MUNICIPAL CORPORATION OF GREATER MUMBAI

AREA TRAFFIC CONTROL DEPARTMENT

CONTRACT NO: EE-ATC-CONSLT-21-22

E-TENDER

<u>SUBJECT</u>: Appointment of Consultant for Detailed Traffic Engineering Study for Up-gradation of 70 existing Conventional Traffic Signals into Intelligent Traffic Signal System (ATC type) with Project Management Consultancy in Greater Mumbai.

Website: https://portal.mcgm.gov.in Office of: Chief Engineer (Roads & Traffic), Engineering Hub Building, Dr. E.Moses Road, Worli Naka, Worli, Mumbai- 400 018. INDIA

CONTENTS

Sr. No	Section	Description	Page No
1	SECTION - I	e-Tender Notice	3-6
2	SECTION - II	Special Instructions to Bidders	7-8
3	SECTION - III	Instructions to Bidders	9-35
4	SECTION - IV	General Conditions of Contract	36-49
5	SECTION - V	Terms of Reference	50-66
6	SECTION - VI	Technical Proposal Forms	67-79
7	SECTION - VII	Financial Proposal Form	80-81
8	SECTION - VIII	Fraud & Corrupt Practices	82-85
9	SECTION - IX	Appendices	86-93
10	SECTION - X	PRICE PACKET `C'	94-95

SECTION – I E-Tender Notice

MUNICIPAL CORPORATION OF GREATER MUMBAI

No.Dy. Ch.E/ATC-1927/Traffic dated 03.12.2021

e-TENDER NOTICE e-Tender No: 7200020280

 The Municipal Corporation of Greater Mumbai invites the online e-Tender for "Appointment of Consultant for Detailed Traffic Engineering Study for Upgradation of 70 existing Conventional Traffic Signals into Intelligent Traffic Signal System (ATC type) with Project Management Consultancy in Greater Mumbai." in three packets system on Least Cost Quality Selection (LCQS). The tender copy can be downloaded from MCGM's portal. (http://portal.mcgm.gov.in) under "e procurement" section.

2. Minimum Qualifying Criteria:

To be eligible for pre-qualification, the bidder shall fulfill the following conditions of eligibility:

2.1 Technical Capabilities:

T-1. The Consultancy firm must have executed the single work of Traffic survey, feasibility study, design for Traffic Signal System for at least 40 Junctions in any of the Metropolitan City in India or abroad during last seven (7) years.

AND

T-2. The Consultancy firm must have executed the single work of Implementation & evaluation study of Internationally proven Intelligent Transport Systems such as SCOOT/SCATS/ITACA for at least 40 Junctions in any of the Metropolitan City in India or abroad during last seven (7) years.

AND

T-3. The Consultancy firm must have experience in preparation of bid documents, evaluation of bids, supervision and project management consultancy in implementation of any transport infrastructure project / traffic management/smart city / Intelligent Transport Systems for at least one project of amounting to Rs. 10.0 Cr. in any of the Metropolitan City in India or abroad during last seven (7) years.

2.2 Financial Capabilities:

F-1. Achieved an average annual financial turnover as certified by 'Chartered Accountant' equal to 60 Lakhs in last three (3) financial years immediately preceding the Financial Year in which bids are invited. i.e. 2018-19, 2019-20, 2020-21. (In case of consortium the Prime bidder should have 70% of the annual turnover requirements.)

- 3. Consortium of maximum of 2 members is allowed or wholly owned subsidiary of the foreign company is eligible to quote on the basis of the credentials of its parent company, if they submit certificate from the parent company to that effect. The qualification criteria shall be met by the tenderer, as a Single Firm entirely on its own, or by forming a Consortium of not more than two firms / companies. Each tenderer shall submit only one tender either by itself, or as a partner in a Consortium. Further, a company participating in the Consortium cannot submit the tender separately in its own name. A tenderer who submits or participates in more than one tender shall be summarily disqualified.
- The bids shall be evaluated on Least Cost Quality Selection (LCQS). The Minimum technical score to get qualified is 75 marks out of 100 marks as mentioned in tender clause 3.22. Interested bidder may obtain further information in the office of the -Dy Chief Engineer (Traffic). Ground Floor, Engineering Hub Building, DR. E. Moses Road, Worli, Mumbai – 400 018.
- 5. All interested bidder, whether already registered or not registered in MCGM, are mandated to get registered with MCGM for e-tendering process, Login Credentials to participate in the online tendering process on the above mentioned portal under "e- procurement".
- 6. For the registration, enrollment for digital signature certificate & user manual, Bidder may please refer to respective links provided in e-tendering tab on MCGM website. The Bidders can get digital signature (Individual class 3 Digital Signature Certificate from authorized Certifying Authorities (CA's). MCGM has opened a help desk at the address mentioned above to help the tenderers in this regard.
- e-Tender document fees Rs. 9400/- + Applicable GST shall be paid through online payment gateway before downloading the tender documents. The e-Tender fee is not refundable.

Sr. No.	Name of the Work	E.M.D. (Rs.)	Contract Period
1	Appointment of Consultant for Detailed Traffic Engineering Study for Up-gradation of 70 existing Conventional Traffic Signals into Intelligent Traffic Signal System (ATC type) with Project Management Consultancy in Greater Mumbai.		 A) 25 Weeks for Design part & Bid Evaluation (Exclusive of Monsoon) B) 104 Weeks (Exclusive of monsoon) for Project Management Consultancy.

8. Submission of Tenders :

- 9. Bidders are required to pay the above said EMD online. Payment by Bank cheque, Demand Draft or in any other form will not be accepted. The scanned copy of receipt of online payment of E.M.D. shall be uploaded by the tenderer(s) in Packet 'A'
- 10. The e-Tenderer(s) should upload scanned digitally signed copy of the original registration certificate to get registered with MCGM for e-tendering process, login credentials to participate in the online tendering process before purchasing /uploading / Submitting the e-tender copy. The e-tenders duly filled in should be uploaded and submitted online on or before the end date of submission.
- 11. The dates and time for uploading the e-Tender & opening of the Packets A, B and C are as under:

Date of Initiation of	Last date of Sale	Submission of e-Tender				
e-Tender	Jale	on line	Packet 'A'	Packet 'B'	Packet 'C'	
07/12/2021	31/12/2021	31/12/2021	04/01/2022	04/01/2022	17/01/2022	
from 11:00	Upto 13:00	Upto 16:00	after 16:00	after 16:10	after 15:00	
Hrs	Hrs	Hrs	Hrs	Hrs	Hrs	

Pre-bid meeting of the bidders shall be convened on 16.12.2021 at 11.00 PM, in the Conference Hall of Ch. Eng. (Roads & Traffic) department, Ground Floor, Engineering Hub, Dr. E. Moses Road, Worli, Mumbai- 400 018.

Other details can be seen in e-tender document. The dates and time for submission and opening the e-tenders are as shown in the Header data, if there are any changes in the dates the same will be displayed on the MCGM Portal: <u>http://portal.mcgm.gov.in</u>.

Sd/-Dy. Chief Engineer (Traffic)

SECTION – II Special Instruction to Bidders for e-Tendering

E-TENDERING ONLINE SUBMISSION PROCESS

For E-Tendering online submission process, please refer the manual available on MCGM portal <u>http://portal.mcgm.gov.in</u> and same can be downloaded from the below link:

SECTION – III Instruction to Bidders

INSTRUCTIONS TO BIDDER (ITB)

- **3.1** These instructions are provided to assist Bidder while preparing their Bids. They shall form part of the contract and they shall be taken into consideration in interpreting or construing the contract.
- **3.2** Bidder are requested to read carefully the following directions, the terms and conditions of the contract; addendum if any and sign the form of Bid, annexure, terms of reference and Bill of Quantities and rates etc. after making appropriate entries wherever necessary.
- **3.3** The Bidder is expected to examine all instructions, forms, terms of reference in the Bid Document. Failure to furnish all information required by the Bid Document or submission of a Bid not substantially responsive to the Bid Document in every respect will be at the Bidder's risk and may result in the rejection of its Bid.

3.4 Scope of Consultancy:

The scope of services is detailed at the `Terms of Reference – Section-V' in the tender document.

3.5 Clarifications for the bidder:

The Commissioner reserve the right to accept or reject any bid or all the bids or annul the biding process at any time prior to award without assigning any reasons thereby incurring any liability to the affected Bidder or any obligation to inform the Bidder(s) of the ground for the Corporation's action.

3.6 Site Visit:

In order to obtain first-hand information /opinion on the assignment, the bidders are advised to visit the individual site of the Project mentioned in Terms of Reference, before submitting their proposal. Required assistance may be obtained from the "office of Executive Engineer (Area Traffic Control), Ground Floor, Engineering Hub Building, Dr E Moses Road, Worli, Mumbai 400 018 with prior appointment in writing except Saturday, Sunday & Public Holidays.

3.7 Bid Validity Period:

The bids shall be kept valid for acceptance for 180 (One Hundred & Eighty) days from the last date of bid submission. In exceptional circumstances, MCGM may request the Bidder in writing to extend the validity of their proposals without allowing any modifications to the offer and stipulated conditions in the bid.

3.8 Consortium:

- 3.8.1 A consortium of maximum 2 bidders will be allowed. However, the Prime Bidder/Prime Bidder of Consortium, shall be primarily accountable for the implementation of the entire scope of the project.
- 3.8.2 A member of Consortium firm shall not be permitted to participate either in individual capacity or as a member of another Consortium firm in the same tender. Further, a company participating in the Consortium cannot submit the tender separately in its own name. A tenderer who submits or participates in more than one tender shall be summarily disqualified.
- 3.8.3 The consortia shall submit a valid Agreement on Stamp Paper among the members signed by the Authorized Signatories of the companies under consortium dated prior to the submission of the bid. The Agreement shall clearly specify the details of Prime bidder, stake of each member and outline the roles and responsibilities of each member.
- 3.8.4 In the Consortium, all the members shall be jointly and severally liable to complete the project; however Successful Prime Bidder shall give an undertaking for successful completion of the project within stipulated period mentioned in the tender.
- 3.8.5 In case of any issues, Prime Bidder will be liable for all penalties.
- 3.8.6 The agreement between the Prime Bidder and each consortium partner should be for the entire period of the Project and submitted along with the Bid. The Agreement of the consortium members should be submitted for their exclusive association for this bid and joint responsibility for the respective scope.
- 3.8.7 MCGM will sign the contract with the Prime Bidder only. All payments shall be made to the Prime Bidder only. However, the names of all the consortium members shall be included in the contract.
- 3.8.8 It will be the prime bidders responsibility to follow all the guidelines laid down by MCGM for registration of consortium for subject work within 30 days from acceptance of LOA.
- 3.8.9 The tender form shall be purchased and submitted in the 'name of the Consortium firm or any constituent member of the Consortium.
- 3.8.10 The EMD can be submitted, either in the name of the Consortium or the Prime partner, with the consent of other partner.
- 3.8.11 Deleted.

3.8.12 Credentials & Qualifying criteria:

- i. The Consortium firm shall fulfill the Minimum Qualification Criteria as mentioned in Clause 3.11
- ii. The Prime Partner shall meet at least two (from T-1 to T-3) Technical eligibility of criteria and financial criteria mentioned below:

Тес	Technical eligibility criteria:				
T-1	The Consultancy firm must have executed the single work of				
1-1	Traffic survey, feasibility study, design for Traffic Signal System				
	for at least 40 Junctions in any of the Metropolitan City in India				
	or abroad during last seven (7) years.				
	AND				
T2	The Consultancy firm must have executed the single work of				
12	² Implementation & evaluation study of Internationally proven				
	Intelligent Transport Systems such as SCOOT/SCATS/ITACA for at				
	least 40 Junctions in any of the Metropolitan City in India or				

	abroad during last seven (7) years.						
	AND						
Τ3	The Consultancy firm must have experience in preparation of h						
Fi	nancial eligibility criteria:						
F1	The Prime partner should have achieved an average annual financial turnover as certified by 'Chartered Accountant' at least Rs. 42 Lakhs in last three (3) financial years immediately preceding the Financial Year in which bids are invited. i.e. 2018-19, 2019-20, 2020-21.						

3.9 Documents comprising of bid:

The Bid document comprises the following -

- 3.9.1 Tender Notice
- 3.9.2 Special Instructions to bidders for e-tendering
- 3.9.3 Instructions to Bidders
- 3.9.4 General Conditions of Contract.
- 3.9.5 Scope of work and Technical specifications. (Terms of Reference)
- 3.9.6 Complete Technical Proposals- Standard Forms as per Section-VI
- 3.9.7 Complete Financial Proposals (Section VII) and their Contents as per Section-X.
- 3.9.8 Contract Agreement Form (Appendix-A)
- 3.9.9 Pro-forma of Bank Guarantee(Appendix-C)
- 3.9.10 Addendum, Corrigendum, if any.

3.10 Earnest Money Deposit:

- 3.10.1 The Bidder shall furnish, as part of the Bid, EMD, in the amount specified in the Header Data Sheet. This bid security shall be in favour of the authority mentioned in the Bid Data Sheet and shall be valid till the validity of the bid.
- 3.10.2 The bidders shall pay the EMD online.
- 3.10.3 Any bid not accompanied by an acceptable Bid Security and not secured as indicated in above mentioned clause, shall be rejected by the Employer as non-responsive.

- 3.10.4 The Bid Security/EMD of the successful Bidder will be discharged when the Bidder has signed the Agreement and furnished the required Security Deposits.
- 3.10.5 The EMD and ASD of L-2 and other higher bidders (L-3, L-4, etc.) shall be refunded immediately after opening of financial bid. In case, the successful bidder becomes non-responsive or successful bidder withdraws the bid or is unwilling to extend the bid validity period, in such circumstances, if L-2 bidder is agreeable to extend the bid validity period and ready to deposit the requisite amount of EMD and ASD to the department within the stipulated time period i.e. 15 days, the department will process further as per normal procedure.

3.10.6 The E.M.D. May be forfeited

- a) If the bidder withdraws the Bid after Bid opening during the period of Bid validity; or
- b) In case of successful Bidder, if the Bidder fails within the specified time limit to
 - I. sign the Agreement,
 - II. furnish the required Security Deposit.

3.11 Minimum Qualifying Criteria:

3.11.1 Eligibility:

- a) Consortium of maximum of 2 members is allowed or wholly owned subsidiary firm of the foreign company is eligible to quote on the basis of the credentials of its parent company, if they submit certificate from the parent company to that effect. To be added as per consortium clause.
- b) The Consultancy firms shall be registered under Indian companies Act. 1956. (Certificate of incorporation and PAN Card must be furnished with technical proposal).
- c) The Consultancy firm must not have been blacklisted or debarred from bidding in tendering process (either as single entity or as partner of consortium) by any Govt. /Semi govt. Authority, Funding Agencies like World Bank/ADB/ JICA etc. at the time of bidding of said Tender.
- d) The consultancy firm shall have been registered (Registrar of Firms/Company of Consulting engineers /Govt. /Govt. Undertaking) under same name & style (Authorized change in name & style shall be considered).
- e) No bidder shall be affiliated with a firm or entity who is involved with the tendering process for the referred works.

- f) The consulting firm shall be in position to provide at least the staff as mentioned under the 'Personnel capabilities'. The staff shall be either in employment of the firm or shall have the consent letter from the prospective staff to accept employment from the consulting firm during the contract period and availability during the contract period including extended period. The consent letter shall have obtained prior to submission of bid.
- g) The tender documents are not transferable. Only those bidders who have purchased the tender documents are eligible to submit their bid.
- h) The firm shall enclose to their technical offer, the relevant copies of experience certificate signed by officer not below the rank of Executive Engineer/ Superintendent Engineer.

3.11.2 Technical & Financial capabilities

T-1. The Consultancy firm must have executed the single work of Traffic survey, feasibility study, design for Traffic Signal System for at least 40 Junctions in any of the Metropolitan City in India or abroad during last seven (7) years.

AND

 T-2. The Consultancy firm must have executed the single work of Implementation & evaluation study of Internationally proven Intelligent Transport Systems such as SCOOT/SCATS/ITACA for at least 40
 Junctions in any of the Metropolitan City in India or abroad during last seven (7) years.

AND

T-3. The Consultancy firm must have experience in preparation of bid documents, evaluation of bids, supervision and project management consultancy in implementation of any transport infrastructure project / traffic management/smart city / Intelligent Transport Systems for at least one project of amounting to Rs. 10.0 Cr. in any of the Metropolitan City in India or abroad **during last seven (7) years**.

Financial Capabilities:

F-1. Achieved an average annual financial turnover as certified by 'Chartered Accountant' equal to 60 Lakhs in last three (3) financial years immediately preceding the Financial Year in which bids are invited. i.e. 2018-19, 2019-20, 2020-21. (In case of Consortium the Prime bidder should have 70% of the annual turnover requirements.)

The bidders who does not fulfil this criteria shall be disqualified and their Packet C shall not be opened. Similarly Packet C of the Bidders who fail to score minimum 75 marks in technical evaluation shall not be opened. The bids shall be evaluated on Least Cost Quality Selection (LCQS) basis as per given in Clause 3.22 - Evaluation of Bid.

3.11.3 Personnel Capabilities

Bidders shall upload general information on the management structure of the firm, and shall deploy full time qualified personnel to fill the key positions as under-

Sr. No.	Position	Professional Qualification	Experience Requirement	Expected Man Months
1.	Project Manager	in Traffic/ Transportation Planning/ Urban	Experience at least 8 Years as Project Leader in implementing all aspects of the planning, design, construction, integration and operation of intelligent transportation system.	Minimum 6 months during design stage and thereafter intermittently as per requirement during execution stage
2.	Local Team Leader /Resident Engineer	in Traffic/ Transportation	Experience at least 5 years as a team leader in implementation of the project with significant experience in traffic engineering / intelligent transportation system.	Intermittently during design stage as per requirement and 24 months during the execution stage.
3.	Senior ITS specialist / Adviser	-	Experience at least 6 years in Intelligent transportation system technology, design, implementation and system integration.	months during design stage and
4	Supervisi on Engineers (Civil) (2 Nos)	Degree in Civil Engineering	Experience at least 5 years in the field of traffic signal / ITS projects or construction/ various infrastructure works. However, preference will be given to the candidates having experience in traffic signal project.	24 months during execution

5	Supervisi on Engineers (M & E) (2 Nos)	Mechanical/Ele	Experience at least 5 years in the field of traffic signal / ITS projects or various infrastructure works.	
6	Environm ental Engineer	Master Degree in Environmental Science /Engineering	Experience at least 5 years in emission inventories / air monitoring, air quality modeling and other assessment tool for the air quality management.	months during design stage and

NOTE :

1) The Bidders should upload general information on the Organizational set up of the firm, to allow the employer to review their proposals.

2) In addition to above key staff, the bidder should provide the C.V.s for support staff such as CAD/GIS Operator.

3.12 Preparation of Bids:

- 3.12.1 In preparing the Proposal, the Bidder is expected to examine the bids in detail. Material deficiencies in providing the information requested in the bid may result in rejection of the Proposal. Queries relevant to the bid documents shall be addressed to Executive Engineer(ATC), preferably by 5:00 PM one day prior to the pre bid meeting.
- 3.12.2 MCGM will respond to any such request for clarifications, which are received in stipulated time. The response, however, will be in the form of written communication.
- 3.12.3 The Bidder shall bear all costs associated with the preparation and submission of its Proposal. The client is not bound to accept any proposal, and reserves the right to annul the selection process at any time prior to Contract award, without thereby incurring any liability to the Bidder.
- 3.12.4 Pre-bid Meeting:-Pre-bid Meeting for this tender shall be held in the office of the Chief Engineer (Roads & Traffic Department) at 11:00 hrs. on 16/12/2021 situated at

Chief Engineer, Roads & Traffic Department, Municipal Corporation of Greater Mumbai Ground Floor, Engineering Hub building, Dr. E. Moses Road, Worli Mumbai-400018 The firms are requested to submit any queries related to the proposal under reference, so as to reach MCGM before the meeting as mentioned in 3.12.1 above, Additional queries, if any, raised during the meeting, will also to be considered and the minutes of the meeting including the text of the questions raised and MCGM response will be transmitted to all prospective firms along with addendum/corrigendum, if any. No queries will be entrained after the pre-bid meeting.

- 3.12.5 The Bidder shall not add to or amend the text of the Bid Document except in so far as may be necessary to comply with the addendum issued by the Corporation. If it is found that the Bidder has violated this condition, his bid is liable to be rejected.
- 3.12.6 Any addenda thus issued shall be part of the proposal documents and will be binding. MCGM may, at its discretion, extend the deadline for submission of proposals.

3.13 Language of Bid:

The language of the bid shall be English. Documents/ Information in any other language shall be accepted only if accompanied by translations certified by Consulates/ Embassies or Gazetted Officers conversant with the language of the document. Only English text shall be governing in e- tendering.

3.14 Format of the Bid

The Bidder shall submit the bid online in three parts, i.e.; Technical bid (Packet A & Packet B) and Commercial bid (Packet C) and shall contain scanned copies of the following documents.

3.14.1 Technical bid (Packet A)

- a) Valid Registration Certificate.(Company registration)
- b) A document in support of Registration under GST tax registration certificate. Those not registered shall submit an undertaking to the effect that if they are successful consultant, they shall submit GST Registration Certificate within 15 days of issue of work order (if applicable), failing which payment for the work executed will not be released.
- c) Certified copies of valid 'PAN' documents and photographs of the individuals, owners, Karta of Hindu undivided Family, firms, private limited companies, registered co-operative societies, partners of partnership firms and at least two Directors, if number of Directors are more than two in case of Private Limited Companies, as the case may be. However, in case of Public Limited companies, Semi Government Undertakings, Government Undertakings, no 'PAN' documents will be insisted.

- d) Scanned copy of latest Partnership Deed, in case of Partnership firms.
- e) Scanned copy of duly registered Power of Attorney, wherever applicable.
- f) Scanned copies of relevant documents of Consortium firm as mentioned in Section III- Clause no. 3.8 if applicable.
- g) Scanned copies of relevant documents /certificates of Subsidiary firm from the parent company.
- h) Screenshot of E.M.D. Payment receipt.
- i) Valid email Id of the consultant.
- j) Documents stating that, it has access to or has available liquid assets, unencumbered assets, lines of credit and other financial means (independent of any contractual advance payment) sufficient to meet the cash flow requirements for the subject contract in the event of stoppage, start-up, or other delay in payment, of the minimum Rs. 30,00,000.00, net of the tenderer's commitment of other contracts (Certificate from Bankers / C.A./Financial Institution shall be accepted as an evidence).

Note:

- If the consultant(s) withdraw offer during the tender validity period, his entire E.M.D shall be forfeited.
- If it is found that the consultant has not submitted required documents in Packet "A" then, the shortfalls will be communicated to the consultant through e-mail only and compliance required to be made within a time period of **three working days** otherwise they will be treated as non-responsive and 10% amount of EMD paid by tenderer will be forfeited.

3.14.2 Technical bid (Packet B)

The Packet 'B' shall contain scanned certified copies of the following documents-

- a) Form of Technical Bid Submission
- b) Form TECH-1, Information regarding status of Bidder
- c) form TECH-2, Annual Turn Over
- d) Form TECH-2A, Bidder's Organization & Experiences
- e) Form TECH-2B, Firms Relevant Experience References
- f) Form TECH-3, Team Composition & Task Assignment
- g) Form TECH-4, Approach, Methodology and Work Plan for performing assignment.
- h) Form TECH-5, Curriculum Vitae

- i) Form TECH-6, Historical Contract Non-performance
- j) Form TECH-7, Work Schedule
- k) Form FIN-1, Financial Proposal Submission form
- I) Addendum/Corrigendum/Clarification if any Pre-Bid Minutes of Meeting
- m) Annexure B, Pre-Contract Integrity Pact

Note:

- If the consultant(s) withdraw offer during the tender validity period, his entire E.M.D shall be forfeited.
- If it is found that the consultant has not submitted required documents in Packet "A" then, the shortfalls will be communicated to the consultant through e-mail only and compliance required to be made within a time period of three working days otherwise they will be treated as non-responsive and 10% amount of EMD paid by tenderer will be forfeited.

3.14.3 Financial bid (Packet C)

The Bidder shall submit the Commercial bid (Packet C) online by filling Complete Financial Proposal with Bill of Quantity as per Section-X.

3.15 Conditional Proposals by Bidders:

Bidders shall upload the offers that comply with the requirements of the etendering documents in Bidders folders. If the Bidder suggests any alternative or stipulates his own condition(s), the e-tenders shall be rejected.

3.16 Amendment of contents of proposal:

- 3.16.1 Before the deadline for submission of bids, the M.C.G.M. may modify the bid documents by issuing addendum/ corrigendum and publishing on portal of MCGM.
- 3.16.2 Any addendum/corrigendum/clarifications thus issued shall be part of the bid documents and shall be published on portal of MCGM.
- 3.16.3 The addendum/corrigendum/ clarifications thus issued shall be downloaded, digitally signed by the Bidder and submitted and uploaded along with the bid.
- 3.16.4 In order to give prospective Bidders reasonable time to consider the addendum/ corrigendum/clarifications before submitting and uploading their bids, the M.C.G.M. may extend as necessary the deadline for submission and uploading of bids.

3.17 Rates and Prices:

The Bidder shall quote the price in bill of quantities uploaded online in Commercial bid (Packet C) only. The rate shall invariably include the cost of the work arising out the scope of the work mentioned in the Terms of References (TOR). The prices quoted shall be firm and no variation will be allowed on any account.

The tender shall be for the whole work as described in Terms of Reference attached hereto based on the Bill of Quantities and cost quoted by the bidder.

The bid prices shall be inclusive of all applicable taxes & duties in force, excluding the GST. However, as per GST Notification no. 9/2017 and no. 12/2017 both dated 28.06.2017, the work of said consultancy being rendered to MCGM is under Twelfth Schedule of Article 243(w) of the Constitution, which is a 'pure service' and hence is exempted from GST. The GST; if applicable; shall be reimbursed at actual. The rates and prices shall be fixed for the entire duration of the consultancy contract.

3.18 Signing of Bid Document:

Bidders are requested to sign at appropriate place in the tender form & formats etc. after making appropriate entries wherever necessary. The uploaded documents shall also be digitally signed. If the Bid is made by a proprietary firm, it shall be signed by the Proprietor above his name and the name of his firm above his current address. If the Bid is made by firm in partnership, it shall be signed by all the partners of the firm above their full names and current addresses or by a partner holding the Power of Attorney for the firm for signing the bid in which case the partnership deed, current address of the firm and full names and current addresses of all the partners of the firm shall also accompany the bid. If the bid is made by a limited Company or a limited Corporation, it shall be signed by a duly authorized person holding the Power of Attorney for signing the bid in which case the Power of Attorney shall accompany the bid. Such Limited Company or Corporation may be required to furnish satisfactory evidence or its existence before the contract is awarded.

In case of Consortium firm, it shall be signed by all the partners of the Consortium firm above their full names and current addresses of individual members the JV partner and current address of Consortium Firm shall also accompany the bid.

3.19 Modification of Documents:

Modifications of specifications and extension of the end date of the Bid, if required, will be made by MCGM by issuing necessary addendum/corrigendum. Such addendum/corrigendum will be uploaded in the bid and same will be displayed on MCGM website. These shall be signed by the Bidder and shall be uploaded in Packet B.

3.20 Submission of Bids:

All bids shall be submitted online. However, hard copy (two copies of Packet A & B) shall be submitted to office of Executive Engineer (Area Traffic Control), Ground Floor, Engineering Hub, Dr. E. Moses Road, Worli, Mumbai 400018 on the next day of submission of bids. The contents of the e-Tender shall be considered as final and binding on the Bidder.

3.21 Opening of bid:

First, Technical bid Packet A of the Bidders shall be opened. Technical bid Packet B of only those Bidder found responsive in respect of Packet A shall be opened and the Technical bid Packet B shall be scrutinized.

To assist in the examination, evaluation and comparison of offers, MCGM may, at its discretion ask for clarifications on submitted offers. The request and the response to clarification will be in writing and no change in price or specification of the offer will be permitted.

The Bidders found responsive shall be asked to produce the original documents, the scanned copies of which are uploaded in the bid, if required.

The original documents shall be produced for verification within3 working days from the date of intimation, failing which the offer of the respective Bidder may be treated as non-responsive and 10% amount of EMD paid by tenderer will be forfeited.

If any discrepancies are observed and false documents are found to be uploaded by the Bidder, such Bidder will be disqualified from the bidding process. Further action as liable e.g. disqualification of the bid and Bidder under rules/regulations shall also be initiated against such Bidder who submits false/fake documents.

Only the Bidders who qualify in Technical bid Packet 'A' and 'B' and with technical score minimum of 75 marks will be considered as responsive for opening of financial bid i.e. Packet 'C'.

Any effort by any prospective firm to influence the MCGM's processing of proposals and/or award decisions may result in rejection of the proposal of that firm.

3.22 Evaluation of the Bids (Packet B):

In comparing bids, the Corporation shall consider such factors as the efficiency and reliability of approach and methodology, proposed key experts, compliance with the terms of reference, standards, quality, environment and safety (QES) and the Bidder's capacity to perform vis-a-vis the time of completion etc. The Employer may seek clarifications on the Bidders technical proposal, if required to help him in technical evaluation.

The bids shall be evaluated on "Least Cost Quality Selection (LCQS)" method as per the scheme of marks as given below. The marking criteria shall be as under. The minimum marks for the qualifying Technical Criteria 75 out of 100 and Commercial Bid (Packet C) of only qualifying bidder shall be opened.

Item	Description	Maximum Marks
T1	Financial Capabilities	5
Т2	Firms relevant experience and capabilities	45
тз	Manpower Capabilities	35
Т4	Approach and Methodology for performing the assignment	5
Т5	Traffic Survey experience along with equipment	5
Т6	Experience of PMC works	5
	Total Technical Score=	100

Table A : Overall Marking Criteria:

The bids shall be evaluated in accordance with the procedures given below:

Sr. No.	Bidder's capabilities	Parameter	Criteria	Marks	Max Mark
T1 - I	Financial Capabilities		1	1	
1	Average Annual Turnover of Consultancy Firm for last three	60 Lakhs to 1.0 Cr	Min. 10 Cr	3	5
	years immediately preceding the Financial Year in which bids are invited. i.e. 2018-19, 2019-20, 2020-21.	More than 1.0 Cr to 3.0 Cr		4	
		More than 3.0 Cr		5	

Sr. No.	Bidder's capabilities	Parameter	Criteria	Marks	Max marks
T2- F	irms relevant experience and ca	pabilities	1		
1	Specific experience as a single work in Traffic survey, feasibility	40 Jns	Min 40 Junctions	10	15
	System in any of the Metropolitan City in India or Abroad during last seven (7) years	Upto 70 Jns		12	
		More than 70		15	
	Specific experience as a single work in implementation &	40 Jns	Min 40 Junctions	25	30
	evaluation study of Internationally proven Intelligent Transport Systems such as	lly proven Intelligent		28	
	SCOOT/SCATS/ITACA in any of the Metropolitan City in India or abroad for minimum 40 signal junctions in single contract during	More than 70		30	
	last seven (7) years.				

	T3 - Manpower Capabilities						
Sr. No	Qualifications and competency of the key professional staff for the	Min Marks	Max Marks				
	Assignment as mentioned in 11.3	21	35				
1	Project Manager	5	9				
2	Local Team Leader/ Resident Engineer	5	9				
3	Senior ITS Specialist/ Advisor	5	8				
4	Supervision Engineer (Civil)	2	2				
5	Supervision Engineer (M&E)	2	2				
6	Environmental Engineer	2	5				

Criteria for additional marking for Manpower capabilities:

1	Project Manager	Higher Education i.e. Phd / Any particular Specialization after post- graduation related to work	Project Manager more	`	system / ITS implementatio
	Additional max. points	1	1	1	1

2	Local Team Leader/ Resident Engineer	Phd / Any particular Specialization related to work	Experience more than 5 to 8 years	Experience more than 8 years	implementatio n in India or abroad equal to or more than 5 years
	Additional max. points	1	1	1	1
3	Senior ITS Specialist/ Advisor	-		FATC signalling system / ITS implementatio n in India or abroad equal to or more than 6 years	
	Additional max. points	1	1	1	
4	Environme ntal Engineer	5	Experience more than 5 to 8 years	Experience more than 8 years	
	Additional max. points	1	1	1	

Sr. No.	Bidder's capabilities	Parameter	Criteria	Marks	Max marks
T4-	Approach and Methodolog	gy for perform	ing the assig	nment	
1	Adequacy of the proposed work plan and methodology in response to the TOR		-	5	5

Sr. No.	Bidder's capabilities	Parameter	Criteria	Marks	Max marks		
T5 -	T5 - Traffic Survey experience						
1	Traffic Survey experience along	1 work	Min. 1	3	5		
	with equipment like Drone Camera /video graphy	2 & more	method	5			

Sr. No.	Bidder's capabilities	Parameter	Criteria	Marks	Max marks	
	/Automatic vehicle counting system of 40 Junctions	works				

Sr. No.	Bidder's capabilities	Parameter	Criteria	Marks	Max marks
T6 -	Experience in PMC Works	1		1	1
1	Experience of PMC works in implementation of any Transport Infrastructure project/smart city/ Intelligent Transport Systems in any of the Metropolitan City in India or abroad having Project cost Rs. 10.0 Cr. during last seven (7) years	1 Work 2 & more works	Min. 1 work	3	5

Note :-

1. The Minimum technical score to get qualified is 75 marks out of 100 marks.

2. If the technical score of bidder is found less than 75% in that case his financial bid will not be opened & the same will be treated as Non-responsive.

3.23 Post Bid Correspondence:

Bid shall be termed to be under consideration from the opening of the bids, until such time an official announcement of award is made. While bids are under consideration, Bidders and their representatives or other interested parties, are advised to refrain from contacting by any means the Corporations personnel or representatives on matters related to the bids under consideration.

The engineer's representative if necessary will obtain clarification of bid by requesting such information from any or all the Bidders either in writing or through personal contact as may be necessary. The Bidder will not be permitted to change the substance of his bid after bids have been opened.

3.24 Date of opening and evaluation of financial bids (Packet C):

The price packet of the technically responsive proposals will be opened on a date as mentioned in at e-tender notice. The date of opening of Financial Proposal shall be intimated to the qualified Bidders separately after the technical evaluation is completed. The employer reserve the right to accept or reject any variation or deviations, and other factors which are in excess of the requirements of the bidding documents or otherwise result in actual of unsolicited benefits to the employer shall not be taken in to account in bid evaluation.

3.25 Rejection of Bid:

The bid is liable to be rejected, if the Bidder

- a) Does not submit the proofs of Minimum qualifying criteria.
- b) Stipulates the validity period less than as mentioned in the bid;
- c) Stipulates his own conditions;
- d) Does not disclose his full name and address with telephone no. and also the full names and addresses with telephone nos. of all his partners in the case of partnership/Consortium concern.
- e) Does not fill in and sign the Complete Financial Proposals & their Contents as per Section-X as well as the Schedule of Quantities & Rates, terms of reference, etc.
- f) Does not submit the E.M.D. as per clause 3.10 of Instruction to Bidder.
- g) Does not submit the bid before the stipulated time on the specified date.
- h) If the bid is filled up partially in splitter manner, it will be treated as non responsive.

3.26 Payment Terms:

The Corporation shall not under any circumstances relax these terms of payment and will not consider any alternative terms of payment. Bidders should therefore, in their own interest note this provision, to avoid rejection of their bids. Currency of Payment shall be Indian Rupees only.

3.27 Award of Contract:

The Contract will be awarded to the technically qualified and responsive Bidder on Least Cost Quality Selection **(LCQS)** basis in conformity with the Terms of References subject to the provisions of Evaluation of Bids. Prior to the expiration of the period of bid validity, the Corporation will notify the successful / unsuccessful Bidder in writing by letter or by email. The successful Bidder will be informed in writing by letter or email that his bid has been accepted.

The bid acceptance letter will be issued to the bidder by MCGM, which shall state the amounts of Performance Guarantee, Contract stamp duty, Legal & Stationary

charges etc. to be paid by the successful Bidder as detailed in the Letter of Acceptance.

The issue of Letter of Acceptance will constitute the formation of the Contract.

If after award of bid, if it is found that the accepted Bidder has violated any instructions/conditions as in the bid, the consultant shall be liable for cancellation at any time during its currency in addition to penal action against the Bidder as well as related firms/establishments.

In the event of Bid being accepted, they must be signed by the member holding the power of attorney. The signatory must produce a power of attorney authorizing him to sign on behalf of the firm.

The Contract must be signed by the two Directors with the common seal of the Company or by the Managing Director or by a person having a power of Attorney to sign the Contract. Certified copy of power of attorney must be produced in the office of the Dy.Ch.E.(Traffic). Successful Bidder shall be required to submit all relevant document for execution of the contract within 30 days of acceptance of LOA failing which a penalty of Rs.5000/- per day will be levied.

3.28 Tendering under different names:

a) Firms with common proprietor/partner or connected with one another either financially or as principal and agent or as master and servant or with proprietor/partners closely related to each as husband, wife, father, mother and minor son/daughter and brother/sister and minor brother/sister, shall not bid separately under different names for the same Contract.

b) If it is found that firms as described in (a) have tendered separately under different names for the same Contract, all such bid(s) shall stand rejected and tender deposit of each such firm/ establishment shall be forfeited. In addition such firms/establishments shall be liable, at the direction of the Municipal Commissioner, for further penal action including blacklisting.

c) If it is found that clearly related persons as in (a) have submitted separate bid/quotations under different names of firms/establishments but with common address for each establishment/firm, though they have different addresses, are managed or governed by the same person/persons jointly or severally, such bids shall be liable for action as in Para (b) above including similar action against the firms/establishments.

d) If after the Award of Contract, it is found that the successful bidder has violated any of the conditions in Paras (a), (b) or (c) above, the contract shall be liable for cancellation at any time during its currency in addition to penal action against the Bidder as well as related firms/establishments.

3.29 Stamp Duty, Legal Charges, Bill Forms:

The payments towards legal charges, stamp duty as applicable (on contract agreement & bank guarantees), supply of bill forms & Tax certificates as per the prevailing rates shall be borne by successful Bidder. Successful tender shall pay the Legal Charges + Stationary charges as per Circular no 03 dtd 22.06.2021.

Contract Value	Legal & Stationary Charges
Rs. 10,001/- to Rs. 50,000/-	Nil
Rs. 50,001 to Rs. 1,00,000/-	Rs. 5710/-
Rs. 1,00,001/- to Rs. 3,00,000/-	Rs. 9430/-
Rs. 3,00,001/- to Rs. 5,00,000/-	Rs. 11,330/-
Rs. 5,00,001/- to Rs. 10,00,000/-	Rs. 13,190/-
Rs. 10,00,001/- to Rs. 20,00,000/-	Rs. 15,060/-
Rs. 20,00,001/- to Rs. 40,00,000/-	Rs. 16,960/-
Rs. 40,00,001/- to Rs. 1,00,00,000/-	Rs. 18,830/-
Rs. 1,00,00,001/- to Rs. 10,00,00,000/-	Rs. 22,220/-
Rs. 10,00,00,001/- to Rs. 20,00,00,000/-	Rs. 25,650/-
Rs. 20,00,00,001/- to Rs. 30,00,00,000/-	Rs. 29,070/-
Rs. 30,00,00,001/- to Rs. 40,00,00,000/-	Rs. 32,490/-
Rs. 40,00,00,001/- to Rs. 50,00,00,000/-	Rs. 35,880/-
Rs. 50,00,00,001/- to Rs. 1,00,00,00,000/-	Rs. 42,720/-
Rs. 1,00,00,00,001/-to Rs. 2,00,00,00,000/-	Rs. 52,970/-
Rs. 2,00,00,00,001/- to Rs. 3,00,00,00,000/-	Rs. 59,790/-
Rs. 3,00,00,00,001/- to Rs. 4,00,00,00,000/-	Rs. 68,290/-
Rs. 4,00,00,00,001/- to Rs. 5,00,00,00,000/-	Rs. 76,820/-
Rs. 5,00,00,00,001/- and above without limit	Rs. 85,380/-

The above Legal and stationary charges are applicable upto 31.03.2022. However, the consultant has to pay the Legal and Stationary charges at prevailing rates.

Stamp Duty: (As per applicable circular)

It shall be incumbent on the successful tenderer to pay stamp duty on the contract.

i. As per the provision made in Article 63, Schedule I of Maharashtra Stamp Act 2015, stamp duty is payable for "works contract" that is to say, a contract for works and labour or services involving transfer of property in goods (whether as goods or in some other form) in its execution and includes a sub-contract, as under (amended in 2015):

. ,	Where the amount or value set forth in such contract does not exceed Rupees Ten Lakh	
(b)	Where it exceeds Rupees Ten Lakh	Five Hundred Rupees plus 0.1% of the

amount	а	bove	Rupees	Ter	ı Lakh	
subject	to	the	maximum	of	Rupees	
Twenty Five Lakh Stamp Duty						

For Bank Guarantee: As per article 54 read with 40 (b) of stamp duty act, stamp duty of 0.5% of BG amount will be applicable and subject to maximum amount of Rs. Ten Lakhs. After expiry of Bank Guarantee (BG) if BG extended, the extended BG will be treated as new BG and stamp duty amount of 0.5% will be applicable for every extension.

The successful bidder shall enter into a contract agreement with M.C.G.M. within 30 days from the date of issue of Letter of Acceptance and the same should be adjudicated for payment of Stamp Duty by the successful bidder.

Further shortfall if any, in amount of stamp duty paid as against prescribed amount for the documents executed in Mumbai City & Mumbai Suburban District be recovered from the concerned work contractors and to deposit the deficit or unpaid Stamp Duty and penalty by two separate Demand Draft or Pay Order in favour of "Superintendent of Stamp, Mumbai" within 15 days from intimation thereof.

All legal charges and incidental expenses in this respect shall be borne and paid by the successful tenderer.

3.30 Security Deposit (Contract Deposit):

Within 30 days from the receipt of notification of award from MCGM, the successful firm shall furnish a security deposit amounting to 2 % (Two percent) of contract sum in the form of FDR/ Bank Guarantee (as per attached format) from any of the banks from the list enclosed below. The notification of award will constitute formation of consultancy agreement and within 30 days from receipt of the agreement form, the successful firm shall execute the agreement and return the same to MCGM.

The B.G. shall be initially valid for 3 months beyond the original contract period.

3.31 List of Approved Banks:

- 1. The following Banks with their branches in Greater Mumbai and upto Virar and Kalyan have been approved only for the purpose of accepting Banker's Guarantee from 1997-98 onwards until further instructions.
- 2. The Bankers Guarantee issued by branches of approved Banks beyond Kalyan and Virar can be accepted only if the said Banker's Guarantee is countersigned by the Manager of a Branch of the same Bank, within the Mumbai City Limit categorically endorsing thereon that said bankers Guarantee is binding on the endorsing Branch of the Bank with Mumbai limits and is liable to be on forced against the said branch of the Bank in case of default by the contractor/ supplier furnishing the Bankers Guarantee.

(A) S.B.I. and its subsidiary Banks:

- (1) State Bank of India
- (2) State Bank of Bikaner & Jaipur
- (3) State Bank of Hyderabad
- (4) State Bank of Mysore
- (5) State Bank of Patiala
- (6) State Bank of Saurashtra
- (7) State Bank of Travankore

(B) Nationalised Banks:

(8) Allahabad Bank

(9) Andhra Bank

- (10) Bank of Baroda
- (11) Bank of India
- (12) Bank of Maharashtra
- (13) Central Bank of India
- (14) Dena Bank Indian
- (15) Indian Bank
- (16) Overseas Bank
- (17) Oriental Bank of Commerce
- (18) Punjab National Bank
- (19) Punjab & Sind Bank
- (20) Syndicate Bank
- (21) Union Bank of India
- (22) United Bank of India
- (23) UCO Bank
- (24) Vijaya Bank
- (25) Corporation Bank

(C) Scheduled Commercial Banks:

- (26) Bank of Madura Ltd.
- (27) Bank of Rajasthan Ltd.
- (28) Banaras State Bank Ltd.
- (29) Bharat Overseas Bank Ltd.
- (30) Catholic Syrian Bank Ltd.
- (31) City Union Bank Ltd.
- (32) Development Credit Bank
- (33) Dhanalakshmi Bank Ltd.
- (34) Federal Bank Ltd.
- (35) Indus Ind. Bank Ltd.
- (36) I.C.I.C.I. Banking Corporation Ltd.
- (37) Global Trust Bank Ltd.
- (38) Jammu and Kashmir Bank Ltd.

- (39) Karnataka Bank Ltd.
- (40) Karur Vysya Bank Ltd.
- (41) Lakshmi Vilas Bank Ltd.
- (42) Nadungadi Bank Ltd.
- (43) Ratnakar Bank Ltd.
- (44) Sangli Bank Ltd.
- (45) South Indian Bank Ltd.
- (46) S.B.I. Commercial & Int. Bank Ltd.
- (47) Tamilnadu Mercantile Bank Ltd.
- (48) United Western Bank Ltd.
- (49) Vysya Bank Ltd.

(D) Scheduled Urban Co-op. Banks:

- (50) Abhyudaya Co.op.Bank Ltd.
- (51) Bassein Catholic Co.op. Bank Ltd.
- (52) Bharat Co.op. Bank Ltd.
- (53) Bombay Mercantile Co.op. Bank Ltd.
- (54) Cosmos Co.op. Bank Ltd.
- (55) Greater Mumbai Co.op. Bank Ltd.
- (56) Janata Sahakari Bank Ltd.
- (57) Mumbai Dist.Central Co.op. Bank Ltd.
- (58) Maharashtra State Co.op. Bank Ltd.
- (59) New India Co.op. Bank Ltd.
- (60) North Canara G.S.B.Co.op. Bank Ltd.
- (61) Rupee Co.op. Bank Ltd.
- (62) Sangli Urban Co.op. Bank Ltd.
- (63) Saraswati Co.op. Bank Ltd.
- (64) Shamrao Vithal Co.op. Bank Ltd.
- (65) Mahanagar Co-op. Bank Ltd.
- (66) Citizen Bank Ltd.
- (67) Yes Bank Ltd.

(E) Foreign Banks:

- (68) AMRO (N.Y.) Bank.
- (69) American Express Bank Ltd.
- (70) ANZ Grindlays Bank
- (71) Bank of America N.T. & SA.
- (72) Bank of Tokyo Ltd.
- (73) Bank Indosuez
- (74) Banque Nationale de Paris
- (75) Barclays Bank
- (76) City Bank N.A.

- (77) Hongkong & Shanghai Banking Corpn.
- (78) Mitsui Taiyokbe Bank Ltd.
- (79) Standard Chartered Bank Ltd.
- (80) Cho Hung Bank

In addition to the list of banks provided above for bank guarantee, following banks in the list of RBI (Reserve Bank of India) will also be allowed. RBI's list of the banks can be downloaded from <u>www.rbi.org.in</u>. From this list of RBI bank under following heads with their branches in greater Mumbai and in Suburbs and extended suburbs upto Virar and Kalyan have been approved for Bank Guarantee:-

SBI and Associates, Nationalised Banks, Other Public Sector Banks, Private Sector Bank, Foreign Banks and Urban Co Operative Banks.

3.32 Refund of Security Deposit:

The Security Deposit shall be returned to the consultant without any interest when the contractor ceases to be under any obligations under this contract. The Security Deposit shall be released after issuing Final taking over of the System by the Employer.

3.33 Jurisdiction of Courts:

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

3.34 Import License:

The Bidders shall have to make their own arrangements to secure import license and/or release of controlled or scarce raw materials or parts if required by them for fulfilment of their contract. The Municipal Commissioner shall not be bound to give any assistance to the Bidders in that behalf.

3.35 Payment of Bills & other claims:

The payment of bills and other claims arising out of the contract will be made by ECS/RTGS/NEFT. The successful Bidder therefore will have to furnish the information as regards the vendor No. registered with M.C.G.M. Vendor No. can be obtained by paying the requisite fees and giving necessary information such as PAN Card, Bank Details, Service Tax Registration etc. in the prescribed form available with MCGM. All payments shall be made in INR and not in any other currency.

3.36 Indian Laws and Indian Environment:

The law applicable is Law of Union of India with jurisdiction of competent courts at Mumbai and Bidder should be aware of all the environment Conditions in India.

3.37 After opening of Packet 'C', the first lowest bidder shall submit an undertaking on Rs. 500/- stamp paper that they will complete the work within stipulated period mentioned in tender. In case the work not completed within the stipulated period, penalty will be levied.

3.38 Special Instruction to Bidder:

- 3.38.1 Before bidding, the bidder shall visit all Conventional Signal Junction sites & satisfy himself as to the prevailing conditions. In case of doubt, the bidders may obtained the required information from Ex. Engr. (ATC)., which may not in any way influence the tender, as no claim what-so-ever shall be entertained for any alleged ignorance, after the opening of tender.
- 3.38.2 The Bidders are directed to go through the entire bid document including scope of work / Instruction/Terms of Reference / specifications, etc. and get the clarifications, if any, before submitting the bid. Such requests regarding clarifications, if any shall be in writing and shall reach the office of Ex. Engr. (Area Traffic control) at least 7 days prior to due date of the bid.
- 3.38.3 The contract period for Design Consultancy is 25 weeks (excluding monsoon)and for Project management consultancy 104 weeks (excluding monsoon).
- 3.38.4 The consultant shall adhere to take cognizance of child Labour Act and take precaution not to deploy child Labourers on site. If Child Labourer is found to be deployed on the work, necessary action as deemed fit shall be initiated.
- 3.38.5 The consultants shall adhere / abide themselves by the provision of the minimum wages act / Workman compensation Act and such other statutory obligations notified by the concerned Government departments from time to time if applicable. They shall also indemnify the MCGM form any claims whatsoever arising there from and shall be solely responsible for consequences thereof.
- 3.38.6 MCGM reserves right to cancel the individual works at any stage and Bidders will not be entitled to any compensation / claims whatsoever on account of such cancellation.
- 3.38.7 Rate analysis indicating the justifiability of the rates quoted by the Bidder for satisfactory execution and completion of the work, shall be submitted by the Bidder as and when directed.

- 3.38.8 Firms with common proprietors / partner or connected with one another either financially or as Principal agent or as master and servant or with Proprietor / Partners closely related to each other such as husband / wife / father / mother and minor son / daughter and brother / sister and minor brother / sister shall not tender separately under the different names for the same contract.
- 3.38.9 If it is found that firms as described in the direction vide Clauses 3.38.8 above, have tendered separately under different names for the same contract, all such tender shall stand rejected and Bidder(s) deposit shall be forfeited. Any contract entered into under such conditions will also be liable to be cancelled at any time during its currency and penal action including blacklisting of such firms will be taken.
- 3.38.10 All the details regarding the staff proposed shall be approved and if any change in that regard shall be immediately intimated to the office. Name and Bio-data of the technically qualified personnel employed to supervise the work should be intimated to the office before starting of the work.
- 3.38.11 It will not be binding on M.C.G.M. / Traffic Police Dept. to provide any space / set up to the consultant for enabling them to operate for consultancy work. However, the consultant shall have their own arrangement for working.
- 3.38.12 The bidders shall note that whenever the Engineer gives order in writing to carry out any work / works of similar nature covered in the contract in any adjacent groups, they shall be bound to carry out the additional work / works treating them as work / works under contract conditions. The additional works so specified shall be carried out at the same rate quoted and within the given time frame only.
- 3.38.13 The MCGM in this contract is the Employer and Consultant is the Engineer for this contract.
- 3.38.14 The Consultant shall witness tests at all levels and shall observe strict adherence to the given standards unless, otherwise specified in writing by competent authority. Any deviation from the given standards will not be tolerated.
- 3.38.15 The payment of the bills and other claims arising out of the contract will be made in the name of Bidder's Bank by E.C.S. / R.T.G.S. Successful bidder therefore will have to furnish information as regards the name and complete address of his bank, its branch and the bank A/c no & E.C.S. No. etc. along with tender document. They will have also to submit updated information when there is any change in this regard.
- 3.38.16 The bidder should submit the Certificates of Registration under Employees Provident Fund and Miscellaneous Provision Act, 1952 (E.P.F. & M.P.

Act,1952) if 20 or more workers / persons employed on Bidder's Establishment. If less than 20 workers / persons are employed on Bidder's Establishment, then the bidder should submit undertaking in that regard on Rs. 200/- Stamp Paper.

- 3.38.17 The bidder should submit the Certificate of Registration under E.S.I.C. Act, 1948 in case:
 - i. 10 or more workers / persons employed and manufacturing process is carried out with power in any part or
 - ii. 20 or more workers / persons employed and manufacturing process is carried out without power.

The Bidder's establishment under Sr. No. i) & having less than 10 workers / persons or the establishment under Sr. No. ii) & having less than 20 workers / persons, then the bidder should submit undertaking in that regard on Rs. 200/- Stamp Paper.

3.38.18 The separate work orders shall be issued to the successful bidder for the works as mentioned in Bill of Quantity.

SECTION – IV General Condition of Contract

GENERAL CONDITIONS OF CONTRACT

4.1 GENERAL PROVISIONS

4.1.1 Definitions

Unless the contract otherwise requires, the following terms whenever used in this Contract have the following meanings.

- a) "Applicable Law" means the laws and any other instruments having the force of law in the Government's country, as they may be issued and in force from time to time.
- b) "Contract" means this Contract between the MCGM and the Bidder.
- c) "Effective Date" means the date on which this Contract comes into force and effect pursuant to Clause 4.2.1 hereof.
- d) GCC means the condition of contract in general
- e) "Government" means the State and/or Central Government.
- f) "Party" means the MCGM. or the Consultant, as the case may be.
- g) "Services" means the work to be performed by the Bidder pursuant to this Contract for the purposes of the Project, as described in Terms of Reference.
- h) "Sub-Consultant" means any entity to which the Consultant subcontract any part of the Services in accordance with the provisions of Clause 4.3.7 hereinafter, and
- i) "Third Party" means any person or entity other than the Government, the MCGM, the Consultant or a Sub-Consultant.
- **j)** "MCGM" means Municipal Corporation of Greater Mumbai / Municipal Commissioner for Greater Mumbai for the time being holding the office and also his successors, Addl. Mun. Commissioners, / D.M.C. (Infra), Chief Engineer (Roads & Traffic) and /or their appointed officers for performance of the contract.
- **k)** "Employer/Client" means MCGM (Municipal Corporation of Greater Mumbai).
- I) "Site means land or other places where the works are to be executed or other working places as may be specifically designated by MCGM.
- m) "Drawings" means, drawing referred to in the specification and /or any modifications to the drawings, approved by MCGM.
- n) "Works" means, work to be executed in accordance with contract, or part thereof, as case may be and shall also include all extra / additional, alternation / substitution as required for performance of the contract.
- o) The "Contract price" means the sum named in the bid subject to such additions there to or deduction there from as may be made under the provisions hereinafter contained.
- p) The "Consultant" is the Engineer of the Contract.
- q) "Personnel" means persons hired by the Consultant or by any Sub Consultant as employees and assigned to the performance of the Services or any part thereof; "Foreign Personnel" means such persons who at the time of being so hired had their domicile outside the Government of India,; "Local Personnel" means such persons who at the time of being so hired had their domicile inside the Government of India,; and 'personnel' means the personnel referred to in Clause GCC 4.4.2 (a).
- r) "Services" means the work to be performed by the Consultant pursuant to this Contract described in Terms of Reference.

4.1.2 Law Governing Contract. This Contract, its meaning and interpretation, and the relation between the Parties shall be governed by the Applicable Indian Law.

4.1.3 Language

This Contract has been executed in the English language, which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this contract.

4.1.4 Headings The headings shall not limit, alter or affect the meaning of this Contract.

4.1.5 Notices

Any notice, request or consent required or permitted to be given or made pursuant to this Contract shall in writing. Any such notice, request or consent shall be deemed to have been given or made when delivered in person to an authorized representative of the Party to whom the communication is addressed, or when sent by registered mail to such Party at the following address:

DEPUTY CHIEF ENGINEER, (TRAFFIC) MUNICIPAL CORPORATION OF GREATER MUMBAI, Ground Floor, Engineering Hub Building, Dr E Moses Road, Worli, MUMBAI – 400 018. Telephone: 022 -24983407 e-mail: mcgmatc@gmail.com

4.1.6 Location

The Services shall be performed at such locations as are specified in Terms of Reference hereto and, where the location of a particular task is not so specified, at such locations as the Client may approve.

4.1.7 Authorized Representatives.

Any action required or permitted to be taken, and any document required or permitted to be executed under this Contract, may be taken or executed;

- (a) On behalf of MCGM. by D.M.C. (Infra)
- (b) On behalf of the Consultant(s) by his/their designated representative.

4.1.8 Income Tax

The Consultant and the Personnel shall pay the Indian Income taxes, levied under the Applicable Law and the MCGM shall perform such duties in regard to the deduction of such tax as may be lawfully imposed.

The Contract price is deemed to have included such amounts.

4.2 COMMENCEMENT, COMPLETION, MODIFICATION AND TERMINATION OF CONTRACT

4.2.1 Effectiveness of Contract.

This Contract shall come into force and effect on the date (the 'Effective Date"), on which the Letter of Acceptance (LOA) is issued.

4.2.2 Commencement of Services. The Consultant shall begin carrying out the Services on such date as the Parties may agree in writing.

4.2.3 Expiration of Contract.

Unless terminated earlier pursuant to Clause 4.2.7 hereof, this Contract shall terminate when, pursuant to the provisions hereof, the Services have been completed and the payments of remuneration and reimbursable expenditures have been made. MCGM at its discretion shall terminate the contract after scheduled contract period as specified from the Effective Date unless extended on the same terms and conditions by agreement of the Parties hereto for a further period to be agreed between the Parties.

4.2.4 Modification

Modifications of the terms and conditions of this Contract, including any modification of the scope of the Services, may only be made by written agreement between the Parties.

4.2.5 Force Majeure

4.2.5.1 Definition

- a) For the purposes of this Contract, "Force Majeure" means an event which is beyond reasonable control of a Party, and which makes a Party's performance of its obligations hereunder impossible or so impractical as reasonably to be considered impossible in the circumstances, and includes, but is not limited to, war, riots, civil disorder, earthquake, fire, explosion, storm, flood or other adverse weather conditions, strikes, lockouts or other industrial action (except where such strikes, lockouts or other industrial action are within the power of the Party invoking Force Majeure to prevent), confiscation or any other action by government agencies.
- b) Force Majeure shall not include

(1) any event which is caused by the negligence or intentional action of a Party or such Party's Sub-Consultant or agents or employees, nor

(2) any event which a diligent Party could reasonably have been expected to both.

- (i) take into account at the time of the conclusion of this Contract, and
- (ii) avoid or overcome in the carrying out of its obligations hereunder.
- c) Force Majeure shall not include insufficiency of funds or failure to make any payment required hereunder ;

4.2.5.2 No Breach of Contract.

The failure of a Party to fulfill any of its obligations hereunder shall not be considered to be a breach of, or default under, this Contract in so far as such inability arises from an event of Force Majeure, provided that the Party affected by such an event has taken all reasonable precautions, due care and reasonable alternative measures, all with the objective of carrying out the terms and conditions of this Contract.

- 4.2.5.3 Measures to be Taken
 - a) A Party affected by an event of Force Majeure shall take all reasonable measures to remove such Party's inability to fulfill its obligations hereunder with a minimum of delay.
 - b) A Party affected by an event of Force Majeure shall notify the other Party of such event as soon as possible, and in any event not later than fifteen (15) days following the occurrence of such event, providing evidence of the nature and cause of such event, and shall similarly give notice of the restoration of normal conditions as soon as possible.
 - c) The Parties shall take all reasonable measures to minimize the consequences of any event of Force Majeure.

4.2.5.4 Extension of Time

Any period within which a Party shall, pursuant to this Contract, complete any action or task, shall be extended for a period equal to the time during which such Party was unable to perform such action as a result of Force Majeure.

4.2.5.5 Consultation

Not later than thirty (30) days after the Consultant, as the result of an event of Force Majeure, have become unable to perform a material portion of the Services, the Parties shall consult with each other with a view to agreeing on appropriate measures to be taken in the circumstances.

4.2.6 Suspension

The Client may, by written notice of suspension to the Bidder, suspend all payments to the Consultant hereunder if the Consultant fail to perform any of their obligations under this Contract, including the carrying out of the Services, provided that such notice of suspension (i) shall specify the nature of the failure, and (ii) shall request the Consultant to remedy such failure within a period not exceeding thirty (30) days after receipt by the Consultant of such notice of suspension.

4.2.7 Termination

4.2.7.1 By MCGM

The MCGM may, by not less than thirty (30) days' written notice of termination to the Consultant (except in the event specified in paragraph (f)

below, for which there shall be a written notice of not less than sixty (60) days), such notice to be given after the occurrence of any of the events specified in paragraphs (a) through (e) of this Clause 4.2.7.1, terminate this Contract:

- a) if the Consultant fail to remedy a failure in the performance of their obligations hereunder, as specified in a notice of suspension pursuant to Clause 4.2.6 herein above, within thirty (30) days of receipt of such notice of suspension or within such further period as the Client may have subsequently approved in writing:
- b) if the Consultant become insolvent or bankrupt or enter into any agreements with their creditors for relief of debt or take advantage of any law for the benefit of debtors or go into liquidation or receivership whether compulsory or voluntary.
- c) if the Consultant fail to comply with any final decision reached as a result of amicable settlement pursuant to Clause 4.9 hereof.
- d) if the Consultant submit to the Client a statement which has a material effect on the rights, obligations or interests of the Client and which the Consultant know to be false.
- e) if, as the result of Force Majeure, the Consultant are unable to perform the Services for a period of not less than sixty (60) days or
- f) if the client, in its sole discretion and for any reason whatsoever, decides to terminate this Contract.

4.2.7.2 By the Consultant

The Consultant may, by not less than thirty (30) days' written notice to the MCGM, such notice to be given after the occurrence of any of the events specified in paragraphs (a) through (d) of this Clause 4.2.7.2, terminate this Contract:

- a) if the Client fails to pay any money due to the Consultant pursuant to this contract and not subject to dispute within forty-five (45) days after receiving written notice from the Bidder that such payment is overdue.
- b) if the Client is in material breach of its obligations pursuant to this Contract and has not remedied the same within forty-five (45) days (or such longer period as the Consultant may have subsequently approved in writing) following the receipt by the Client of the Consultant notice specifying such breach.
- c) if, as the result of Force Majeure, the Consultant are unable to perform the Services for a period of not less than sixty (60) days or
- d) if the Client fails to comply with any final decision reached as a result of amicable settlement pursuant to Clause 4.9 hereof.

4.2.7.3 Payment upon Termination Upon termination of this Contract pursuant to Clauses 4.2.7.1 or 4.2.7.2 hereof, the MCGM shall make the following payments to the Consultant:

a) Remuneration for Services satisfactorily performed prior to the effective date of termination.

b) Reimbursable expenditures for expenditures actually incurred prior to the effective date of termination and which are reimbursable as per contract.

4.3 OBLIGATIONS OF THE CONSULTANT

- 4.3.1 General
- 4.3.1.1 Standard of Performance

The Consultant shall perform the Services and carry out their obligations hereunder with all due diligence, efficiency and economy, in accordance with generally accepted techniques and practices used in the construction industry and with professional engineering and consulting standards recognized by international professional bodies, and shall observe sound management, and technical and engineering practices, and employ appropriate advanced technology and safe and effective equipment, machinery, materials and methods. The Consultant shall always act, in respect of any matter relating to this Contract or to the Services, as faithful advisers to the MCGM, and shall at all times support and safeguard the MCGM's legitimate interests in any dealings with Sub-Consultant or Third Parties.

4.3.1.2 Law Governing Services

The Consultant shall perform the Services in accordance with the Applicable Law and shall take all practicable steps to ensure that any Sub- Consultant, as well as the Personnel and agents of the Consultant and any Sub-Consultant, comply with the Applicable Law.

- 4.3.2 Conflict of Interests Bidder Not to benefit from Commissions, Discounts etc. The remuneration of the Consultant pursuant to Clause 4.6 hereof shall constitute the Consultant' sole remuneration in connection with this Contract or the Services and, subject to Clause 4.3.2.2 hereof, the Consultant shall not accept for their own benefit any trade commission, discount or similar payment in connection with activities pursuant to this Contract or to the Services or in the discharge of their obligations hereunder, and the Consultant shall use their best efforts to ensure that any Sub- Consultant, as well as the Personnel and agents of either of them, similarly shall not receive any such additional remuneration.
- 4.3.2.1 Consultant and Affiliates Not to Be otherwise Interested in Project. The Consultant agree that, during the term of this Contract and after its termination, the Consultant and any entity affiliated with the Consultant, as well as any Sub- Consultant and any entity affiliated with such Sub-Consultant, shall be disqualified from providing goods, works or services (other than the Services and any continuation thereof) for the Project.

4.3.2.2 Prohibition of Conflicting Activities

Neither the Consultant nor their Sub- Consultant nor the Personnel of either of them shall engage, either directly or indirectly, in any business or professional activities which would conflict with the activities assigned to them under this Contract.

4.3.3 Confidentiality

The Consultant, their Sub- Consultant and the Personnel of either of them shall not, either during the term or within two (2) years after the expiration of this Contract, disclose any proprietary or confidential information relating to the Project, the Services, this Contract or otherwise prior written consent of the MCGM.

4.3.4 Liability of the Consultant

The Consultant shall be liable to MCGM for the performance of the Services in accordance with the provisions of this contract and for any loss suffered by the Client as a result of a default of the Consultant in such performance, subject to the following limitations:

- The Consultant shall not be liable for any damage or injury caused by or arising out of the act, neglect, default or omission of any persons other than the Consultant, its Sub- Consultant or the Personnel of either of them, and
- b) the Consultant shall not be liable for any loss or damage caused by or arising out of circumstances over which the Bidder had no control.

4.3.5 Indemnification of the Client by the Consultant

The Consultant shall keep the MCGM, both during and after the term of this Contract, fully and effectively indemnified against all losses, damage, injuries, deaths, expenses, actions, proceedings, demands, costs and claims, including, but not limited to, legal fees and expenses, suffered by the Client or any Third Party, where such loss, damage, injury or death is the result of a wrongful action, negligence or breach of Contract of the Bidder or their Subbidder, or the Personnel or agents of either of them, including the use or violation of any copyright work or literary property or patented invention, article or appliance.

4.3.6 Insurance to be Taken Out by the Consultant

The Consultant shall take out and maintain, and shall cause any Sub-Consultant to take out and maintain, at their (or the Sub- Consultant, as the case may be) own cost but on terms and conditions approved by the MCGM, insurance, set forth below, and at the MCGM's request, shall provide evidence that such insurance has been taken out and maintained and that the current premiums therefore have been paid.

4.3.6.1 PROFESSIONAL LIABILITY INSURANCE

Professional liability insurance, with a minimum coverage equal to the contract price. professional liability insurance shall cover the claims arising out of losses and/or damages during the period of insurance first made in writing against the Insured during the Policy Period and Insured is indemnified in accordance with Operation Clause for any breach of Professional duty by reason of any negligent act, error or omission, whenever and wherever committed or alleged to have been committed during the period of insurance and the deliberate noncompliance with technical standards commonly observed in professional practice, laid down by law, or regulated by official bodies. The insurance shall be in force covering the contact period and thereafter for one year.

4.3.6.2 THIRD PARTY INSURANCE

- a) The successful Consultant shall, in the joint names of the successful Consultant, the Commissioner and the Employer, insure against all damage or injury occurring before all the works have been taken over to any person or to any property (other than property forming part of the works) due to or arising out of the execution of the works or during the travel to the site. Such insurance shall be effected for an amount for Rs.1,00,000.00 per occurrence from the date of commencement till completion of the contract and the successful Bidder shall from time to time when so required by the Employer produce the policy and the receipt for the premium.
- b) Third Party motor vehicle liability insurance as required under Motor Vehicles Act, 1988 in respect of motor vehicles operated in India by the Consultant or their Personnel or any Sub-Consultants or their Personnel for the period of consultancy in accordance with applicable law.

4.3.7 Bidder's Actions Requiring MCGM's Prior Approval

The Consultant shall obtain the MCGM's prior approval in writing before taking any of the following actions:

- a) appointing Personnel to carry out any part of the Services, including the terms and conditions of such appointment.
- b) entering into a subcontract for the performance of any part of the Services, it being understood

1) that the selection of the Sub- Consultant and the terms and conditions of the subcontract shall have been approved in writing by the MCGM prior to the execution of the subcontract and

2) that the Consultant shall remain fully liable for the performance of the Services by the Sub- Consultant and its Personnel pursuant to this Contract.

4.3.8 Reporting Obligations The Consultant shall submit to the MCGM, 2 copies of monthly progress reports, the format for which shall be mutually agreed.

4.3.9 Documents Prepared by the Consultant to be the Property of the Client All plans, drawings, specifications, designs, reports and other documents prepared by the Consultant in performing the Services shall become and remain the property of the MCGM and the Consultant shall, not later than upon termination or expiration of this Contract, deliver all such documents to the MCGM, together with a detailed inventory thereof. The Consultant may retain a copy of such documents but shall not use them for purposes unrelated to this contract without the prior written approval of the MCGM.

4.3.10 Drawings

The Consultant shall supply MCGM, 2 copies of all drawings as necessary for the Detailed Traffic Engineering Report.

4.4 CONSULTANT'S PERSONNEL

4.4.1 General

The Consultant shall employ and provide such qualified and experienced Personnel as are required to carry out the Services following the provisions under 4.3.7 above.

- 4.4.2 Description of Personnel
 - a) The titles, agreed job descriptions, minimum qualifications and estimated periods of engagement (i.e. minimum man months) in the carrying out of the Services of each of the Bidder's Personnel shall be described in the offer.
 - b) If additional work is required beyond the scope of the Services specified in Terms of Reference the estimated periods of engagement of Personnel set forth may be increased by agreement in writing between the MCGM and the Consultant provided that any such increase shall not, except as otherwise agreed, cause payments under this Contract to exceed the ceilings set forth for the scope of this Contract.

4.4.3 Agreed Personnel

The Consultant hereby agrees to engage the personnel and Sub- Consultant listed by title as well as by name in the offer in order to fulfil the contractual obligations under the contract.

- 4.4.4 Removals and/or Replacement of Personnel
 - a) Except as the MCGM may otherwise agree, no changes shall be made in the Personnel. if, for any reason beyond the reasonable control of the Bidder, it becomes necessary to replace any of the Personnel, the Consultant shall forthwith provide as a replacement a person of equivalent or better qualifications subject to seeking approval from MCGM.
 - b) If the MCGM

 finds that any of the Personnel has committed serious misconduct or has been charges with having committed a criminal action, or
 has reasonable cause to be dissatisfied with the performance of any of the Personnel, then the Bidder shall, at the Client's written request specifying the grounds therefore, forthwith provide as a replacement a person with qualifications and experience acceptable to the Client.

c) The removal and /or replacement under (a) & (b) above shall have no cost implications on MCGM.

4.5 OBLIGATIONS OF THE CLIENT

4.5.1 Assistance and Exemptions

The MCGM shall provide the Consultant, Sub-Consultant and Personnel with all such assistance as shall be necessary to enable the Consultant, Sub-Consultant or Personnel to perform the services.

- 4.5.2 Change in the Applicable Law
 - If, after the date of this Contract, there is any change in the Applicable Law which increases or decreases the cost or reimbursable expenses incurred by the Bidder in performing the Services, then the remuneration and reimbursable expenses otherwise payable to the Bidder under this Contract shall be increased or decreased accordingly by agreement between the Parties hereto, and corresponding adjustments shall be made to the ceiling amounts specified in the contract.
- 4.5.3 Payment : In consideration of the Services performed by the Consultant under this Contract, the MCGM shall make to the Consultant such payments and in such manner as is provided by Clause 4.6 of this Contract.

4.6 **PAYMENTS TO THE BIDDER**

An all payments for the services shall be payable in Indian Rupees only. The GST; if applicable; shall be reimbursed at actual. As per GST Notification no. 9/2017 and no. 12/2017 both dated 28.06.2017, the work of said consultancy being rendered to MCGM is under Twelfth Schedule of Article 243(w) of the Constitution, which is a 'pure service' and hence is exempted from GST. The modalities of making payments are set forth in Terms of Reference.

4.7 FAIRNESS AND GOOD FAITH

4.7.1 Good Faith

The Parties undertake to act in good faith with respect to each other's rights under this Contract and to adopt all reasonable measures to ensure the realization of the objectives of this Contract.

4.7.2 Operation of the Contract

The parties recognize that it is impractical in this Contract to provide for every contingency which may arise during the life of the Contract, and the Parties hereby agree that it is their intention that this Contract shall operate fairly as between them, and without detriment to the interest of either of them, and that, if during the term of this Contract either Party believes that this Contract is operating unfairly, the Parties will use their best efforts to agree on such action as may be necessary to remove the cause or causes of such unfairness, but no failure to agree on any action pursuant to this Clause shall give rise to a dispute subject to arbitration in accordance with Clause 4.9 hereof.

4.7.3 Goods and Services Tax (GST)

As per GST Notification no. 9/2017 and no. 12/2017 both dated 28.06.2017, the work of said consultancy being rendered to MCGM is under Twelfth Schedule of Article 243(w) of the Constitution, which is a 'pure service' and hence is exempted from GST.

However, if applicable in future as per Govt. notifications, GST shall be reimbursed at actual, by MCGM to the Consultant. The bidder shall produce the documentary evidence of GST paid for the work under this contract.

4.7.4 Other Taxes

The MCGM shall not reimburse any other taxes & duties, such as customs, excise etc. levied by Govt. and /or any statutory body thereto, on import / export of any documents, instruments, materials going into the project and the bonafide personal effects of personnel visiting India / going abroad in connection with project.

4.8 COMPENSATION FOR DELAY

If the Consultant fails to render timely services on or before the specified deadline (as mutually agreed by both parties) and such delay is solely attributable to the bidder, without prejudice to any other right or remedy of MCGM on account of such delay, the Consultant shall pay compensation at the rate of 1/4 percent per month or part thereof of total fees for that specified activity.

Provided always that total amount of such compensation shall not exceed 10% of contract price including any additions &/or deletions thereto.

4.9 SETTLEMENT OF DISPUTES

Amicable Settlement

If the commissioner fails to give the notice of the decision as aforesaid within a period of 90 days after being requested as aforesaid or if contractor is dissatisfied with any such decision, then contractor may within 90 days after receiving notice of such decision or within 90 days after the expiration of the first named period of 90 days (as the case may be) require that the matter or matters in dispute be referred to arbitration as hereinafter provided. (i) In case of contract where the contract price and/or contract value is less than Rs.5,00,00,000/- (Rupees Five Crore Only), any dispute arising out of or in connection with contract, including any question regarding its existence, validity or termination, shall be referred to a mutually agreed arbitral tribunal in accordance with the Arbitration and Conciliation Act, 1996 (amended up to date). The arbitral tribunal shall consist of a sole arbitrator, as mutually agreed upon by the parties and the said dispute shall be finally resolved by the said arbitral tribunal. The decision of the arbitral tribunal shall be in writing (with reasons) and which will be final and binding upon the parties hereto and the expenses of the arbitration shall be paid as may be determined by arbitral tribunal. The seat of the arbitration shall be Mumbai. The venue of arbitration shall be within the limits of Brihan Mumbai. The language of the Arbitration shall be English. If parties fails to appoint mutually agreed arbitral tribunal, within the period of 30 days from the date of application seeking arbitration in the dispute, the arbitral tribunal shall be appointed by recognized arbitral institution i.e. Mumbai Centre for International Arbitration (approved by Government of Maharashtra under G.R.no.ARB/Case No.1/2017/D-19 dtd.28.02.2017) as per the Arbitration Rules of the Mumbai Centre for International Arbitration then in force ("MCIA In case of contract where the contract price and/ or contract Rules"). (ii) value is Rs.5,00,00,000/- (Rupees Five Crore Only) or more, any dispute arising out of or in connection with such contract, including any question regarding its existence, validity or termination, shall be directly referred to and finally resolved by the recognized arbitral institution i.e. Mumbai Centre for International Arbitration (approved by Government of Maharashtra under G.R. no. ARB/Case No.1/2017/D-19 dtd.28.02.2017) as per the Arbitration Rules of the Mumbai Centre for International Arbitration then in force ("MCIA Rules"). The arbitral tribunal shall consist of a sole arbitrator. The seat of the arbitration shall be Mumbai. The language of the Arbitration shall be English. In either case, the law governing this arbitration agreement and the contract shall be Indian Law.

4.10 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 consultant 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:

a) Extension attributable to MCGM

i. 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 Consultant 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 consultancy works.

ii. Extension For Delay Due to MCGM: In the event of any failure or delay by the MCGM to hand over the details necessary for the 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 MCGM 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 consultant to damages or compensation therefore, but in any such case, the MCGM 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, 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.

b) Extension of Time for Delay Due to Consultant :

The time for 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 consultant fails to complete the works within the time as specified in the contract for the reasons other than the reasons specified in above as (a.i) and (a.ii), the MCGM may, if satisfied that the works can be completed by the consultant within reasonable short time thereafter, allow the consultant for further extension of time as the Employer may decide

c) 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 under Clause (4.10.b) of 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.

SECTION – V Terms of Reference

TERMS OF REFERENCE FOR THE ENGINEER

5.1. Background:

At present Mumbai city has 652 signal junctions which includes Island city, Western suburbs and Eastern Suburbs. Out of 652 signal junctions 394 signal junctions are working in fixed time mode of conventional type and 258 signal junctions are converted in to Area Traffic Control system with World Bank assistance under MUTP-I. The existing 258 signal junctions under ATC are operating in ITACA (Intelligent Adaptive Traffic Control Area) from Traffic Police Control Room. The capacity of the server is to accommodate approximately 500 signal junctions, out of which almost 250 signal junctions are already connected with the existing server. The existing ITACA system is working satisfactorily.

The main control is at Traffic Police Head Quarters. The address of the Main control room:-

Office of Jt. Commissioner of Police (Traffic), 5th Floor, Traffic Police Head Quarters, 87, Sir Pochkhanwala Road, Worli, Mumbai 400025.

The Satellite Information Center is in MCGM's Worli Office which provides the data for the Fault Management System. The fault management activity is carried out at Satellite Information Center. The address of the Satellite Information Center:

Office of Executive Engineer (Area Traffic Control), Ground Floor, Engineering Hub, Dr. E. Moses Road, Worli, Mumbai 400018.

Now, some of the conventional signals were refurbished due to their outlived life was over. These signals are refurbished by replacing the ATC type street furnitures except vehicle detection cameras, ATC Controller (at some places), leased line connectivity and configuration to the existing ATC software.

Further, The Central Government launched National Clean Air Programme (NCAP) as a long-term, time-bound, national level strategy to tackle the air pollution problem across the country in a comprehensive manner with targets to achieve 20% to 30% reduction in Particulate Matter concentrations by 2024 keeping 2017 as the base year for the comparison of concentration. Under NCAP, 122 non-attainment cities have been identified across the country based on the Air Quality data from 2014-2018.

The city specific action plans have been prepared which, inter-alia, include measures for strengthening the monitoring network, reducing vehicular/industrial emissions, increasing public awareness etc. Implementation of the city specific action plans are regularly monitored by Committees at Central and State level namely Steering Committee, Monitoring Committee and Implementation Committee.

The 15th Finance Commission is the first Commission to specifically discuss and set budget allocations for improving air quality. In the City action plan, "Synchronize Traffic movement/Introduce Intelligent Traffic System for lane driving" is one of the component. Accordingly, MCGM Traffic department has proposed the work of Conversion of Existing 70 Traffic signals into fully adaptive Traffic Control system in coordination with Traffic Police department. For conversion of these refurbished signals into ATC type signals & installation of new signals, it is necessary to appoint **Traffic consultant** for detailed traffic engineering study, Network design, pre & post impact analysis environmental study etc.

The current assignment is aimed of this project

1. Appointment of Consultancy for detailed Traffic Engineering Study of 70 signals (Pre Study, Network design & Impact Analysis Study in terms of environment) & Project Management Consultancy

5.2_Objectives:

- (a) The objectives of deploying the Engineer for improvement of Air Quality by synchronize Traffic Movement. The Traffic Signal Synchronization is a traffic engineering technique of matching the green light times for a series of intersections to enable the maximum number of vehicles to pass through, thereby reducing stops and delays. Traffic synchronizing traffic signals ensures a better flow of traffic and minimizes gas consumption and pollutant emissions. The objective function of this project is a weighted sum of the delays caused by the signalized intersections.
- (b) To ensure that high quality work to be carried out in full compliances with the engineering design, technical specifications and other contract documents. The Engineer will plan the execution of contracts including pre-construction activities in such a way to avoid slippage's, delays by the consultant and to monitor and suggest to the MCGM remedial advance actions to speed up works and avoid delays.

Apart from this above, the following benefits are anticipated after Conversion of Existing 70 Traffic signals into fully adaptive Traffic Control system

- 1. Automatically adapt to unexpected changes in traffic conditions
- 2. Reducing stops & delays at intersection
- 3. To increase safety by reducing stops
- 4. Reduce the delay in travel time
- 5. Reducing the congestion and fuel consumption
- 6. Improving the Air Quality by reducing emission
- 7. Centrally Monitoring Traffic Signals system

5.3 Scope Of Work:

5.3.1. Detailed Engineering Study

The consultant shall carry out the Detailed Engineering Study at Signal Junctions as prescribed in Clause 5.11 (List of Junctions) in the tender which shall cover the following Parameters:

5.3.1.1 Data Collection:

Main objective of the data collection is to be ensuring the information rich and reliable data is collected for analysis and data driven decisions can help to find out results. Data collection includes primary and secondary data collection.

- A) Primary data collection shall includes
 - 1. Topographic Survey of the junctions
 - a) Consultant shall be carried out topographic survey for all the junctions
 - b) In Topographic survey capture all the existing physical features on ground at the junction such as road width, median, island, light poles, traffic signal poles, footpath, trees, chambers, ducts, utility crossings, existing and proposed right of way.
 - c) The topographic survey shall be done on intersections and approaches of at least 150m from the stop line of approaches of the junctions.
 - d) The survey also capture the existing building boundary along the street, entrances to adjoining plots, etc.
 - a) The consultant has to relate the survey to the acceptable mapping grid in Mumbai, and carry out to standard of accuracy which enables plans 1:500 to be prepared for all areas affected by the works.
 - 2. Traffic Count & Pedestrian count Survey
 - a) Traffic counts shall be taken along with classification of vehicles for at least 3 days (2 weekdays and 1 Sunday or holiday) during morning, Evening peak & off peak hours along with turning movement count.
 - b) Pedestrian count (along and across) for each junction. These surveys will be taken up with video graphic camera or any other advanced technology.
 - 3. Identification of corridor & Sub Area
 - a) The consultant shall identify the corridor & Sub area as per the pattern & behaviour of traffic in network.
 - 4. Junction and Corridor Inventory

Junction and corridor inventory shall includes

- a) Parking area of public/private transport and their bays
- b) Vending activities at junction area,
- c) Existing speed limit of corridor
- d) Pedestrian crossings
- e) Type of junction (major/ minor, controlled/uncontrolled, number of approaches, existing signal timing, etc.)
- 5. Speed and Delay Survey Analysis

The speed and delay assessment shall be carried out along the corridors and approaches of the junctions. It helps to identify the speeds along the links and major queue length at junctions.

a) The duration of the survey shall carried out for at least for a period of one week.

- b) The number of journey time runs shall be adequate to ensure statistical significance. It is likely to at least 20-30 journey times run per direction during peak period.
- c) Journey time shall be carried out for buses and private vehicles.
- d) Survey methodology shall be (1) a simple variant of floating car for private vehicles and (2) on board bus observers for BEST routes.
- e) Separate queue length surveys shall be carried out. If resources are constrained, the moving observers in private vehicles shall note traffic queues during their surveys.
- f) Prepare the Speed & Delay Heat Map from the outcome of above study.
 - i. Traffic count & pedestrian count
 - ii. Environmental Study (Pre & Post)
 - iii. Junction and corridor inventory,
 - iv. Speed and delay survey (Pre & Post)
- B) Secondary data collection shall consists of technical reports, DPR, CMP reports, metro DPR, Parking reports, etc. The consultant shall refer the same from external available sources.
- 5.3.1.2 Evaluation of benefits of Proposed FATC by modelling &

Simulation

- 1. The evaluation and feasibility of signal junction shall be based on outcomes of the Data Collection.
- 2. The consultant shall carried out the micro analysis, modelling & simulation by using PTV Vissim, PTV Vistro or TRL Transyt software or any other advanced techniques to suggest best FATC system
- 3. Recommendation of proposed FATC signal system in order to synchronize and for better optimisation.
- 4. If Engineer suggest any new adaptive system other than ITACA then it shall be evaluated for at least 10 signal junctions which will be suggested by Employer. The evaluation period shall be minimum three months. On the basis of the performance, Engineer will decide to go ahead to implement the said system for the remaining signal junction. Otherwise, the consultant may recommend to integrate these new signal junction in existing ITACA system. However, the existing ITACA system has already been installed at 256 signal junction which was already evaluated during the implementation of ATC project and the performance of the system is satisfactorily as of now.
- 5. If the performance of newly adaptive system at 10 junctions found non satisfactorily then consultant shall be stated the reasons for non-performance of the system and re-design as per existing ITACA system. No additional payment shall be paid in this regard.

6. The design of the recommended FATC system shall be carried out after receipt of approval from the Employer

5.3.1.3 Design of FATC

- 1. Preparation of junction geometry and traffic signal junction drawing with adaptive real time system arrangement.
- Construction design and plans includes construction details such as road width, road pavement, footpath, earthwork, manholes on roads and footpath, streetlights, trees, traffic management measures and safety devices, location of existing signal poles where necessary, and service lanes.
- 3. Operational design includes all aspect of signal design such as physical requirements (Signal pole, controller location, signal aspects, ducts, cables, chamber covers, camera locations, etc.).
- 4. In traffic regulation design will include the consultant's recommendations for all traffic regulations which will apply at least within 150 m from the junction of centre of junction.
- 5. Preparation of junction timing plan, signal phases by considering the conflict movements.
- 6. The interaction of junction with upstream and downstream junction shall be studied for synchronization within the subarea, corridor or operate as a standalone junction.
- 7. All the main drawings will be prepared as auto CAD files or any upgraded software. All plans and drawings will be produced at standard size (Internationally A0/A3)
- 8. Consultant may suggest any other traffic aspect required for efficient and effective operation of the system to be installed.

5.3.2 Preparation of Tender Document with Cost Estimate for the work of Conversion of existing conventional signal system into fully adaptive traffic control system.

The consultant will be responsible -

- 1. Preparation of bid document, Technical Specifications, Plan & drawings based on the approved Detailed Engineering Study report.
- 2. Assistance to the Employer in organising pre-bid meeting, providing clarification to the bidders., answer queries; advise the Employer at all stages during the bidding process.
- 3. Undertake initial Bid assessment in accordance with the established Bid evaluation criteria, Prepare the bid evaluation report for the Employer and assist the Employer for the final bid assessment report.
- 4. Bill of Quantity and estimate- Based on the full design Bill of Quantities should be prepared for all items of works required for implementation of ATC system design. The breakdown of items shall be in accordance with the standards adopted by MCGM for road/

traffic works. The consultants should take cognizance of trenching policy of MCGM while preparing bid documents. As far as possible detail break up of items are to be taken into consideration while preparing the cost estimate. The consultant will estimate cost for individual work or item from available market rates or fair market schedule of MCGM for the complete scheme. The cost shall be identified with applicable GST or any other taxes.

- 5. Modification to the bidding documents: If required consultants may modify the bidding documents based on the outcome of the pre-bid meeting. The amendments to the bidding documents will be adequate and complete to enable the implementing authority to proceed with invitation and award of the contract with procedure acceptable to MCGM.
- 6. The consultant will be responsible for assistance in bidding process, preparation of bid evaluation report till completion of project.

5.3.3. Project Management Consultancy (PMC)

The consultants will be the Engineer as defined in Bid documents and undertake the implementation, supervision of the system in accordance with the conditions set out in the Bid Documents.

Under this the Engineer will -

- 1. Liaise with selected contractual agency to establish and resolve any issues identified in the initial programme of work included in the contract.
- 2. Define and approve overall implementation period while ensuring that the detailed implementation schedule is prepared by Contractor and agreed by the Engineer along with MCGM.
- 3. The day to day monitoring and supervision of the progress of work with respect to civil engineering, selection/procurement of equipment, manufacturing process, testing and installation shall comply with the designs and specifications and their functioning under the contract. This includes Factory Acceptance Tests before finalization of vendor and after manufacture of Equipment, site acceptance test of all equipment and systems, validation of Monitoring Systems etc.
- 4. Day to day activities report & Monthly progress report to Employer to update the activities.
- 5. To undertake the measurements and valuation of works. The consultant is responsible for Certification of works carried out by the contractor and the equipments delivered in accordance with the contract. The consultant shall also recommend additional costs for any other cause and recommend the appropriate course of action.
- 6. Prepare a work completion certificate after commissioning of the entire system.

7. Prepare a Defect Liability Certificate for Handing Over the System after satisfactorily performance and ensure that suitable warranty provisions are made before signing the certificate.

5.3.4 Performance Evaluation:

The consultant will evaluate the performance of the existing Conventional system & newly installed system and equipment against the established performance criteria and will report to the MCGM.

There shall be evaluation at three stages,

- 1. First evaluation shall be at the stage of physical survey
- 2. Second evaluation at the stage after installation of the system in corridor.
- 3. The Final evaluation of the system shall be done after installation and operational stage of the entire system.

The work of evaluation may continue during the entire period of the consultancy work including project management consultancy, however the contractor shall not be paid extra for this activity.

Following three types of evaluations are envisaged the details of which are given below:

A) Traffic Impact Evaluation which will show the effectiveness of the installed system under the contract ("with condition") in comparison to the before or "without" the installed system;

The base or "without" installed system case will require traffic data to be collected to demonstrate traffic operations (journey time, capacity, Turning movement count/pedestrian count, level of service, delay, corridor analysis & PV² analysis etc). Traffic operation surveys should be scheduled as close as possible to the start date of the system implementation contract. The "with" installed system scenario will require data to be collected after approximately a period of three months in operation.

The two "with" cases are envisaged-

- 1. With demand responsiveness in operation
- 2. Without demand responsiveness in operation

The consultants will be responsible for all aspects of evaluation programme including-

- i. Establishing and defining the data collection and monitoring programme.
- ii. Collection of the Traffic operational data.
- iii. Determining the signal setting to be used in "without responsive" case.
- iv. collection and analyze of any other operational and system data necessary to carry out the evaluation.

v. Analysis of two "with" installed system cases in relation to "without" installed system or base case in economic and operational terms and preparation of an evaluation report.

B) Environmental Evaluation:

Environmental Evaluation Study is a systematic, documented verification process for objectively obtaining and evaluating evidence to determine whether specified environmental activities, events, conditions, management systems conforms with audit crieteria, and communicating the result of this process to the client. Is is an investigative process to determine if an existing facility is in compliance with applicable environmental laws & regulations. This service is essential to the environmental management process, as it complements associated field services aimed at analyzing environmental parameters. The environmental study (Pre & Post) shall be based on National Ambient Air Quality Standard, Central Pollution Control Board, Notification 18 November 2009, for the concentration in Ambient air of the pollutant such as Sulphur DiOxide, Nitrogen DiOxide, PM2.5, PM10, Ozon, Lead, Carbon Monoxide, Ammonia, Hydrocarbon measured by applicable methods of measurement.

C) System evaluation which will demonstrate the reliability and adequate functioning of the equipment.

a) Equipment- Consistency

Records should be obtained for the representative periods from the control centre to ensure that the equipment functions as planned. This should include such criteria as cycle time variation etc and will be specified by the consultant but is likely to include cycle times, plan switch times (for the "without responsive" cases) etc.

b) Equipment-Reliability

Records should be obtained for representative periods of mean time between failures and compared with industry standards. This should include on-street lights, detectors, transmission equipment, etc. these will be specified by the consultant.

5.4 Role of Consultant (Engineer):

The Engineer will have all the powers to execute the work with the exception of the following, which will be retained and exercised by the Employer.

- 1. Issuing the order to commence the works.
- 2. Approving variation orders that have financial implications as recommended by the Engineer.
- 3. Approving significant variations in quantity as recommended by the Engineer.
- 4. Approving time extensions as recommended by the Engineer

The Engineer's responsibilities will include the following:

a) review the design as required;

- b) approving design as per site condition mutually agreed with Employer.
- c) approving the contractors work-program, method statement, material sources, etc.;
- d) preparing and issuing reports as defined subsequently;
- e) approving working drawings, setting out the work and giving instructions to the contractors;
- f) reviewing the quality control programs of the contractor;
- g) inspecting and testing all materials to ensure compliance with specifications and giving immediate notice to the contractor in the event that such materials fail to comply with the specifications;
- h) making measurements and keeping measurement records;
- i) maintaining records, correspondence, diaries & photographs;
- j) assisting the MCGM with the maintenance of consolidated project accounts, and preparation of financial statements;
- k) certifying completion of the work;
- periodically checking the balance quantities, and undertaking constant monitoring of each item & costs associated;
- m) reviewing and recommending to MCGM variation orders, extensions of time, claims, and other matters that may come from contractor;
- n) negotiating with contractor and recommending to MCGM the rates for any nonscheduled /Fair items of work that may arise;
- o) advising the MCGM on all matters relating to the execution of the works;
- p) day to day supervision of Contractor's work, conducting monthly review meetings, preparation of Minutes of meeting and action plan undertaking project performance management system in the format acceptable by the MCGM;
- q) It is the responsibility of the consultant to supervise and expedite all the excavated portion refilled & temporarily reinstated as per MCGM trenching policy guidelines by the signal Contractor. Surplus excavated earth from work site shall be removed within 24 hours as per the M.C.G.M. guidelines from the site.
- r) The consultant shall have to check that all the safety measures are taken care of onsite and ensure various display/ cautionary boards on site.
- s) The consultant will have to arrange to carry out the work either during daytime and/or night time as the permissibility from traffic operation point of view. No extra payment to that effect will be made.
- t) The consultant shall confirm the work shall be finished in workman like manner and to the entire satisfaction of the Employer. The entire work shall be in accordance with the latest modern practice and shall present a neat appearance when completed from aesthetic point of view.
- u) at the completion of the contracts, assisting in preparing a consolidated project completion report;
- v) checking and certifying as-built drawings for the works prepared by the Contractors;
- w) inspecting the works at appropriate intervals during the defect liability period and certifying the defect liability certificate for issuance by the MCGM;
- x) providing the MCGM with complete records, and reports i.e. inception report, monthly report, and completion report;
- y) Providing training to MCGM personnel on the various softwares utilised for signal systems under this contract.
- z) Preparation of Environmental study of signal junction as per NAAQ standard (Pre & Post). Based on the outcomes from the study, impact analysis study shall be

prepare.

aa) The consultant shall ensure that Air Quality parameters shall be improved after conversion of existing traffic signal system into Fully Adaptive Traffic Control System in order to synchronize and for better optimization. For this, the necessary measures shall be taken by the consultant.

5.5 <u>Time Schedule & payment term:</u>

Sr. No.	Activity	Period	payment
	I. Detailed Engineering Stue	dy (25 Weel	ks)
1	Project inception report which includes elaboration on the approach and methodology, data collection strategy, work plan for execution of the assignment, deployment of experts, surveys and investigations, tools for analytical studies, the outcomes at various stages and PMC task etc.	2 Weeks	10.00%
2	Physical survey of traffic counts along with classification etc., pedestrian counts, Speed & Delay, Queue length, journey time, saturation flow, (Pre Evaluation Study on Traffic Engineering as detailed in 5.3.1 & Pre Environmental Study as detailed in 5.3.4.B		40.00%
3	Preparation of construction, design and plans with operational design and submission of Draft Feasibility Report including methodology and work plan.(as detailed in 5.3.1.2 & 5.3.1.3)		20.00%
4	Final Feasibility Report. It provides all the information that will be needed for a decision by the Employer	02 weeks	10.00%
5	Preparation of Bill of Quantities and cost estimate with technical specifications & drawings & Preparation of Tender documents & drawings (GAD) (as detailed in 5.3.2)		20.00%
	II. Project Management Consultance	y (104 Week	s)
1	Project management Consultancy for Upgradation of 70 existing Conventional Traffic Signals into Intelligent Traffic Signal System (ATC Type)(as detailed in 5.3.3)	100 Weeks	90.00%

2	Post Evaluation Study of Traffic 04 Weeks 10.00% Engineering after commissioning the system as well as Environmental study as per NAAQ standard (as detailed in 5.3.4)	
---	---	--

The consultant shall note the following :

1. Advance payment will not be applicable to the Consultant.

2. Payment against the PMC are equally divided in 70 Signal Junctions.

- 3. The above said contract period for consultancy work is actual work period, however the physical contract period will vary with signal installation work. And the consultant will not be paid extra on this account.
- 4. Payment will be delivered as per the commissioning of signal junctions and operational acceptance of the signal junction to the satisfaction of the Employer. Operational acceptance means the acceptance by the Employer of the proper functioning of Fully Adaptive Traffic System which certifies the contractor fulfillment of the contract in respect of functional guarantees of the system.

5.6 Training:

The consultant should define the scope of training for which the consultant is responsible to impart the training in Mumbai. If the training faculty staying in overseas, then this faculty remain available in Mumbai to delivered the training to MCGM & Traffic Police staff. The cost associated in this regard shall be included in the estimate or Bill of Quantities. The training should be in such a way that the MCGM/Traffic Police staff can operate the system independently. The operation of the system is the responsibility of the Traffic Police for which they should be trained. For maintenance of the system MCGM will be responsible.

5.7 Pre-bid Meeting

Pre-bid meeting of the bidders shall be convened on 16.12.2021 at 11.00 PM, in the Conference Hall of Ch. Eng. (Roads & Traffic) department, Ground Floor, Engineering Hub, Dr. E. Moses Road, Worli, Mumbai- 400 018.

A maximum of three representatives of each bidder shall be allowed to participate on production of authority letter from the bidder.

During the course of Pre-bid meeting, the bidders will be free to seek clarifications and make suggestions for consideration to the Authority. The Authority shall Endeavor to provide clarifications and such further information as it may, in its sole discretion, consider appropriate for facilitating a fair, transparent and competitive Bidding Process.

5.8 Deliverables by the consultant:

The Consultant shall be required to deliver the following reports (as per scope of work) in hard and soft form as mentioned below.

Sr. No.	Report	Qty
1	Project inception report	3 Hard copies + soft copy
2	Traffic Survey Report & Pre Environmental study report	3 Hard copies + soft copy
3	Design Report	3 Hard copies + soft copy
4	Bid Document (Draft)	2 Hard copies + soft copy
5	Bid Document (Final)	2 Hard copies + soft copy
6	Monthly Progress reports during the execution period	2 Hard copies + soft copy
7	Project Commissioning Report	3 Hard copies + soft copy
8	Post Study Report (Traffic Engineering & Environmental)	3 Hard copies + soft copy
9	Final Completion report	3 Hard copies + soft copy

The Engineer will prepare a comprehensive Final Completion Report for the Contract which includes as built drawings, Manuals of Equipment (Operation & troubleshooting), Test Reports & Certificate of procured material and other relevant documents, evaluation summary as compared to the old system, financial summary which includes the original contract amount and the final contract amount with details of variations if any. These reports must be submitted immediately after taking over of the system. It shall summarise the method of construction, the construction supervision performed, and recommendations for future projects of similar nature to be undertaken by the MCGM.

5.9 Place of Work:

The Consultant shall generally work from their own office in Mumbai and may arrange for their own office space at his own cost.

5.10 Data, Services and Facilities to be provided by MCGM

- a) Facilitate organizing meetings with various authorities as necessary.
- b) Suitable space for meetings.
- c) Copies of schedule of rates and standard specifications of MCGM.
- d) Access to the existing ITACA System
- e) Available Signal Junction drawings

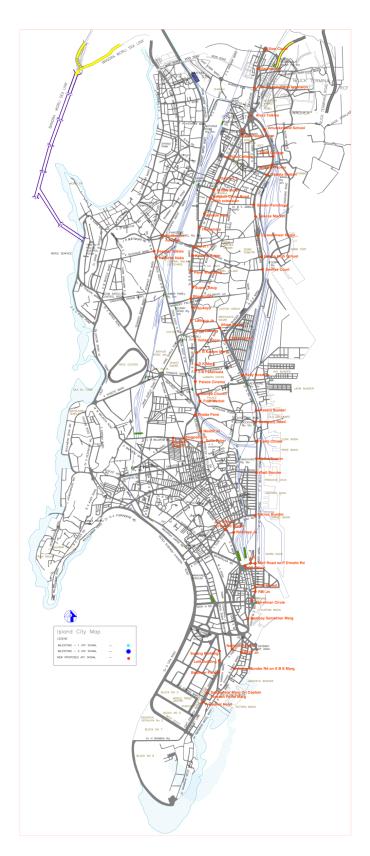
5.11 List of Signal Junctions:

	t of Signal Junc		Di		
Sr. No		Nam	e of the Signal Junctions	Type of Junction	Reference Latitude longitude
1		1	President Hotel	3-arm	18°54'51.32"N, 72°49'17.94"E
2		2	Saigaonkar Marg on Captain Prakash Marg	3-arm	18°54'59.93"N 72°49'25.12"E
3	Captain Prakash Marg	3	Badhwar Park	3-arm	18°55'7.62"N, 72°49'31.76"E
4		4	Lalit Building	3-arm	18°55'16.18"N 72°49'34.82"E
5		5	Sarang Building	3-arm	18°55'22.22"N 72°49'35.96"E
6		1	Arthor Bandar Road on S B S Marg	3-arm	18°55'8.20"N 72°49'44.61"E
7	_	2	BEST House	4-arm	18°55'18.70"N 72°49'52.19"E
8	_	3	Nathalal Parekh	4-arm	18°55'22.50"N 72°49'45.86"E
9	Shahid Bhagat Singh Marg	4	Bombay Samachar Marg	3-arm	18°55'41.58"N 72°50'2.82"E
10	_	5	Horniman Circle	3-arm +ped	18°55'55.17"N 72°50'8.54"E
11	_	6	RBI Junction	Ped	18°56'0.09"N 72°50'12.67"E
12		7	Fort Market	4-arm	18°56'4.20"N 72°50'13.40"E
13	Walchand Hirachand	1	ACP Office	3-arm	18°56'18.65"N 72°50'9.41"E
14		2	GPO Junction	3-arm	18°56'18.43"N 72°50'12.72"E
15	_	1	Mint Road on P D'mello Road	4-arm	18°56'17.81"N 72°50'16.64"E
16	_	2	Karnac Bandar	4-arm	18°56'55.95"N 72°50'26.03"E
17	P D'mello Road	3	Wadi Bandar	3-arm	18°57'26.49"N 72°50'33.24"E
18	_	4	Mallet Bandar	3-arm	18°57'36.51"N 72°50'35.77"E
19		5	Kaklij Chowk	4-arm	18°57'48.79"N 72°50'38.56"E
20	_	1	Dockyard Road	3-arm	18°58'3.42"N 72°50'41.50"E
21		2	Kasara Bandar	Ped	18°58'11.44"N 72°50'43.48"E
22	Barister Nath Pai Marg	3	Reay Road	Ped	18°58'38.25"N 72°50'38.16"E
23		4	Cotton Green	Ped	18°59'7.65"N 72°50'31.81"E
24		5	Albert Circle	4-arm	18°59'7.10"N 72°50'31.80"E

25		1	Sewree Court	4-arm	18°59'46.10"N 72°51'10.16"E
26		2	Fatima High School	3-arm	19° 0'1.91"N 72°51'13.47"E
27		3	Dyaneshwar Nagar	3-arm	19° 0'17.38"N 72°51'14.22"E
28		4	Sewree Market	Ped	19° 0'32.48"N 72°51'14.94"E
29	R A Kidwai Marg	5	Sakhar Punchayat	3-arm	19° 0'40.76"N 72°51'15.63"E
30		6	Wadala Station	4-arm	19° 1'0.78"N 72°51'31.28"E
31		7	Wadala Flyover	3-arm	19° 1'7.55"N 72°51'36.82"E
32		8	SIWS College	3-arm	19° 1'14.81"N 72°51'38.70"E
33		9	Amulukchand School	Ped	19° 1'37.53"N 72°51'35.28"E
34		1	Khada Parsi	5-arm	18°58'17.15"N 72°49'56.75"E
35		2	Fruit Market	3-arm	18°58'26.67"N 72°50'1.72"E
36		3	Gloria Church	3-arm	18°58'31.56"N 72°50'1.21"E
37		4	Palace Cinema	Ped	18°58'34.72"N 72°50'0.74"E
38		5	E. S. Patanwala	3-arm	18°58'49.80"N 72°50'3.46"E
39	Dr. B A Road	6	D. K. Marg	3-arm	18°58'53.89"N 72°50'4.58"E
40	DI. D A Rodu	7	T B Kadam Marg	3-arm	18°59'2.19"N 72°50'6.95"E
41		8	Volta Sagar	Ped	18°59'10.52"N 72°50'8.14"E
42		9	Kala Chowky	4-arm	18°59'18.58"N 72°50'8.88"E
43		10	Santa Jagnade Maharaj (lalbaug Market)	3-arm	18°59'26.66"N 72°50'8.39"E
44		11	Tejukaya	Ped	18°59'36.47"N 72°50'11.53"E
45		12	Bharatmata	4-arm	18°59'43.35"N 72°50'11.81"E
46	Dr. B A Road	13	Supari Baug	3-arm	18°59'51.39"N 72°50'14.74"E
47		14	Parel Workshop	Ped	19° 0'1.30"N 72°50'16.34"E
48		15	Krishna Nagar	Ped	19° 0'11.75"N 72°50'19.36"E
49		16	Parel T.T.	5-arm	19° 0'19.28"N 72°50'22.93"E

50		17	Hindamata	4-arm	19° 0'30.63"N 72°50'29.45"E
51		18	Shindewadi	Ped	19° 0'43.05"N 72°50'37.12"E
52		19	Naigaon Corss Road with extension	4-arm	19° 0'52.90"N 72°50'43.69"E
53		20	Pritam Hotel	3-arm	19° 0'58.71"N 72°50'47.84"E
54		21	Dadar T.T. with extension	4-arm +ped	19° 1'4.05"N 72°50'52.14"E
55		22	Ruia College	4-arm	19° 1'19.28"N 72°51'3.53"E
56		23	Maheshwari Udyan	4-arm	19° 1'36.67"N 72°51'19.20"E
57		24	Arora Talkies	3-arm	19° 1'45.14"N 72°51'26.45"E
58		25	Sion Hospital with extension	3-arm +ped	19° 2'6.22"N 72°51'35.69"E
59		26	Shivneri	Ped	19° 2'19.79"N 72°51'41.08"E
60		27	Sion Circle	Ped	19° 2'33.07"N 72°51'49.82"E
61		1	Nagpada Junction	5-arm	18°58'1.24"N 72°49'43.33"E
62	Belassis Road	3	Alexandra Theatre	3-arm	18°58'3.39"N 72°49'34.93"E
63	Circ 1 1 Marra	1	NESBIT	3-arm	18°58'5.41"N 72°49'57.92"E
64	Sir J J Marg	2	Sofia Juber	4-arm	18°57'56.24"N 72°49'56.94"E
65	Mata Ramabai Ambedkar	1	Himalaya Jn	3-arm	18°56'41.81"N 72°50'4.15"E
66	Marg	2	Crawford market	3-arm	18°56'42.55"N 72°50'3.01"E
67	L T Road/ D N Road	1	C P Office	Ped	18°56'43.68"N 72°50'2.50"E
68		1	Vadacha Naka	4-arm	19° 0'17.92"N 72°49'51.56"E
69	Senapati Bapat Marg	2	Elphinston Junction	4-arm	19° 0'32.92"N 72°49'59.98"E
70		3	Dipak Cinema Junction	3-arm	19° 0'22.49"N 72°49'51.08"E

5.12 Reference maps of Signal Junction:



66

SECTION - VI

TECHNICAL PROPOSAL – STANDARD FORMS

FORM OF TECHNICAL BID SUBMISSION

To,

The Municipal Commissioner for Greater Mumbai

Sir,

I/ We have read and examined the following documents relating to the work of "Appointment of Consultant for Detailed Traffic Engineering Study for Up-gradation of 70 existing Conventional Traffic Signals into Intelligent Traffic Signal System (ATC type) with Project Management Consultancy in Greater Mumbai.".

- 1. The e-tender notice
- 2. The said Tender
- 3. Instruction to e-tenderers
- 4. Instruction to Bidders
- 5. General Condition of Contract (GCC)
- 6. The terms of Reference
- 7. Tender forms & Formats
- 8. Pro-Forma of Bank Guarantees
- 9. Form FIN-1
- 10. Drawings, if any
- 11. Pre bid Minutes
- 12. Addendum, Corrigendum, if any

1A. I/We___

(full name in capital letters, starting with surname), the Proprietor/ Managing Partner/ Managing Director/ Holder of the Business, for the establishment / firm / registered company, named herein below, do hereby offer to carry out the work of **Appointment** of **Consultant for Detailed Traffic Engineering Study for Up-gradation of 70** existing Conventional Traffic Signals into Intelligent Traffic Signal System (ATC type) with Project Management Consultancy in Greater Mumbai. referred to in the specifications and schedule to the accompanying form of contract of the rates entered in the schedule of rates sent herewith and signed by me/ us" (strike out the portions which are not applicable).

1B. I/We do hereby state and declare that I/We, whose names are given herein below in details with the addresses, have not filled in this tender under any other name or under the name of any other establishment /firm or otherwise, nor are we in any way related or concerned with the establishment /firm or any other person, who have filled in the tender for the aforesaid work."

- 2. I/We hereby tender for the execution of the works referred to in the aforesaid documents, upon the terms and conditions, contained or referred to therein and in accordance with the specifications designs, drawings and other relevant details in all respects.
- * At the rates entered in the aforesaid Bill of Quantities and Rates.

I/We have deposited the amount through online payment gateways with the C.E. of the Corporation not to bear interest

- 4. I/We hereby request you not to enter into a contract with any other person/s for the execution of the works until notice of non/acceptance of this tender has first been communicated to me/us, and in consideration of yours agreeing to refrain from so doing I/we agree not to withdraw the offer constituted by this tender before the date of communication to me/us of such notice of non/acceptance, which date shall be not later than ten days from the date of the decision of the Standing Committee or Education Committee of the Corporation, as maybe required under the Mumbai Municipal Corporation Act, not to accept this tender.(Subject to condition 5 below).
- 5. I/We also agree to keep this tender open for acceptance for a period of 180 days from the date fixed for opening the same and not to make any modifications in its terms and conditions which are not acceptable to the Corporation.
- 6. I/We agree that the Corporation shall, without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely, if.
 - a. I/We fail to keep the tender open as aforesaid.
 - b. I/We fail to execute the formal contract or make the contract deposit when called upon to do so.
 - c. I/we do not commence the work on or before the date specified by the Employer in his work order.
- 7. I/We hereby further agree to pay all the charges of whatsoever nature in connection with the preparation, stamping and execution of the said contract.
- 8. I/We further agree that, I/we shall register ourselves as 'Employer' with the Bombay Iron and Steel Labour Board' and fulfill all the obligatory provisions of Maharashtra Mathadi, Hamal and other Manual workers (Regulation of Employment and Welfare) Act 1969 and the Bombay Iron and Steel unprotected workers Scheme 1970.
- 9. "I/We...... have failed in the accompanying tender with full knowledge of liabilities and, therefore, we will not raise any objection or dispute in any manner relating to any action, including forfeiture of deposit and blacklisting, for giving any information, which is found to be incorrect and against the instructions and directions given in this tender.

10. "I/We further agree and undertake that in the event it is revealed subsequently after the allotment of work/contract to me/us, that any information given by me/us in this tender is false or incorrect, I/We shall compensate the Municipal Corporation of Greater Mumbai for any such losses or inconvenience caused to the Corporation in any manner and will not resist any claim for such compensation on any ground whatsoever. I/we agree and undertake that I/we shall not claim in such case any amount by way of damages or compensation for cancellation of the contract given to me/us or any work assigned to me/us or is withdrawn by the Corporation,"

	Yours faithfully,
Digital Signature of the	
Bidder or the Firm	
	1
	2
	3
	4

Full Name and private residential address of

all the partners constituting the Firm

	A/c No.
1.	 Name of Bank
2.	
3.	 Name of Branch
4.	
5	 Vender No

Form TECH-1

Information regarding status of Bidder

Name of the Bidder:

Place and Country of Incorporation:

Address for correspondence:

Contact Person:

Telephone Number/Mobile Number:

Email address:

Company Registration particulars (CIN)

Director DIN number:

- (1)(a) if it is a proprietary concerning ---
 - (b) of so, name of the owner----
- (2) If it is a partnership concern, please furnish name of each partner and copy of registration certificate

(3) In case of company, please furnish the documentary proof to show that the company is registered

(4) In case of consortium/subsidiary firm, please furnish the documentary proof of each partner of consortium/subsidiary firm

Signature of authorized signatory

Form TECH-2:

Annual Turn Over

Yearly turnover of Works during the last three financial years immediately preceding the Financial Year in which bids are invited.

Sr. No.	Financial year	Annual Turnover of Works	Average of last 3 years	Page No.
1	2018-19			
2	2019-20			
3	2020-21			
Total				

NOTE: The above figures shall tally with the audited balance sheets uploaded by the bidders duly certified by Chartered Accountant.

Signature of authorized signatory

Bidder's Organization and Experience

Provide here a brief (two pages) description of the organization and general experience of the Bidder and, if applicable, for this assignment with supporting documentation. Submit organogram of the firm.

Signature of authorized signatory

Firm's Relevant Experience References

Consultancy Firm's Reference Relevant Experiences/Assignments that Best Illustrate Qualifications (supported with documentary evidence).

Using the format below, provide information on each reference assignment for which your firm/entity, either individually as a corporate entity or as one of the major companies within an association, was legally contracted.

Assignment Name	
Country	
Location within Country	
Professional staff provided by your Firm/entity(profiles)	
Name of Client (Client Certificates to be submitted)	
Name and address of the contact person with e-mail and phone number.	
Duration of assignment	
Start Date (Month/Year):	
Completion Date (Month/Year):	
Approx. Value of Services (in INR)	
Name of Associated Bidders, if any:	
	(Indicate most significant profiles such as Project Director/ Coordinator/ Team Leader)
Narrative Description of Project:	(Details of the Traffic survey, feasibility study, design, implementation & evaluation study (Pre & post) of Internationally proven Intelligent Transport Systems such as SCOOT/SCATS/ITACA in any of the Metropolitan City in India or abroad)
Firm's Name:	

Signature and seal of the Bidder

Team Composition and Task Assignments

1. Personnel Capabilities

(as per clause 3.11.3 of Section III Instruction to Bidders)

Sr. no.	Post	Name	Qualification	Experience
1	Project Manager			
2	Local Team Leader /Resident Engineer			
3	Senior ITS specialist / Adviser			
4	Supervision Engineers (Civil)			
5	Supervision Engineers (M & E)			
6	Environmental Engineer			

NOTE: Scanned Attested copies of qualification certificates and details of work experience shall be submitted /uploaded.

2. Support Staff:

Sr. no.	Post	Name	Qualification	Experience
1	Survey Coordinator			
2	CAD Operator			

NOTE: Scanned Attested copies of qualification certificates and details of work experience shall be submitted /uploaded.

Signature of authorized signatory

DESCRIPTION OF APPROACH, METHODOLOGY AND WORK PLAN FOR PERFORMING THE ASSIGNMENT

Technical approach, methodology and work plan are key components of the Technical Proposal. You are suggested to present your Technical Proposal (NOT MORE THAN 50 pages, inclusive of charts and diagrams) divided into the following three chapters:

- 1. Technical Approach and Methodology,
- 2. Work Plan, and
- 3. Organization and Staffing,
- a) Technical Approach and Methodology. In this chapter you should explain your understanding of the objectives of the assignment, approach to the services, methodology for carrying out the activities and obtaining the expected output, and the degree of detail of such output. You should highlight the problems being addressed and their importance, and explain the technical approach you would adopt to address them. You should also explain the methodologies, you propose to adopt and highlight the compatibility of those methodologies with the proposed approach.
- b) Work Plan. In this chapter you should propose the main activities of the assignment, their content and duration, phasing and interrelations, milestones (including interim approvals by the Client), and delivery dates of the reports. The proposed work plan should be consistent with the technical approach and methodology, showing understanding of the TOR and ability to translate them into a feasible working plan. A list of the final documents, including reports, drawings, and tables to be delivered as final output, should be included here. The work plan should be consistent with the Work Schedule, Form TECH-7
- c) Organization and Staffing. In this chapter you should propose the structure and composition of your team. You should list the main disciplines of the assignment, the key expert responsible, and proposed technical and support staff. You shall also specify if you will be the Prime firm in an association with Sub-bidders.

Curriculum Vitae (CV) for proposed Key Expert

1. General

Position Title and No.	[e.g., Project Manager [Note: Only one candidate shall be nominated to each position.]
Name of Key Expert	[Insert full name]
Date of Birth	[day/month/year]
Nationality	
Country of Citizenship/Residence	

2. Education

[List college/university or other specialized education, giving names of educational institutions, dates attended, degree(s)/diploma(s) obtained]

3. Employment record relevant to the work assignment

[Starting with present position, list in reverse order. Please provide dates, name of employing organization, titles of positions held, types of activities performed and location of the assignment, and contact information of previous clients and employing organization(s) who can be contacted for references. Past employment that is not relevant to the assignment does not need to be included.]

Period	Employing organization and your title/position. Contact information for references*	Country	Summary of activities performed relevant to the Assignment

*Contact information for references is required only for assignments during the last 3 years.

4. Membership in Professional Associations and Publications:

.....

.....

5. Language Skills: (Indicate only Language in which you are proficient):_____

6. Adequacy for the Assignment:

Detailed Tasks Assigned on Bidder's Team of Experts: Reference to Prior Work/Assignments that Best Illustrates Capability to Handle the Assigned Tasks

Historical Contract Non-Performance

[The following table shall be filled in for the Bidder and an Affidavit in this regard shall be submitted]

Date :[insert day, month, year]

Bidder's Legal Name :[insert full name] No. and title :[insert Group number and title of works] Page [insert page number] of [insert total number] pages

1. Black Listing or debarment proceedings ongoing or completed by any Govt./ Semi-Govt. works during last three years.

Sr. No.		Name client	and	address	of	regarding	No. of years of debarment/blac klisting	

2. Pending Litigation

No Pending Litigation

Pending litigation as indicated below for last 5 years

Year		as of	Contract Identification	Amount	(current IN INR	Cost of performin contract RUPEES	Non g in
-	[insert percentage]		Contract Identification: [indicate complete contract name, number, and any other identification] Name of Employer: [insert full name] Address of Employer: [insert street/city/country] Matter in dispute: [indicate main issues in dispute		amount]		

It is further submitted that neither We are under execution of a Tender Securing Declaration nor have forfeited Tender Security or Earnest Money Deposit in the Republic of INDIA in the past Five Years.

Signature of authorized signatory

Form TECH-7 Work Schedule

No.	Activity ¹				Weeks ²	
		1	2	3	4	
1						
2						
3						
4						
5						
•						
•						
•						
•						
•						
n						

Signature of authorized signatory

- 1. Indicate all main activities of the assignment as defined in TOR covering total contract period.
- 2. Duration of activities shall be indicated in the form of a bar chart.

SECTION – VII FINANCIAL PROPOSAL – STANDARD FORMS

Form FIN-1 Financial Proposal Submission Form

To,

The Municipal commissioner, The Municipal Corporation of Greater Mumbai, Municipal Head Office Building, Mahapalika Marg, Fort, Mumbai-400001 INDIA.

Subject: Appointment of Consultant for Detailed Traffic Engineering Study for Up-gradation of 70 existing Conventional Traffic Signals into Intelligent Traffic Signal System (ATC type) with Project Management Consultancy in Greater Mumbai.

Sir,

We, the undersigned, offer to provide the Consulting Services for [insert name of assignment] in accordance with tender notice no. ______ dtd._____ and our Technical Proposal. We have examined the Tender Documents, including the e-Tender Notice, Special Instructions to bidders for e-tendering, Instruction to bidders, Forms and Formats, General Conditions of Contract, Terms of Reference, Appendices and Addendum, if any for the above named tender. We have understood and checked these documents and have not found any errors in them.

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations, up to expiration of the validity period of the Proposal, i.e. 180 days

We understand you are not bound to accept any Proposal you receive.

We remain,

Yours sincerely,

SECTION – VIII

FRAUD AND CORRUPT PRACTICES

FRAUD AND CORRUPT PRACTICES

- The Applicants 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.
- Without prejudice to the rights of the Authority under relevant Clause herein above, if an Applicant is found by the Authority to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice during the Bidding Process, such Applicant shall not be eligible to participate in any tender or RFQ issued by the Authority during a period of 2 (two) years from the date such Applicant is found by the Authority to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice, as the case may be.
- For the purposes of this Clause, the following terms shall have the meaning hereinafter respectively assigned to them:
 - A. "corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the actions of any person connected with the Bidding Process (for avoidance of doubt, offering of employment to, or employing, or engaging in any manner whatsoever, directly or indirectly, any official of the Authority who is or has been associated in any manner, directly or indirectly, with the Bidding Process or the LOA or has dealt with matters concerning the Concession Agreement or arising there from, before or after the execution thereof, at any time prior to the expiry of one year from the date such official resigns or retires from or otherwise ceases to be in the service of the Authority, shall be deemed to constitute influencing the actions of a person connected with the Bidding Process); or save and except as permitted under the relavant sub clause, engaging in any manner whatsoever, whether during the Bidding Process or after the issue of the LOA or after the execution of the Concession Agreement, as the case may be, any person in respect of any matter relating to the Project or the LOA or the Concession Agreement, who at any time has been or is a legal, financial or technical adviser of the Authority in relation to any matter concerning the Project;
 - B. "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 ;
 - C. "coercive practice" means impairing or harming or threatening to impair or harm, directly or indirectly, any person or property to influence any persons participation or action in the Bidding Process;

- D. "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
- E. "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.
- F. If the Employer/Financier determines that the Contractor has engaged in corrupt, fraudulent, collusive, coercive or obstructive practices, in competing for or in executing the Contract, then the Employer may, after giving 14 days' notice to the Contractor, terminate the Contractor's employment under the Contract and expel him from the Site, and the provisions of relevant Clause shall apply as if such expulsion had been made.
- G. Should any employee of the Contractor be determined to have engaged in corrupt, fraudulent, collusive, coercive, or obstructive practice during the execution of the Works, then that employee shall be removed in accordance with relevant Clause.

For the purposes of this Sub-Clause:

- i. "corrupt practice" is the offering, giving, receiving to soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
- ii. "another party" refers to a public official acting in relation to the procurement process or contract execution. In this context, "public official" includes Financer staff and employees of other organizations taking or reviewing procurement decisions.
- iii. "fraudulent practice" is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
- "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
- v. "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
- vi. "obstructive practice" is deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede the Financier investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or
- vii. acts intended to materially impede the exercise of the Financer's inspection and audit rights provided .

- viii. "party" refers to a public official; the terms "benefit" and "obligation" relate to the procurement process or contract execution; and the "act or omission" is intended to influence the procurement process or contract execution.
- ix. "parties" refers to participants in the procurement process (including public officials) attempting to establish bid prices at artificial, noncompetitive levels. a "party" refers to a participant in the procurement process or contract execution.

SECTION – IX

APPENDICES

ANNEXURE -A AGREEMENT FORM

Tender No	dated
Standing Committee/Education Committee Reso	olution Nodated
CONTRACT FOR THE WORKS"	
This agreement made this day of	Two thousand Be-
inhabitants of Mumbai, carrying on business at	
Mumbai under the style and name of Messrs (H one part and Shri	ereinafter called "the consultant of the

the Director(E.S.& P.)/D.M.C. (Infrastructure) (hereinafter called "the commissioner" in which expression are included unless the inclusion is inconsistent with the context, or meaning thereof, his successor or successors for the time being holding the office of Director (E.S.& P.) /D.M.C. (Infrastructure) of the second part and the Municipal Corporation of Greater Mumbai (hereinafter called "the Corporation") of the third part, WHEREAS the consultant has tendered for the works described above and his tender has been accepted by the Commissioner (with the approval of the Standing Committee/Education Committee of the Corporation

NOW THIS AGREEMENT WITNESSETH as follows:-

- 1) In this agreement words and expressions shall have the same meanings as are respectively assigned to them in the General Conditions of Contract for works hereinafter referred to:-
- 2) The following documents shall be deemed to form and be read and constructed as a part of this agreement viz.
 - a) The letter of Acceptance
 - b) The Bid:
 - c) Addendum to Bid; if any
 - d) Tender Document
 - e) The Bill of Quantities:
 - f) The Specification:
 - g) Detailed Engineering Drawings
 - h) Standard General Conditions of Contracts (GCC)
 - i) All correspondence documents between bidder and MCGM
- 3) In consideration of the payments to be made by the Commissioner to the consultant as hereinafter mentioned the consultant hereby covenants with the

Commissioner to construct, complete and maintain the works in conformity in all respects with the provision of the contract.

4) The Commissioner hereby covenants to pay to the Consultant in consideration of the construction, completion and maintenance of the works the contract sum, at times and in the manner prescribed by the contract.

IN WITNESS WHERE OF the parties hereto have caused their respective common seals to be herein to affixed (or have hereunto set their respective hands and seals) the day and year above written.

Signed with designation stamp of the consultant, Sealed and	
delivered by the Consultant)	Seal
Trading under the name & style of)	
In the presence of witness	
Witness No. 1: Name & Address	
Name:	
Resi Address:	
	Signature of Witness No. 1
Witness No. 2: Name & Address Name:	
Resi Address:	
	Signature of Witness No. 2
Signed by the Director (E.S.& P.) /D.M.C.(2 ture) in the presence of	Infrastruc-
1	
2	Director(E.S.& P.)/ D.M.C.(Infrastructure)

Name and Signature of concern Dy.Ch.Eng. & Ch.Eng. (HOD) with Designation Stamp

Dy.Ch.Engr.	Ch.Eng.
(Traffic)	(Roads & Traffic)
Shri/Smt	Shri/Smt

The Common seal of the Municipal Corporation of Greater Mumbai was affixed on the day of20..... presence of

1.

2.

Two members of the Standing Committee of the Municipal Corporation of Greater Mumbai. Witness: (Shri/Smt.....) Office Superintendent, Municipal Secretary's Office

ANNEXURE- B

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, favor, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the MCGM, 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 MCGM 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 MCGM 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 MCGM 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 ;
 - "coercive practice" means impairing or harming or threatening to impair or harm, directly or indirectly, any person or property to influence any persons 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;
 - 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 Bidder/Bidder

Annexure- C

BANKERS GUARANTEE IN LIEU OF CONTRACT

DEPOSIT/PERFORMANCE

THIS INDENTURE made this ______day of ______ BETWEEN

THE _____BANK incorporated under the English/Indian Companies Acts and carrying on business in Mumbai (hereinafter referred to as 'the bank' which expression shall be deemed to include its successors and assigns) of the first part

_____ inhabitants carrying on business at

_____ in Mumbai under the style and name of Messer's

_____(hereinafter referred to as 'the consultant') of the second part THE MUNICIPAL Shri. COMMISSIONER FOR GREATER MUMBAI (hereinafter referred to as 'the commissioner' which expression shall be deemed, also to include his successor or successors for the time being in the said office of Municipal Commissioner) of the third part and THE MUNICIPAL CORPORATION OF GREATER MUMBAI (hereinafter referred to as 'the Corporation') of the fourth part WHEREAS the consultant have submitted to the Commissioner tender for the execution of the work of and the terms of such tender /contract require that the consultant shall deposit with the Commissioner as/contract deposit/ earnest money and /or the security a sum of _)AND WHEREAS if and when any Rs.___ (Rupees such tender is accepted by the Commissioner, the contract to be entered into in furtherance thereof by the consultant will provide that such deposit shall remain with and be appropriated by the Commissioner towards the Security deposit to be taken under the contract and be redeemable by the consultant, if they shall duly and faithfully carry out the terms and provisions of such contract and shall duly satisfy all claims properly chargeable against them there under AND WHEREAS the consultant re constituents of the Bank and in order to facilitate the keeping of the accounts of the consultant, the Bank with the consent and concurrence of the consultant has requested the Commissioner to accept the undertaking of the Bank hereinafter contained, in place of the consultant depositing with the Commissioner the said sum as earnest money and /or security as aforesaid AND WHEREAS accordingly the Commissioner has agreed to accept such undertaking NOW THIS AGRREMENT WITHNESSES that in consideration of the premises, the Bank at the request of the consultant (hereby testified) UNDERTAKES WITH the commissioner to pay to the commissioner upon demand in writing, whenever required by him, from time to time, so to do, a sum not exceeding in the whole Rs.______(Rupees_____)under the terms of the said tender and /or the contract. The B.G. Is valid upto ______ "Notwithstanding anything what has been stated above, our liability under the above guarantee is restricted to Rs._____only and guarantee shall remain in force upto unless the demand or claim under this guarantee is made on us in writing on or before _____all your right under the above guarantee shall be forfeited and we shall be released from all liabilities under the guarantee thereafter"

IN WITNESS WHEREOF

WITNESS(1)	_
Name and	_
address	_
WITNESS(2)	-
Name and	_ the duly constituted Attorney Manager
address	-
the Bank and the said Messer's	
	(Name of the Bank)
WITNESS(1)	
Name and	
address	
WITNESS(2)	
Name and	-
For Messer's	
address	

have here into set their respective hands the day and year first above written.

SECTION – X PRICE (PACKET C)

Bill of Quantities

(To be submitted ONLINE along with the tender as a PACKET-C)

Subject: Appointment of Consultant for Detailed Traffic Engineering Study for Up-gradation of 70 existing Conventional Traffic Signals into Intelligent Traffic Signal System (ATC type) with Project Management Consultancy in Greater Mumbai.

Format of Financial Proposal

Sr. No.	Description	Quan tity	Unit	Unit Rate	Amount in Rs.
1	Detailed Engineering Study of 70 existing conventional Traffic Signal Junction, preparation of Bid documents with cost estimate, Bid evaluation. (as detailed in scope of work)		Lumpsum	Lumpsum	
2	Project Management Consultancy for Upgradation of 70 existing Conventional Traffic Signals into Intelligent Traffic Signal System (ATC type) & Performance Evaluation of the system. (as detailed in scope of work)		Lumpsum	Lumpsum	

Signature & Seal of the Bidder