liable in any manner whatsoever to the Applicant if it determines that the Applicant has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice in the Bidding Process.

For the purposes of this Clause 9, the following terms shall have the meaning herein after respectively assigned to them:

1. "fraudulent practice" means a misrepresentation or omission of facts or suppression of facts or disclosure of incomplete facts, in order to influence the Bidding Process;

2. "coercive practice" means impairing or harming or threatening to impair or harm, directly or indirectly, any person or property to influence any person's participation or action in the Bidding Process;

3. "undesirable practice" means (i) establishing contact with any person connected with or employed or engaged by the Authority with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Bidding Process; or (ii) having a Conflict of Interest; and

4. "Restrictive practice" means forming a cartel or arriving at any understanding or arrangement among Applicants with the objective of restricting or manipulating a full and fair competition in the Bidding Process.

Signature of Tenderer/Bidder

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PROFORMAS

PROFORMA- I (List of Works Completed)

	PROFORMA- I									
Name of the Project	Name of the Employer	Cost of the Project	Date of issue of work Order	Stipulated Date of Completion	Actual Date of Completion	Actual cost of work done	Remarks explaining reasons for delay, if any			
1	2	3	4	5	6	7	8			

Note: Scanned Attested copies of completion/performance certificates from the Engineer-in-charge for each work should be annexed in support of information furnished in the above proforma.

PROFORMA-II

(List of Technical Personnel to be deployed for the work) PROFORMA- II

Sr.	Post	Name	Qualification	Work Experience		
No.						
		(Prime		No. of Years	Name of	
		Candidate/			Projects	
		Alternate)				
1						
2						
3						
4						

Note: Scanned Attested copies of qualification certificates and details of work experience shall be /uploaded

PROFORMA-III

(List of Works in Hand)

S.	Name of	Owner	Cost of	Date of	Stipula	Upto	Slow	Name	Rem
No.	work/p	or	work	comme	t ed	date	progres	and	a rks
	r oject	sponso	(in	n	date of	percen	s if any	address	
	and	ri ng	crores	cement	compl	t age	and	/	
	location	organiz	of	as per	et ion	progre	reasons	telephon	
		a tion	rupees	contrac		s s of	thereof	е	
)	t		work		number	
								of officer	
								to whom	
								referenc	
								e may be	
								made	

Advisor (Coordination)

PROFORMA- IV Litigation History

S. No.	Name of Issue	Date of Start	Status: Award against/Award in Favour of Contractor

PROFORMA-V

(Structure and Organization)

- 1. Name & address of the bidder
- 2. Telephone no./Telex no./Fax no.
- 3. Legal status of the bidder (attach copies of original document defining the legal status)
 - a. An Individual
 - b. A proprietary firm
 - c. A firm in partnership
 - d. A limited company or Corporation
- 4. Particulars of registration with various Government Bodies (attach attested photocopy)

Organization / Place of Registration

1. _____

Registration No.

- 2. ______
- 5. Names and titles of Directors & Officers with designation to be concerned with this work.
- 6. Designation of individuals authorized to act for the organization
- 7. Was the bidder ever required to suspend construction for a period of more than six months continuously after he commenced the construction? If so, give the name of the project and reasons of suspension of work.
- 8. Has the bidder, or any constituent partner in case of partnership firm, ever abandoned the awarded work before its completion? If so, give name of the project and reasons for abandonment.
- 9. Has the bidder, or any constituent partner in case of partnership firm, ever been debarred/black listed for tendering in any organization at any time? If so, give details
- 10. Has the bidder, or any constituent partner in case of partnership firm, ever been convicted by the court of law? If so, give details.
- 11. In which field of Civil Engineering construction, the bidder has specialization and interest?
- 12. Any other information considered necessary but not included above.

Signature of Bidder(s)

Form of Performance Security (Guarantee)

Bank Guarantee Bond

1. We, (hereinafter referred to as "the Bank") hereby undertake to pay to the MMRC an amount not exceeding Rs. (Rupees....... Only) on demand by the MMRC.

3. We, the said bank further undertake to pay the MMRC any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment thereunder and the Contractor(s) shall have no claim against us for making such payment.

4. We, (indicate the name of the Bank) further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the MMRC under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till Engineer-in- Charge on behalf of the MMRC certified that the terms and conditions of the said agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges this guarantee.

5. We, (indicate the name of the Bank) further agree with the MMRC that the MMRC shall have the fullest liberty without our consent and without affecting in any manner our obligation hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the MMRC against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contractor(s) or for any forbearance, act of omission on the part of the MMRC or any indulgence by the

MMRC to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).

7. We, (indicate the name of the Bank) lastly undertake not to revoke this guarantee except with the previous consent of the MMRC in writing.

8. This guarantee shall be valid up tounless extended on demand by the MMRC. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs. (Rupees) and unless a claim in writing is lodged with us within six months of the date of expiry or the extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharged.

Dated	the	day	of	for	(indicate	the	name	of	the
Bank)									

CHAPTER 10

SCHEDULE OF WORK FOR PASSENGER LIFTS

Advisor (Coordination)

Schedule of Work for Passenger Lifts

S.No.	Description	Qty
	Sub Head I	
1.	Supplying, installation, testing & commissioning of 9 passenger/ 612 Kg. (Refer Technical Particular for Technical Specification) serving 12 floor, 13 stops and openings and Travel rise of 34 mtrs.	6 nos.
2.	Supplying, installation, testing & commissioning of 6 passenger/ 408 Kg. (Refer Technical Particular for Technical Specification) serving 12 floor, 13 stops and openings and Travel rise of 34 mtrs.	6 nos.
	Total of Sub Head I	
	Sub Head II	
1.	Annual maintenance of 12 nos. of lifts for two years which include routine, preventive & break down maintenance including repair/ replacement of worn out items with minimum downtime and warranty & guarantee of repaired / replaced items during DLP period	1 Job
	Total of Sub Head II	
	Sub Head III	
1.	Buyback of 6 nos. of existing 9 passenger/ 612 Kg Lifts/Elevators	1 Job
2	Buyback of 6 nos. of existing 6 passenger/ 408 Kg Lifts/Elevators	1Job
	Total of Sub Head III	
	Grand Total (Total of Sub Head I + II - III)	

NIT

(Part-II) **Price Bid**

Advisor (Coordination)

CHAPTER 11 PRICE BID

Advisor (Coordination)

PRICE BID

NAME OF WORK: Supply, Installation, Testing and Commissioning of 12 nos. of Lifts/Elevators (6nos. of 612Kg / 9Person, and 6nos. of 408Kg/6 Person) including 2 years AMC work at Rehabilitation site of Mumbai Metro Rail Corporation Limited at Building No. 10 A to F Wing (2 lifts in each wing) situated in HDIL Premier Compound, Kurla, Mumbai, Pin code:- 400070

S.	Description	Qty	Rate	Unit	Amount
No.	Description	209	nuce	onne	mioune
	Sub Head I				
1.	Supplying, installation, testing & commissioning of 9 passenger/ 612 Kg. (Refer Technical Particular for Technical Specification) serving 12 floor, 13 stops and openings and Travel rise of 34 mtrs.	6		Nos.	
2.	Supplying, installation, testing & commissioning of 6 passenger/ 408 Kg. (Refer Technical Particular for Technical Specification) serving 12 floor, 13 stops and openings and Travel rise of 34 mtrs.	6		Nos.	
	Total of Sub Head I				
	Sub Head II				
1.	Annual maintenance of 12 nos. of lifts for two years which include routine, preventive & break down maintenance including repair/ replacement of worn out items with minimum downtime and warranty & guarantee of repaired / replaced items during DLP period (Including liftmen as per Contract Data) Total of Sub Head II	1		Job	
	Sub Head III				
1.	Buyback of 6 nos. of existing 9 passenger/ 612 Kg Lifts/Elevators	1		Job	
2	Buyback of 6 nos. of existing 6 passenger/ 408 Kg Lifts/Elevators	1		Job	
	Total of Sub Head III				
	Grand total (Total of Sub Head I + II - III)				

ABSTR	АСТ	OF	COST
		UI.	0051

SUB HEAD I Rs.

SUB HEAD II Rs.

SUB HEAD III Rs.

Total amount (I + II – III)

(Rupees.....)

Rs.

Note: Tenders with any condition including that of conditional rebates shall be rejected forthwith. The Price shall be inclusive of all taxes/duties/cess/transportation, etc except GST which shall be reimbursed separately.

Advisor (Coordination)