

#### **BRIHANMUMBAI MUNICIPAL CORPORATION**

#### CONTRACT NO: ATC-EE-SITC-ES-22-23

**Subject:** Supply, Installation, Testing and Commissioning of conventional Road Traffic Signal Systems in Eastern Suburb of Brihanmumbai and Subsequent Preventive and Corrective Maintenance up to 12 Months period of Defect Liability.

> 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

### INDEX

SECTION	DESCRIPTION	PG-NO
1	E-TENDER NOTICE	3 to 6
2	ELIGIBILITY CRITERIA	7 to 9
3	DISCLAIMER	10 to 12
4	INTRODUCTION	13 to 14
5	E-TENDER ONLINE SUBMISSION PROCESS	15 to 17
6	INSTRUCTIONS TO BIDDERS	18 to 42
7	SCOPE OF WORK	43 to 45
8	BILL OF QUANTITIES	46 to54
9	GENERAL CONDITIONS OF CONTRACT	55 to 56
10	SPECIFICATIONS AND SELECTION OF MATERIALS	57 to 68
11	FRAUD AND CORRUPT PRACTICES	69 to 72
12	LIST OF APPROVED BANKS	73 to 76
13	SPECIAL INSTRUCTIONS TO BIDDERS	77 to 84
14	APPENDIX & PROFORMAS	85 to 113

# **SECTION 1**

**E-TENDER NOTICE** 

#### **BRIHANMUMBAI MUNICIPAL CORPORATION**

Department: Deputy Chief Engineer (Traffic) No. Dy. Ch. Eng./ATC-2462/Traffic Dated 28.12.2022

#### e-TENDER NOTICE

#### CONTRACT No.: ATC-EE-SITC-ES-22-23

#### **E- Tender no: 7200042823**

#### Subject: Supply, Installation, Testing and Commissioning of conventional Road Traffic Signal systems in Eastern Suburb of Brihanmumbai and Subsequent Preventive and Corrective Maintenance up to 12 months period of Defect Liability.

The Brihanmumbai Municipal Corporation (BMC) invites e-tender on percentage Basis for subject work from contractors of reputed, multidisciplinary engineering organizations i.e. eminent firm, Proprietary/ Partnership Firms/ Private Limited Companies/ Public Limited Companies/ Companies registered under the Indian Companies' Act 2013, the contractors registered with the Brihanmumbai Municipal Corporation, (BMC) in Class AA as per old registration or Class A as per new registration in Electrical/ Mechanical/ Electronics (excluding those who are blacklisted or against whom FIR has been filed) and from the contractors/ firms equivalent and superior classes registered in Central or State Government/ Semi Govt. Organization/ Central or State Public Sector Undertakings, will be allowed subject to condition that, the contractors who are not registered with BMC will have to apply for registering their firm within three months time period from the award of contract, otherwise their Bid Security i.e. E.M.D (Earnest Money Deposit) will be forfeited/ recovered and an amount equal to Registration Fee of respective class will be recovered as penalty.

Bidding Process will comprise of THREE stages.

The Bid can be downloaded from BMC's portal (https://portal.mcgm.gov.in) and on payment of Rs.10,400/- + 18% GST (9 % SGST and 9 % CGST). The bidders not registered with B.M.C. are mandated to get registered (Vendor Registration) with BMC for e-tendering process & obtain login credentials to participate in the online bidding process.

- i) To download the application form, for those applicants not having vendor registration, need to apply first for vendor registration at the office of Central Purchase Department (CPD), Office at Byculla, Bakariadda, Mumbai.
- ii) Followed by SRM login ID and password to be obtained from Central Purchase Department (CPD), Office at Byculla, Bakariadda, Mumbai.
- iii) For e-Tendering registration, enrollment for digital signature certificates and user manual, please refer to respective links provided in 'Tenders' tab. Vendors can get digital signature from any one of the Certifying Authorities (CA's) licensed by controller of certifying authorities namely, Safes crypt, IDRBT, National Informatics Center, TCS, CUSTOMS, MTNL, GNFC and e- Mudhra CA.

Sr.	Name of the work	Contract	Estimated Cost
No.		Period	(Rs.)
	Supply, Installation, Testing and Commissioning of conventional Road Traffic Signal systems in Eastern Suburb of Brihanmumbai and Subsequent Preventive and Corrective Maintenance up to 12 months period of Defect Liability.	08 months (Excluding Monsoon)	Rs.3,79,89,628.00

In terms of the 3 stage system of e-tendering, a Bidder will be required to deposit, along with its Bid, an Earnest Money Deposit of **Rs.3,79,900.00** (Rupees Theree Lakh Seventy Nine Thousand Nine Hundred only) (the "EMD"), refundable in accordance to the relevant clause of bid document, from the Bid Due Date, except in the case of the selected Bidder whose Bid Security/EMD shall be retained. The Bidders will have to provide Earnest Money Deposit through the payment gateways while submitting the bids. The Bid shall be summarily rejected if it is not accompanied by the Earnest Money Deposit. The e-tender is available on BMC portal (https://portal.mcgm.gov.in) as mentioned in the Header Data of the tender.

As per THREE Packet systems, the document for Packet A & B is to be uploaded by the bidder in vendors' document online in Packet A, B. Packet A, B & C shall be opened on dates as mentioned in header data. All the responsive and eligible bidders if they so wish can be present at the time of opening of bids, in the office of the Executive Engineer (ATC). The Packet C shall be opened if bids submission in Packet A & B satisfies/includes all the requirements and same are found acceptable to the Authority. The Brihanmumbai Municipal Commissioner reserves the right to reject all or any of the e- tender(s) without assigning any reasons at any stage. The dates and time for submission and opening the bids are as shown in the Header Data. If there are any changes in the dates the same will be displayed on the BMC Portal. (https://portal.mcgm.gov.in) The Applicants interested for the above referred works may contact the Ex. Engr. (Area Traffic Control) at the following address on any working day during office hours.

Executive Engineer (Area Traffic Control),

Ground Floor, Engineering Hub Building,

Dr. E. Moses Road, Worli, Mumbai- 400 018,

The bidders may wish to visit the site under reference located in Eastern Suburb and can collect the information of the present status from the office of the Executive Engineer (ATC).

The BMC reserves the rights to accept any of the bid or reject any or all the bids received for above works, without assigning any reasons thereof. The information regarding above subject matter is available on Website of Brihanmumbai Municipal Corporation (https://portal.mcgm.gov.in/tenders).

Sd/- 27.12.2022 Dy. Ch. Engineer (Traffic)

HEADER DATA		
Tender Document Number	7200042823	
Name of Organization	Brihanmumbai Municipal Corporation	
Danartmart	Deputy Chief Engineer (Traffic) /	
Department	Executive Engineer (ATC)	
Subject	Supply, Installation, Testing and Commissioning of conventional Road Traffic Signal systems in Eastern Suburb of Brihanmumbai and Subsequent Preventive and Corrective Maintenance up to 12 months period of Defect Liability.	
Cost of Tender	Rs.10,400/- + 18% GST	
Cost of E-Tender(Estimated Cost)	Rs. 3,79,89,628.00	
<b>Bid Security Deposit/ EMD</b>	Rs. 3,79,900.00	
Date of issue and sale of tender30.12.2022 From 11:00 Hrs.		
Last date & time for sale of tender	16.01.2023 up to 12:00 Hrs.	
Submission of Packet A, B & Packet C(Online) & Receipt of Bid Security Deposit	16.01.2023 up to 16:00 Hrs.	
<b>Opening of Packet A</b>	17.01.2023 From 15:00 Hrs.	
<b>Opening of Packet B</b>	17.01.2023 From 15:05 Hrs.	
<b>Opening of Packet C</b>	24.01.2023 From 15:00 Hrs.	
Address for communication	Ex. Engr. (Area Traffic Control), Ground Floor, Engineering Hub, Dr. E. Moses Road, Worli, Mumbai- 400 018	
Venue for opening of bid	Online in the office of Ex. Engr. (Area Traffic Control).	

#### **HEADER DATA**

#### This tender document is not transferable.

The BMC reserves the rights to accept any of the application or reject any or all the application received for above subject without assigning any reason thereof.

Sd/- 27.12.2022 Dy. Ch. Engineer (Traffic)

# **SECTION 2**

### **ELIGIBILITY CRITERIA**

Name of the Department	Details of work
Deputy Chief Engineer (Traffic)	Supply, Installation, Testing and Commissioning of conventional Road Traffic Signal systems in Eastern Suburb of Brihanmumbai and Subsequent Preventive and Corrective Maintenance up to 12 months period of Defect Liability.

#### **Eligibility Criteria:**

To be eligible for pre-qualification and short listing, the bidder shall fulfil the following eligibility criteria

#### 2.1 **Technical Capacity**

The tenderer(s) in their own name should have satisfactorily executed the work of similar nature with BMC/ Semi Govt./ Govt. & Public Sector Organizations during **last seven (7)** years ending last day of month previous to the one in which bids are invited as a prime Contractor.

1. **Three** similar **completed** works **each** of value not less than the value equal to **20%** of estimated cost put to tender.

Or

2. **Two** similar **completed** works **each** of value not less than the value equal to **25%** of estimated cost put to tender.

Or

3. **One** similar **completed** work of value equal and or not less than the **40%** of estimated cost put to tender

The value of executed works shall be brought to current costing level by enhancing the actual value of work at compound rate of 10% per annum; calculated from the date of completion to last date of receipt of applications for tenders.

#### 2.2 Financial Capacity

Achieved an average annual financial turnover as certified by 'Chartered Accountant' equal to **30%** of the estimated cost of work in **last three (3) financial years** immediately preceding the Financial Year in which bids are invited. i.e. 2019-2020, 2020-2021, 2021-2022.

#### 2.3 Similar Nature of work experience:

Supply, Installation, Testing & Commissioning of Road Traffic Signal system in Brihanmumbai or in any urban city in India.

Or

Maintenance of Road Traffic Signal Systems in Brihanmumbai or in any urban City in India.

## **SECTION 3**

DISCLAIMER

#### **DISCLAIMER**

The information contained in this e-tender document or provided to Bidder(s), whether verbally or in documentary or any other form, by or on behalf of the Brihanmumbai Municipal Corporation (BMC), hereafter also referred as "The Authority", or any of its employees or advisors, is provided to Bidder(s) on the terms and conditions set out in this e-tender and such other terms and conditions subject to which such information is provided.

This e-tender includes statements, which reflect various assumptions and assessments arrived at by the Brihanmumbai Municipal Corporation (BMC) in relation to the Project. Such assumptions, assessments and statements do not purport to contain all the information that each Bidder may require. This e-tender may not be appropriate for all persons, and it is not possible for the Brihanmumbai Municipal Corporation (BMC), its employees or advisors to consider the investment objectives, financial situation and particular needs of each party who reads or uses this e-tender. The assumptions, assessments, statements and information contained in this e-tender may not be complete, accurate, adequate or correct. Each Bidder should therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and information contained in this e-tender and obtain independent advice from appropriate sources.

Information provided in this e-tender to the Bidder(s) is on a wide range of matters, some of which may depend upon interpretation of law. The information given is not intended to be an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. The Brihanmumbai Municipal Corporation (BMC) accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on law expressed here.

The Brihanmumbai Municipal Corporation (BMC), its employees and advisors make no representation or warranty and shall have no liability to any person, including any Bidder, under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this e-tender or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the e-tender and any assessment, assumption, statement or information contained therein or deemed to form part of this e-tender or arising in any way with pre-qualification of Bidders for participation in the Bidding Process. The Brihanmumbai Municipal Corporation (BMC) also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Bidder upon the statements contained in this e-tender. The Brihanmumbai Municipal Corporation (BMC) may, in its absolute discretion but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this e-tender.

The issue of this e-tender does not imply that the Brihanmumbai Municipal Corporation (BMC) is bound to select and short-list pre-qualified Bidders for Bid Stage or to appoint the selected Bidder or Concessionaire, as the case may be, for the Project and the Brihanmumbai Municipal Corporation (BMC) reserves the right to reject all or any of the Bids without assigning any reasons whatsoever.

The Bidder shall bear all its costs associated with or relating to the preparation and submission of its Bid including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by The Brihanmumbai Municipal Corporation (BMC) or any other costs incurred in connection with or relating to its Bid. All such costs and expenses will remain with the Bidder and the Brihanmumbai Municipal Corporation (BMC) shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by an Bidder in preparation or submission of the Bid, regardless of the conduct or outcome of the Bidding Process.

### **SECTION 4**

INTRODUCTION

#### **INTRODUCTION**

#### **Background:**

The Brihanmumbai Municipal Corporation covers an area of 483.14 sq. kms. with a population of 1.24 Crores as per census of 2011. The metropolis accounts major portion of India's international trade and government's revenue, from being one of the foremost centers of education, science and technological research and advancement.

The Mumbai Metropolis has historic tradition of strong civic activism dedicated to the cause of a better life for all its citizens. And it's the Brihanmumbai Municipal Corporation (BMC), hereafter called the "corporation", the primary agency responsible for urban governance in Brihanmumbai.

BMC (The Authority) is one of the largest local self-governments in the Asian Continent. In observance of historic traditions of strong civic activism, with the change in time and living conditions to match with the urbanization, BMC has mainly focused in providing almost all kinds of engineering services viz, Hydraulics, storm water drain, sewerage, water supply projects, roads, bridges, solid waste management, and environmental services. Beside this, the BMC is also providing dedicated services in various segments such as Health, Primary Education as well as the construction and maintenance of Public Markets and Slaughter Houses.

BMC is an organization having different departments, right from engineering depts. to health depts. Moreover we have other dept. like education, market, fire brigade dept., Octroi and other such departments where quite a good number of staff members are working.

BMC is primarily an organization, which in the interest of citizens and with the speed of urbanization deals with the variety of the infrastructure services and delivered to the public by different departments like Water Supply Projects, Sewerage Projects, Hydraulics, Storm Water Drain, Roads, Traffic, bridges and Building Construction etc.

#### 4.1 Introduction to the Mumbai Area Traffic Control System

In Mumbai, there are 653 signal junctions in all out of which 258 signal junctions are converted into Fully Adaptive Area Traffic Control Systems including VIP corridors and remaining are conventional type of Road Traffic Signal Systems.

# **SECTION 5**

**E-TENDERING ONLINE SUBMISSION PROCESS** 

### **E-TENDERING ONLINE SUBMISSION PROCESS**

The terminology of e-Tendering is solely depending upon policies in existence, guidelines and methodology adopted since decades. The SRM is only change in process of accepting and evaluation of tenders in addition to manual. The SAP module to be used in this E-tendering is known as Supplier Relationship Module (SRM). SRM is designed and introduced by ABM Knowledge ware Ltd. who will assist BMC in throughout the tendering process for successful implementation. **NOTE:** This tendering process is covered under Information Technology ACT & Cyber Laws as applicable.

 In e-tendering process some of the terms and its definitions are to be read as under wherever it reflects in online tendering process.

> Start Date read as "Sale Date" End Date read as "Submission Date" Supplier read as "Contractor/bidder" Vendor read as "Contractor/bidder" Vendor Quotation read as "Contractors Bid/Offer" Purchaser read as "Department/BMC"

I. Before entering in to online tendering process, the contractors should complete the registration process so as to get User ID for E-tendering links. For this, the contractors can access through Supplier registration via BMC Portal.

There are two methods for this registration :( II and III)

- II. Transfer from R3 (registered contractors with BMC) to SRM
  - a. Contractors already registered with BMC will approach to Vendor Transfer cell.
  - b. Submit his details such as (name, vendor code, address, registered Email ID, pan card etc.) to Vendor transfer cell.
  - c. BMC authority for Vendor Transfer, transfers the Vendor to SRM application from R3 system to SRM system.
  - d. Transferred Vendor receives User ID creation link on his supplied mail Id.
  - e. Vendor creates his User ID and Password for e-tendering applications by accessing link sent to his mail ID.
- III. Online Self Registration (Temporary registration for Bidder not registered with BMC)
  - a. Vendor fills up Self Registration form via accessing BMC portal.
  - b. Vendor Transfer cell (same as mentioned above) accesses Supplier Registration system and accepts the Vendor request.

- c. Accepted Vendor receives User ID creation email with Link on his registered mail Id.
- d. Vendor creates his User ID and Password for e-tendering application.

#### IV. CONTRACTORS BIDDING:

For E-Tendering online submission process, please refer the manual available on BMC portal http://portal.mcgm.gov.in and same can be downloaded from the below link: https://portal.mcgm.gov.in/irj/go/km/docs/documents/HomePage%20Data/Whats %20New/220721.pdf

The tenderer shall pay the EMD/Bid Security through payment gateways before submission of Bid and shall upload the screenshot of receipt of payment in Packet 'A' instead of paying the EMD at any of the CFC centers in BMC Ward Offices.

The e-tender is available on BMC portal, <u>https://portal.mcgm.gov.in</u>, as mentioned in the Header Data of the tender. The tenders duly filled in should be uploaded and submitted online on or before the end date of submission. The Packet 'A', Packet 'B' & Packet 'C' of the tender will be opened in the office of Ex. Engineer (ATC) as per the time-table shown in the Header Data.

The Municipal Commissioner reserves the right to reject all or any of the e-Tenders(s) without assigning any reason at any stage. The dates and time for submission and opening the tenders are as shown in the Header Data. If there are any changes in the dates the same will be displayed on the BMC Portal (https://portal.mcgm.gov.in).

In case of any issue related to e-tendering online process, please mail to <u>etendering.it@mcgm.gov.in</u> with screenshot of error.

# **SECTION 6**

**INSTRUCTIONS TO BIDDERS** 

#### **INSTRUCTIONS TO BIDDERS**

#### 6.1 Scope of Bid

The Authority wishes to receive Bids for Qualification in order to SELECT experienced and capable bidder for the work of "Supply, Installation, Testing and Commissioning of conventional Road Traffic Signal Systems in Eastern Suburb of Brihanmumbai and Subsequent Preventive and Corrective Maintenance up to 12 months period of Defect Liability"

#### 6.2 Eligibility of Bidders

The Brihanmumbai Municipal Corporation (BMC) invites e-tender to appoint Contractor for the aforementioned work from contractors of repute, multidisciplinary engineering organizations i.e. eminent firm, Proprietary/ Partnership Firms/ Private Limited Companies/ Public Limited Companies/ Companies registered under the Indian companies' Act 2013, the contractors registered with the Brihanmumbai Municipal Corporation, (BMC) in Class AA as per old registration or Class A as per new registration and from the contractors/ firms equivalent and superior classes registered in Central or State Government/ Semi Govt. Organization/ Central or State Public Sector Undertakings, will be allowed subject to condition that, the contractors who are not registered with BMC will have to apply for registering their firm within three months' time period from the award of contract, otherwise their Bid Security i.e. E.M.D (Earnest Money Deposit) will be forfeited/ recovered and an amount equal to Registration Fee of respective class will be recovered as penalty.

To be eligible for pre-qualification and short-listing, the Bidder shall fulfill the following conditions of eligibility:

Name of the Department	Details of project works
Deputy Chief Engineer(Traffic)	Supply, Installation Testing and Commissioning of conventional Road Traffic Signal systems in Eastern Suburb of Brihanmumbai and Subsequent Preventive and Corrective Maintenance up to 12 months period of Defect Liability.

6.3

#### 6.4 **Technical Capacity**

The tenderer(s) in their own name should have satisfactorily executed the work of similar nature with BMC/ Semi Govt./ Govt. & Public Sector Organizations during **last seven (7) years** ending last day of month previous to the one in which bids are invited as a prime Contractor.

1. **Three** similar **completed** works **each** of value not less than the value equal to **20**% of estimated cost put to tender.

Or

2. **Two** similar **completed** works **each** of value not less than the value equal to **25%** of estimated cost put to tender.

Or

3. **One** similar **completed** work of value equal and or not less than the **40%** of estimated cost put to tender

The value of executed works shall be brought to current costing level by enhancing the actual value of work at compound rate of 10% per annum; calculated from the date of completion to last date of receipt of bids for tenders.

#### 6.5 **Financial Capacity**

Achieved an average annual financial turnover as certified by 'Chartered Accountant' equal to **30%** of the estimated cost of work in **last three (3) financial years** immediately preceding the Financial Year in which bids are invited. i.e. 2019-2020, 2020-2021, 2021-2022.

#### 6.6 Similar Experience:

Supply, Installation, Testing & Commissioning of Road Traffic Signal System in Brihanmumbai or in any urban City in India.

Or

Maintenance of Road Traffic Signal Systems in Brihanmumbai or in any urban City in India.

#### 6.7 **BID Capacity**

The bid capacity of the prospective bidders will be calculated as under:

#### Assessed Available Bid Capacity = $(A^* N^* 2 - B)$

Where,

A = Maximum value of works executed in any one year (year means Financial year) during **the last five years** (updated to the price level of the Financial year in which bids are received at a rate of 10% per year) taking into account the completed as well as works in progress.

- N = Number of years prescribed for completion of the Project/Works, excluding monsoon period, for which these bids are being invited. (E.g. 7 months = 7/12 year) For every intervening monsoon 0.33 shall be added to N.
- B = Value of existing commitments (only allotted works) on the last date of submission of bids as per bidding document and on-going works to be completed during the period of completion of the Project/Works for which these bids are being invited.
- *Note:* The statement showing the value of existing commitments and on-going works as well as the stipulated period of completion remaining for each of the works listed should be attached along with certificates duly signed by the Engineer-in Charge, not below the rank of an Executive Engineer or equivalent.

#### Even though the bidders meet the above qualifying criteria, they are subject to be disqualified if they have:

- made misleading or false representation in the forms, statements and attachments submitted in proof of the qualification requirements; and/or
- Record for poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.

#### 6.8 Equipment Capabilities as required for this work

**Regular and Routine works**: The successful bidder will make an arrangements of the required equipment on the day of commencement or with respect to the progress of the work in phases, as per the instructions of site in charge. The successful bidder to that effect will ensure commitment on an undertaking on Rs.500/- stamp paper to be submitted along with the Bid in Packet B. However, this condition in no way shall dilute the respective condition in Registration Rules of BMC.

Facility of Truck mounted Aerial/Boom Lift crane

Megger

cable fault locators (preferably APLAB make),

earth tester,

tongue tester,

Aluminum ladders,

vacuum cleaners, blower etc.

All the above items shall be in full working conditions and must demonstrate that based on known commitments, they will be available for timely use in the instant tender work.

It is mandatory that the Contractor should either own the Facility of Truck mounted Aerial/Boom Lift crane of atleast 9 mtr. Height or should have hired the same from reputed Facility of Truck mounted Aerial/Boom Lift crane Supplier. The declaration to that effect (Proforma 'X') shall be submitted along with the Bid document. The Contractor should supply the Facility of Truck mounted Aerial/Boom Lift crane as & when instructed by the Engineer. The Bidder(s) may also list the alternative type of equipment's that are proposed for use on the contract. All equipment used should be calibrated. The vehicles used for the work should be equipped with above equipment's.

#### 6.9 **Personnel Capabilities:**

Bidder(s) shall supply general information on the management structure of the firm, and shall have provisions of suitably qualified personnel to fill the key positions as required during the contract implementation.

The Bidder(s) shall supply information on a prime candidate or an alternate for each key position and each shall meet the requirements specified as under:

Sr. No.	Post	Educational Qualification and Experience	No. of staff /ve- hicle to be de- ployed	Rate of Recovery in case of non-compliance
1.	Project Manager	Shall be graduate in Engineering in the field of Electrical/ Electronics/ Electronics and Telecommunication with minimum 5 years ex- perience or Diploma in the above streams with minimum 8 years experience in the field of in- stallation of road traffic signal system or main- tenance of signal systems	1	Rs.2000/-per day.
2	Field Engineer	Shall be at least Diploma in Engineering in the field of Electrical/ Electronics/ Electronics and Telecommunication/ Information Technology with minimum 1 years experience in the field of Operation/ Maintenance/ Installation of Road Traffic Signal systems.	1	Rs.1000/-per day.
3	Civil Supervisor	The civil supervisors shall be ITI or equivalent certificate course with one year experience Or 5 years of work experience in the same field of signal installation/ maintenance or other road	1	Rs.1000/-per day.

		works		
4	Techni- cian/ Wireman	Shall be a ITI Electrical/ Electronics/ Electron- ics & Telecommunication passed with mini- mum of 2 years experience or PWD license holder with 5 years of work experience	1	Rs.500/- per day.
5	Labourers	Unskilled / Semiskilled	2	Rs.300/- per day.

Bidder(s) shall supply general information on the management structure of the firm, and shall have provisions of suitably qualified personnel to fill the key positions as required during the contract implementation.

Signal Installation team shall comprise of:

- a) Field Engineer 1No.
- b) Civil Supervisor 1No.
- c) Technician/Wiremen 1No.
- d) Unskilled / Semiskilled 2 Nos.

(The above staff shall be apart from the staff required for onsite works such as excavation, masonary works, installation of poles & reinstatement work).

The maintenance team with vehicle during DLP period shall comprise of Technician/ Wiremen -1No., Two Semi skilled workmen etc. Maintenance team should be made available for the maintenance work as and when required/instructed by BMC engineer. The Project Manager shall be empowered for financial, administrative, technical decisions etc. Project Manager will be responsible for availability of all the staff throughout the contract period. If any of the team member is not available the equivalent replacement should be provided. The Civil Engineer will supervise all civil related activities in the region. E.g. Installation of Signal poles, Construction of chambers and Controller foundations etc. The Field Engineer will supervise the works. It shall be the responsibility of the Field Engineer to follow up with the different agencies.

#### 6.10 **Price Escalation will not be admissible.**

#### 6.11 **Communication:**

- i. The vehicle preferably a utility vehicle with all necessary licenses shall be deployed for each team under this contract. Every vehicle shall have identification marks i.e. name, address and telephone nos. of the Company.
- ii. All the staff as well as the driver of the vehicle shall be provided with the uniform and Logo of the company and handset communication device (mobile phone).

#### 6.12 **Contract Execution**

All required documents for execution of the contract shall be submitted within 30 days from the date of issue of letter of acceptance. If the documents are not submitted within the stipulated time, a penalty of Rs.5,000/- per day will be applicable to the contractor. All contract documents need to be duly affixed with stamp duty properly signed along with evidence/ proof of payment of security/ contract deposit/ within 30 days from the date of letter of acceptance received by him.

- 6.13 If the amount of Contract Deposit is not paid within 30 Days from the date of issue of Letter of Acceptance, the tenderer/ contractor already accepted shall be considered as cancelled and legal steps shall be taken against the contractor for recovery of amounts.
- 6.14 The amount of Security Deposit retained by the BMC shall be released after expiry of period up to which the contractor has agreed to maintain the work in good order is over. In the event of the contractor failing or neglecting to complete the rectification work within the period up to which the contractor has agreed to maintain the work in good order, the amount of security deposit retained by BMC shall be adjusted towards the excess cost incurred by the Department on rectification work.

#### 6.15 Action when whole of security deposit is forfeited:

In any case in which under any Clause of this contract, the contractor shall have rendered himself liable to pay compensation amounting to the whole of this security deposit whether paid in one sum or deducted by installments or in the case of abandonment of the work owning to serious illness or death of the contractor or any other cause, the Engineer on behalf of the Municipal Commissioner shall have power to adopt any of the following process, as he may deem best suited to the interest of BMC.

- (a) To rescind the contract (for which rescission notice in writing to the contractor under the head of Executive Engineer shall be conclusive evidence) and in that case, the security deposit of the contract shall stand forfeited and be absolutely at the disposal of BMC.
- (b) To carry out the work or any part of the work departmentally debiting the contractor with the cost of the work, expenditure incurred on tools and plant, and charges on additional

supervisory staff including the cost of work-charged establishment employed for getting the unexecuted part of the work completed and crediting him with the value of the work done departmentally in all respects in the same manner and at the same rates as if it had been carried out by the contractor under the terms of his contract. The certificate of the Executive Engineer as to the costs and other allied expenses so incurred and as to the value of the work so done departmentally shall be final and conclusive against the contractor.

(c) To order that the work of the contractor be measured up and to take such part thereof as shall be un-executed out of his hands, and to give it to another contractor to complete, in which case all expenses incurred on advertisement for fixing a new contracting agency, additional supervisory staff including the cost of work charged establishment and the cost of the work executed by the new contract agency will be debited to the contractor and the value of the work done or executed through the new contractor shall be credited to the contractor in all respects and in the same manner and at the same rates as if it had been carried out by the contractor under the terms of his contract. The certificate of the Executive Engineer as to all the cost of the work and other expenses incurred as aforesaid for or in getting the un-executed work done by the new contractor and as to the value of the work so done shall be final and conclusive against the contractor.

In case the contract shall be rescinded under Clause (a) above, the contractor shall not be entitled to recover or be paid any sum for any work therefore actually performed by him under this contract unless and until the Executive Engineer shall have certified in writing the performance of such work and the amount payable to him in respect thereof and he shall only be entitled to be paid the amount so certified. In the event of either of the courses referred to in Clause (b) or (c) being adopted and the cost of the work executed departmentally or through a new contractor and other allied expenses exceeding the value of such work credited to the contractors amount of excess shall be deducted from any money due to the contractor, by BMC under the contract or otherwise, howsoever, or from his security deposit or the sale proceeds thereof provided, however, the contractor shall have no claim against BMC even if the certified value of the work done departmentally or through a new contractor exceeds the certified cost of such work and allied expenses, provided always that whichever of the three courses mentioned in clauses (a), (b) or (c) is adopted by the Executive Engineer, the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchase or procured any materials or entered in to any engagements or made any advance on account of or with a view to the execution of the work or the performance of the contract.

### 6.16 Contract may be rescinded and security deposit forfeited for bribing a public officer or if contractor becomes insolvent

If the contractor assigns or sublets his contracts or attempt so to do, or become insolvent or commence any proceeding to get himself adjudicated and insolvent or make any composition with his creditors, or attempt so to do or if bribe, gratuity, gift, loan, perquisite, reward or advantage, pecuniary or otherwise, shall either directly or indirectly be given promised or offered by the contractor or any of his servants or agents through any public officer, or person in the employee of BMC/ Govt. in any way relating to his office or employment, or if any such officer or person shall become in any way directly or indirectly interested in the contract the Engineer In-charge may thereupon, by notice in writing rescind the contract and the Security Deposit of the Contractor shall thereupon stand forfeited and be absolutely at the disposal of BMC and the same consequences shall ensure as if the contract had been rescinded under applicable clause; and in addition the contractor shall not be entitled to recover or be paid for any work therefore actually performed under the contract.

#### 6.17 Submission of Tenders

#### PACKET – A

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

Scrutiny of this packet will be done strictly with reference to only the scanned copies of Documents uploaded online in packet 'A'

- a) Valid Registration Certificate.
- b) Valid Bank Solvency Certificate of minimum solvency amount as governed by Registration Rules in force for respective Class of Contractor for M & E Works, issued not more than Six months prior to the date of submission of tender and valid upto one year.
- c) A document in support of Registration under Goods & Service Tax (GST) Act 2017.
- d) Certified copies of valid 'PAN' documents and photographs of the individuals, owners, Karta of Hindu undivided Family, firms, private limited companies, registered cooperative 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.
- e) Certified Copy of Latest Partnership Deed in case of Partnership firm duly registered with Chief Accountant (Treasury) of BMC.
- f) The bidders shall categorically provide their Email-ID.
- g) Screen Shot of applicable EMD paid receipt of subject work.

NOTE:

• If the tenderer(s) withdraw tender offer during the tender validity period, his entire EMD shall be forfeited.

• If it is found that the tenderer has not submitted required documents in Packet "A" then, the shortfalls will be communicated to the tenderer through e-mail only and compliance required to be made within a time period of **three working days**.

#### PACKET – B

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

- a) Annexure 'A'
- b) The undertaking of Rs. 500/- stamp paper as per the proforma annexed in Annexure B: -Pre-Contract Integrity Pact & Annexure C: - Declaration Cum Indemnity Bond
- c) The list of similar type of works as stated in eligibility criteria in prescribed proforma I, in the role of prime contractor. Information furnished in the prescribed proforma (Proforma I) shall be supported by the certificate duly self-attested.
- d) Annual financial turnover for preceding three financial years as certified by Chartered Accountant preceding the Financial Year in which bids are invited. Copies of Documents of audited balance sheet and profit and loss account for the preceding five financial years in which bids are invited. (Proforma – II).
- e) Details of similar works as stated in eligibility criteria during last Seven years (Proforma III).
- f) 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 15% of the cost of the work tendered for, net of the tenderer's commitment of other contracts (Certificate from Bankers/ C.A./ Financial Institution shall be accepted as a evidence).
- g) Details of Personnel (Proforma IV)
- h) Details of works in hand (Proforma VI-A & VI-B) (original), along with copies of work orders & attested copies of percentage of works completed or part thereof.
- i) Affidavit for BEST Price (Proforma VII)
- j) Copy of Structure & Organisation (Proforma VIII)
- k) Copy of Litigation History (Proforma IX)
- 1) Declaration for Supply of Truck mounted Aerial/Boom Lift crane (Proforma X)
- m) Equipment manufacturer's declaration (Proforma XI)
- n) The successful bidder shall submit valid registration certificate under E.S.I.C., Act 1948, if the tenderer has more than 10 employees/ persons on his establishment (in case of

production by use of energy) and 20 employees/persons on his establishment (in case of production without use of energy) to BMC as and when demanded. In case of less employees/persons mentioned above then the successful bidder has to submit an undertaking to that effect on Rs. 200/- stamp paper as per circular u/no. CA/FRD/I/65 of 30.03.2013.

- o) The successful bidder shall submit valid registration certificate under E.P.F. & M.P., Act 1952, if tenderer has more than 20 employees/persons on his establishment, to BMC as and when demanded. In case if the successful bidder has less employees/ persons mentioned above then the successful bidder has to submit an undertaking to that effect on Rs. 200/- stamp paper as per circular u/no. CA/FRD/I/44 of 04.01.2013.
- p) Signed copy of the Addendum if any.
- q) Undertaking on Rs. 500/- Stamp Paper towards arrangement of the required equipments for Signal Maintenance work.
- r) Form of Tender (As prescribed in Tender Document) duly filled in.
- s) Statement showing assessed available Bid Capacity.
- t) Irrevocable Undertaking on Rs. 500/- Stamp paper as per Annexure -E

#### Note:

If it is found that the tenderer has not submitted required documents in Packet "B" then, the shortfalls will be communicated to the tenderer 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% of EMD amount will be forfeited.

#### PACKET – C

Online tender filled in either percentage plus or minus (above or below), or at par. (There is no separate provision to quote in physical form, this is a part in Header Data of online Tendering). For Packet 'C' tenderer(s) will fill data in 'Item Data Tab' in Service Line Item via Details and quotes his percentage variation figures. (If entered '0' it will be treated as 'at par'. By default the value is zero only).

a) **Note:** In case of rebate/ premium of 15% and above as quoted by the tenderer, the rate analysis of major items shall be submitted by L1 and L2 bidder after demand notification by e-mail to bidders by Ex. Eng. (ATC). The format for rate analysis is annexed at Annexure D

#### 6.18 Bid Security or Earnest Money Deposit (EMD):

- i. The Bidder shall furnish, as part of the Bid, EMD, in the amount specified in the Header Data Sheet.
- ii. The bidders shall pay the EMD online.

- iii. Any bid not accompanied by an acceptable Bid Security and not secured as indicated in sub-clause mentioned above, shall be rejected by the Employer as non-responsive.
- iv. The EMD of the successful Bidder will be discharged when the Bidder has signed the Agreement and furnished the required Security Deposits. In case of successful bidder not registered with BMC, tender clause 6.2 will be applicable.

#### **Refund of EMD/ ASD**

- 1. The Bid Security/ EMD and ASD of L-2 and other higher bidders (L-3, L-4 etc.) shall be refunded immediately after opening of financial bid
- 2. 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. 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 bid security/ EMD and ASD to the department within the stipulated time period i.e. 15 days, the department will process further as per normal procedure.

#### EMD may be forfeited:

- a) If the Bidder withdraws the Bid after bid opening (opening of technical qualification part of the bid during the period of Bid validity);
- b) In the case of a successful Bidder, if the Bidder fails within the specified time limit to:
  - i. Sign the Agreement; and/ or
  - ii. Furnish the required Security Deposits.
- The cases wherein if the shortfalls are not complied by a contractor, will be informed to Registration and Monitoring Cell. Such non-submission of documents will be considered as 'Intentional Avoidance' and if three or more cases in 12 months are reported, shall be viewed seriously and disciplinary action against the defaulters such as banning/ deregistration, etc. shall be taken by the registration cell with due approval of the concerned AMC.
- 2. No rejections and forfeiture shall be done in case of curable defects. For non-curable defects the 10% of EMD shall be forfeited and bid will be liable for rejection.

#### Note:

- I) Curable Defect shall mean shortfalls in submission such as:
  - a. Non-submission of following documents,
    - i. Valid Registration Certificate

- ii. Valid Bank Solvency
- iii. Goods and Service Tax Registration Certificate (GST)
- iv. Certified Copies of PAN documents and photographs of individuals, owners, etc.
- v. Partnership Deed and any other documents
- vi. Undertakings as mentioned in the tender document

#### II) Non-curable Defect shall mean

- a. Inadequate submission of EMD/ ASD amount.
- b. In-adequacy of technical and financial capacity with respect to Eligibility criteria as stipulated in the tender.
- c. No proper submission of experience certificates and other documents etc.
- d. Wrong Calculation of Bid Capacity.

#### 6.19 **BID VALIDITY:**

Bids shall remain valid for a period not less than one eighty (180) days after the deadline date for bid submission specified in Bid Data Sheet. A bid valid for a shorter period shall be rejected by the Employer as non-responsive.

In exceptional circumstances, prior to expiry of the original time limit, the Employer may request that the bidders may extend the period of validity for a specified additional period. The request and the bidders' responses shall be made in writing or by cable. A bidder may refuse the request without forfeiting his Bid Security. A bidder agreeing to the request will not be required or permitted to modify his bid, but will be required to extend the validity of his bid security for a period of the extension.

#### 6.20 SECURITY DEPOSIT AND PERFORMANCE GUARANTEE

#### A. The security deposit shall mean and comprise of

- I) Contract Deposit and
- II) Retention Money.
- Contract Deposit The successful tender, here after referred to as the contractor shall pay an amount equal to two (2) percent of the contract sum shall be paid within thirty days from the date of issue of letter of acceptance.
- II) Retention Money As the said work falls in the Mechanical & Electrical Category hence the retention money will not be applicable.

#### **B.** Additional Security Deposit

The **additional security deposit (ASD)** will be applicable when a rebate of more than 12 % with no maximum limit. The ASD is calculated as follows:

Additional security deposit = (X/100) x office estimated cost,

Where X=percentage rebate quoted above 12%

The successful bidder shall submit the applicable A.S.D in the form of Demand Draft to BMC within 15 working days after issue of Letter of Acceptance and same shall be deposited to any CFC center of BMC. If the successful bidder fails to submit the applicable A.S.D. within 15 working days, the E.M.D. Paid by the bidder will be forfeited and the company will be debarred for two years. Similarly if the director/ partner of said company is also working in other company as a director/ partner the said company will also be debarred for two years

#### C. Performance Guarantee

The successful tenderer, here after referred to as the contractor shall pay in the form of "Performance Guarantee" at different rates for different slabs as stated below

Offer	PG applicable %
For premium, at par and rebate 0 to 12%	PG= 0.92% x contract sum <b>applicable for rebate</b> of 12%
For rebate of 12.01%	P.G. = $\{0.92\%$ x contract sum applicable for rebate of 12% $\}$ + (X) x contract sum
	where
	X= percentage rebate quoted more than 12%

**Note:** Contract sum shall mean amount after application of rebate/ premium as quoted by the contractor with contingencies only and excluding price variation.

The Performance Guarantee shall be paid in one of the following forms.

- I) Cash (In case guarantee amount is less than Rs.10,000/-
- II) Demand Draft (In case guarantee amount is less than Rs.1,00,000/)
- III) Government securities
- IV) Fixed Deposit Receipts (FDR) of a Schedule Bank.
- V) An electronically issued irrevocable bank guarantee bond of any Schedule bank or in the prescribed form given in Appendix.

Performance Guarantee is applicable over and above the clause of Security Deposit. Performance Guarantee will have to be paid & shall be valid till the defect liability period or finalization of final bill whichever is later.

This deposit will be allowed in the form of I to V as mentioned above and shall be paid within 15 days after receipt of Letter of Acceptance.

The Performance BG shall not be accepted in broken period else penalty amounting to Rs. 1000/- per day will be recovered for broken period.

#### D. Refund of Security Deposit:

#### I. Refund of Contract Deposit:

The Contract Deposit shall be released after completion of the DLP period and handing over of junctions subject to no recoveries are pending against the said work, provided that the Engineer of the contract is satisfied that there is no demand outstanding against the Contractor

#### II. Refund of Retention Money

Not Applicable

#### III. Refund of Additional Security Deposit

The additional security deposit shall be released within 30 days of issue of 'Certificate of Completion' with respect to the whole of the Works. In the event the Engineer issues a Taking-over Certificate for a section or part of the Permanent Works, only such proposition thereof as the Engineer determines (having regard to the relative value of such section or part of the Works) shall be considered by the Engineer for payment to the Contractor

#### IV. Refund of Performance Guarantee

The Deposit on account of performance guarantee shall be released after completion of the DLP period subject to finalization of final bill whichever is later and no recoveries are pending against the said work, provided that the Engineer is satisfied that there is no demand outstanding against the Contractor.

a) It shall be clearly mentioned that the BG shall be applicable for individual work/ contract and clubbing of various contracts of the said contractor will not be allowed. In case of obtaining Bank Guarantee, it is necessary to mention that the same shall be valid further for minimum 6 months beyond the Defect liability perod.

- b) It shall be the responsibility of the bidder to keep the submitted B.G. "VALID" for the stipulated time period as mentioned in the tender & in case of its expiry it will attract penalization.
- c) Bank Guarantee should be issued by way of General Undertaking and Guarantee issued on behalf of the Contractor by any of the Nationalized or Scheduled banks or branches of foreign banks operating under Reserve Bank of India regulations located in Mumbai upto Virar & Kalyan. List of approved Banks is appended at Section 12 of the tender document. The Bank Guarantee issued by branches of approved Banks beyond Kalyan and Virar can be accepted only if the said Bank Guarantee is countersigned by the Manager of a Regional Branch of the same bank within the Mumbai City Limit; categorically endorsing thereon that the said Bank Guarantee is binding on the endorsing Branch of the Bank or the Bank itself within Mumbai Limits and is liable to be enforced against the said Branch of the Bank Guarantee. The Bank Guarantee shall be renewed as and when required and/or directed from time to time until the Contractor has executed and completed the works and remedied any defects therein

#### E Legal + Stationary Charges: (As per applicable circular)

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 and Stationery charges with applicable GST.

Contract Value	Legal & Stationary Charges (Excluding GST)
Rs. 10,001/- to Rs. 50,000/-	Nil
Rs. 50,001 to Rs. 1,00,000/-	Rs. 6,290/-
Rs. 1,00,001/- to Rs. 3,00,000/-	Rs.10,380/-
Rs. 3,00,001/- to Rs. 5,00,000/-	Rs. 12,470/-
Rs. 5,00,001/- to Rs. 10,00,000/-	Rs. 14,510/-
Rs. 10,00,001/- to Rs. 20,00,000/-	Rs. 16,570/-
Rs. 20,00,001/- to Rs. 40,00,000/-	Rs. 18,660/-
Rs. 40,00,001/- to Rs. 1,00,00,000/-	Rs. 20,720/-
Rs. 1,00,00,001/- to Rs. 10,00,00,000/-	Rs. 24,450/-
Rs. 10,00,00,001/- to Rs. 20,00,00,000/-	Rs. 28,220/-

Rs. 20,00,00,001/- to Rs. 30,00,00,000/-	Rs. 31,980/-
Rs. 30,00,00,001/- to Rs. 40,00,00,000/-	Rs. 35,740/-
Rs. 40,00,00,001/- to Rs. 50,00,00,000/-	Rs. 39,470/-
Rs. 50,00,00,001/- to Rs. 1,00,00,000/-	Rs. 47,000/-
Rs. 1,00,00,00,001/-to Rs. 2,00,00,00,000/-	Rs. 58,270/-
Rs. 2,00,00,00,001/- to Rs. 3,00,00,00,000/-	Rs. 65,770/-
Rs. 3,00,00,00,001/- to Rs. 4,00,00,00,000/-	Rs. 75,120/-
Rs. 4,00,00,00,001/- to Rs. 5,00,00,00,000/-	Rs. 84,510/-
Rs. 5,00,00,00,001/- and above without limit	Rs. 93,920/-

The above Legal and Stationery charges are applicable upto 31.03.2023. However, the contractor has to pay the Legal and Stationery charges at prevailing rates.

#### F Stamp Duty: (As per applicable circular)

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

- i. As per the provision made in Article 63, Schedule I of Bombay Stamp Act 1958, 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 2015):
  - (a) Where the amount or value set Five Hundred Rupees Stamp Duty forth in such contract does not exceed Rupees Ten Lakh
  - (b) Where it exceeds Rupees Ten Lakh
    Lakh
    Five Hundred Rupees plus 0.1% of the amount above Rupees Ten Lakh subject to the maximum of Rupees Twenty Five Lakh Stamp Duty

For Bank Guarantee: Stamp duty @ 0.5% for the amount secured 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.

- ii. The successful bidder shall enter into a contract agreement with BMC 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.
- iii. 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.

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

#### 6.21 **IMPORTANT DIRECTIONS:**

- a) All the information uploaded shall be supported by the corroborative documents in absence of which the information uploaded will be considered as baseless and not accepted for eligibility criteria. All the documents shall be uploaded with proper pagination. The page No. shall be properly mentioned in the relevant places. The information shall be uploaded in the sequence as asked for with proper indexing etc. The Bidder shall be fully responsible for the correctness of the information uploaded by him.
- b) Bidders shall refer https://portal.mcgm.gov.in/tenders for "The Manual of Bid-Submission n for Percentage Rate/Item Rate Tender Document." The detail guidelines for creation and submission of bid are available in the referred document. Any queries or request for additional information concerning this TENDER shall be submitted by e-mail to mcgmatc@gmail.com. The subject shall clearly bear the following identification/ title: "Queries/ Request for Additional Information: TENDER for the work of " Supply, Installation, Testing and Commissioning of conventional Road Traffic Signal systems in Eastern Suburb of Brihanmumbai and Subsequent Preventive and Corrective Maintenance up to 12 months period of Defect Liability." Any changes in mail ID will be intimated on the portal.
  - c) In case of Equal Percentage of lowest bidders (L1), the allotment of work shall be done by giving 48 hrs (2 working days) from the day of opening of packet C on same BID-Document number for re-quoting and such development needs to done by IT department in BMC's SRM system. Till such development is made; 'Sealed Bids' shall be called from the bidders quoting the same rates i.e. L1.

In case of equal percentage of lowest bidders is obtained even after re-quoting, then the successful bidder will be decided by lottery system by concerned Chief Engineer. The bidder shall need to submit the additional ASD if applicable within 7 days after receipt of notification issued by concerned Chief Engineer.

#### 6.22 Taxes and Duties on Material:

G.S.T. And other State levies/ cess which are not subsumed under G.S.T. will be applicable. The tenderer shall quote inclusive of all taxes. It is clearly understood that BMC will not bear any additional liability towards payment of any taxes and duties. Wherever the services to be provided by the bidders, fall under Reverse Charge Mechanism, the price quoted shall be exclusive of G.S.T., but inclusive of taxes/ duties/ cess other than G.S.T., if any.

Rates accepted by BMC shall hold good till completion of work and no additional individual claim shall be admissible on account of fluctuations in market rates; increase in taxes/ any other levies/ tolls etc. except that payment/ recovery for overall market situation shall be made as per price variation and if there is any subsequent change (after submission of bid) in rate of GST applicable on the work/ services to be executed as per tender, i.e. any increase will be reimbursed by BMC whereas any reduction in the rate of GST shall be passed on to BMC as per the provisions of the GST Act.

#### 6.23 **Payments Terms:**

The payment of executed work shall be made to the contractor as per BMC routine procedure. This is an entire job work of Supply, installation, testing and commissioning of Conventional Road Traffic Signal System comprising of various components as per technical specifications. After successful completion of SITC and operational acceptance of any 01 of the Signal Junction to the satisfaction of BMC Engineer 90% of payment of that particular junction will be released. Balance 10% amount will be released after successful completion of Defect Liability period. Operational acceptance means the acceptance to the proper functioning of Traffic Signal System at a particular junction. Hence, the part payment can be released but it will be for the completed junction only. No advance payment will be released

#### 6.24 **Submission of bills**

The Contractor shall submit the bill for the work carried out within 15 days from the date of successful completion of SITC of the signal junction. If the Contractor fails to submit their bills for the completed works/ running bill within 15 days, penalty or action as shown below will be taken for each delayed bill.

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

#### 6.25 The Amount of Solvency Certificate Prescribed is as Under:

Total Estimated Cost (Rs. In Lakh)	Solvency Certificate Value
Without limit	Rs. 8 Lakhs

The Bank Solvency Certificate should be issued not more than Six months prior to the date of submission of Tender and valid upto one year.

### 6.26 **Penalty Clause:**

 a) There shall be regular review regarding the performance of the contractor by BMC/ Traffic Police. In case at any stage, it has been observed/ found that the performance of the contractor is unsatisfactory or discrepancies are found in the works carried out by contractor, BMC reserves the right to penalize the contractor. However, penalty will not be levied if the work is delayed due to reasons which are beyond control of the Contractor such as non granting road opening permission, not

allowed by Traffic Police / Govt. agencies etc.

- b) The Engineer of Contract keeps the right reserved to make any change, amendment, addition/ deletion and enhancement in the penalty clause duration of agreement period etc. If the installation/ maintenance work is not carried out to the satisfaction of the BMC and /or Traffic Police Authorities, the Contractor shall be liable to be penalized and deductions, as deemed appropriate. The penalty / deductions will be made from the Running bills, after evaluating the performance on the basis of several external factors such as power supply, excavation permission, no. of signals that were faulty or non functioning, the response time in attending the faults/ damages, frequency of defects, non replacement of LED retrofits/ SMPS or other parts, other software and hardware problems related to the Controller etc. In case of unsatisfactory installation/maintenance works the office of Jt. Commissioner of Police (Traffic), who are the end users of the Traffic Signal Systems, may also propose penalty.
- c) The contractor shall have to arrange the barricades, cones, cautionary tape, work in progress boards with work details for excavation works in carriage way as well as footpath, else a penalty of Rs.5000/- will be levied for each work on the contractor and will be deducted from the running bill.
- d) If the contractor fails to make available maintenance vehicle as per instruction of BMC Engineer, a penalty of Rs.1500/- per day will be levied.
- e) The penalties will be based on resolution time as specified below after instruction/complaint is given and compliance/rectification is not attended within the specific resolution time, then the penalties will be levied as specified below and will be deducted from the final bill.

Sr. No.	Description	Resolution Time in working days	Penalty Imposed after stipulated Resolution Time
1	All vehicular/ pedestrian signal	One Day	Rs. 100/- per day per Aspect

	indications of Signal Junction should be in operative continuous		
2	Replacement of damaged Aspect and Make it Functional.	One Day	Rs. 100/- per day per Aspect
3	All signal Aspects are properly aligned	One Day	Rs.100/- per day per Signal Aspect Assembly
4	Damaged signal poles (Straight /Cantilever Pole)to be replaced and make it functional	Four Days	Rs. 200/- per day per Pole
5	All signal poles pole caps & pole door, Grommets, Screws are properly in-tacked	One Day	Rs. 100/- per day per Pole
6	All Signal aspects, Controllers, Straight Poles, Cantilever Poles, Power Supply Boxes etc. should be normally cleaned during Preventive & Corrective Maintenance	every Month	Rs. 1000/- per month per Junction
7	All Signal Controller should be properly operative continuously	One Day	Rs. 2000/- per day per Junction
8	Rectification of Cable Fault	Four Days	Rs.200/- per day per Junction
9	Restoring the Power Supply from Power Supply Company	Two Days	Rs.200/- per day per Junction
10	Replacing the damaged Controller including sealing	Two Days	Rs.1000/- per day per Junction
11	Damaged foundation for controller & Power Supply Box should be Prepared and make the controller in operative condition.	Four Days	Rs.1000/- per day
12	Sealing should be done after installation / replacement of controller / controller cabinet	One Day	Rs. 200/- per day per Junction
13	Reconstructing the damaged chamber and putting Chamber Cover	Two Days	Rs. 500/- per day per Chamber
14	To ensure that all chamber are properly covered with Chamber covers	One Day	Rs. 100/- per day per Chamber
15	The signal junction is completely Off due to negligence / lapse on account of contractor	One Day	Rs. 1000/- per month per Junction

16	Non-availability of staff		As per Tender Clause No 6.9
17	Junction name, Meter No., Pole Numbers not maintained properly.	04 Days	100/- Per Day for per Pole/Power Supply Box/Controller Cabinet

- f) If the Contractor fails to complete the works and clear the site on or before the Contract or extended date(s)/ period(s) of completion, he shall, without prejudice to any other right or remedy of Municipal Corporation on account of such breach, pay as agreed compensation, amount calculated as stipulated below (or such smaller amount as may be fixed by the Engineer) on the contract value of the whole work or on the contract value of the time or as such group of items of work for which separate period of completion are given in the contract and of which completion is delayed for every week that the whole of the work of item or group of items of work concerned remains uncompleted, even though the contract as a whole be completed by the contract or the extended date of completion. For this purpose the term 'Contract Value' shall be the value of the work at Contract Rates as ordered including the value of all deviations ordered
  - Completion period for (originally stipulated or as extended) not exceeding 6 months:
    *(a)* 1 percent per week.
  - Completion period for (originally stipulated or as extended) exceeding 6 months and not exceeding 2 years: @ <sup>1</sup>/<sub>2</sub> percent per week.
  - Completion period for (originally stipulated or as extended) exceeding 2 years: <a>a</a>
    <sup>1</sup>/<sub>4</sub> percent per week.

When the delay is not a full week or in multiple of a week but involves a fraction of a week the compensation payable for that fraction shall be proportional to the number of days involved.

Provided always that the total amount of compensation for delay to be paid this condition shall not exceed the under noted percentage of the Contract Value of the item or group of items of work for which a separate period of completion is given.

 Completion period (as originally stipulated or as extended) not exceeding 6 months: 10 percent.

- Completion period (as originally stipulated or as extended) exceeding 6 months and not exceeding 2 years: 7<sup>1</sup>/<sub>2</sub> percent.
- Completion period (as originally stipulated or as extended) exceeding 2 years: 5 percent.

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

a) The maximum penalty shall not exceed 10% of the contract value. If the penalty exceeds 10% of contract value the contractor will be debarred from further works of Brihanmumbai Municipal Corporation.

# 6.27 Litigation History

The bidder shall disclose the litigation history as mentioned in Packet 'B. If there is no litigation history, the bidder shall specifically mention that there is no litigation history against him. In case there is litigation history-

Litigation History must cover– Any action of blacklisting, debarring, banning, suspension, de-registration and cheating with BMC, State Govt., Central Govt. or any authority under State or Central Govt./ Govt. Organisation initiated against the company, firm, directors, partners or authorized signatory shall be disclosed for last 5 years from the date of submission of bid. Also, bidder must disclose the litigation history for the last 5 years from the date of submission of bid about any action like show caused issued, blacklisting, debarring, banning, suspension, de-registration and cheating with BMC and BMC is party in the litigation against the company, firm, directors, partners or authorized signatory for carrying out any work for BMC by any authority of BMC and the orders passed by the competent authority or by any Court where BMC is a party. While taking decision on litigation history, the concerned Chief Engineer/ D.M.C./ Director, as may be the case, should consider the details submitted by bidder and take decision based on the gravity of the litigation and the adverse effect of the act of company, firm, directors, partners or authorized signatory or any work swhich can spoil the quality, output, delivery of any goods or any work execution and within the time frame.

# 6.28 **GST – Anti Profiteering Measures**

"Chapter XXI-Miscellaneous, section 171(1) of GST Act, 2017 governs the 'Anti Profiteering Measure' (APM)

As per the provision of this section, 'Any reduction in rate of tax on any supply of goods or services or the benefit of input tax credit shall be passed on to the recipient by way of commensurate reduction in prices'

Accordingly, the contractor should pass on the complete benefit accruing to him on account of reduced tax rate or additional input tax credit, to BMC.

Further, all the provisions of GST Act will be applicable to the tender."

- 6.29 The Successful Bidder should pay the Building & Other Construction Workers' Cess as per Building & Other Construction Workers' (Regulation of Employment and Conditions of Service) Act 1996. The Bidder should consider the same while submitting the offer
- 6.30 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

#### 6.31 Arbitration and Jurisdiction

Arbitration and Jurisdiction:- If the Commissioner fails to give notice of the decision as aforesaid within a period of 90 days after being requested as aforesaid or if the Contractor is dissatisfied with any such decision, then the 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 provide. i) In case of a 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 this 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 upto 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 the arbitrail 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 the 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 the recognised 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".) ii) In case of contract where the contact price and/ or contract value is Rs. 5, 00,00,000/- (Rupees Five Crore Only) or more, any dispute arising out of or in connection with such a 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.

6.32 For "INTERNAL GRIEVANCE REDRESSAL MECHANISM" please refer circular No. D.M.C./ CPD/ 3217 of 02.03.2019 and circular no Dy. Ch. E./ CPD/ 8610/ AE-5 dated 23.04.2019.

**SCOPE OF WORK** 

#### **SCOPE OF WORK**

# Supply, Installation, Testing and Commissioning of Conventional Road Traffic Signal Systems in Eastern Suburb of Brihanmumbai

- Supply, Installation, testing & commissioning of Conventional Road Traffic Signal System in Eastern Suburb of Brihanmumbai at following 11 locations:
  - i) Pump House Junction on WEH, Andheri (East).
  - ii) Jijamata Road & Hanjer Nagar Marg (Jijamata Chowk) Aaghadi Nagar Junction, Andheri (East).
  - iii) Powai Sarovar CHS. & A. S. Road Junction, Near. Powai Police Staion, Powai .

iv) Marol Co-op. Road & Andheri-Kurla Road, Near. Times Square Building (Sagbaug Junction) Marol, Andheri (East).

- v) Makwana Road & Andheri-Kurla Road Junction (Near. Sunni Masjid), Andheri (East).
- vi) Taximen Colony Gate No.1 & Suleman Building Junction on LBS Marg, Kurla (West).
- vii) New Mhada Vasahat Junction on Veer Jijamata Bhosale Marg (GMLR), Govandi.

Viii) Lokshahir Annabhau Satthe Nagar Junction on Veer Jijamata Bhosale Marg (GMLR), Govandi.

- ix) Raghvendra Swamiji Marg Junction on Goregaon Mulund Link Road, Mulund (West).
- x) EEH & Sewri Chembur Link Road Junction, Chunabhatti
- xi) Hotel Grand Hyatt Junction with extension of University Gate No. 2 on SCLR, Santacruz (East).
- 2. The work consist of Supply, installation, testing and Commissioning of Traffic Signal Poles, controller units, signal aspects, housings, LED's, providing electric supply to these installation, making necessary civil works i.e. trenching for laying duct pipes, construction of chamber/controller/pole foundation, Earthing etc. The work shall be executed as per technical specifications of individual items as narrated in USOR 2018.
- 3. The successful bidder shall co-ordinate with concern traffic police department while execution of the work. Necessary paper work for this purpose will be done by this department.
- 4. The excavation permission for signal installation works and other related maintenance works from the respective ward offices/ Road dept./ P.W.D./ M.S.R.D.C./ M.M.R.D.A./ Traffic Police etc. will have to be arranged by the successful Bidder Necessary paper work for this purpose will be done by this department.

- 5. The contractor shall apply to respective electricity supply companies to provide electric supply in the name of Executive Engineer (Area Traffic Control) and shall make initial payment for new connection charges.
- 6. The Defect liability period of the work will be 12 months from the date of commissioning of the last signal system. During this DLP, monthly cleaning along with preventive & corrective maintenance of signal systems shall be carried out as per instructions of site engineer.
- 7. The successful bidder shall maintain history sheet for all the post commissioning activities carried out at site till the end of DLP & handover the same department subsequently.
- 8. If any minor/miscellaneous work which is not specified in bill of quantity, but found essential for completion of the work then the successful contractor shall execute the same under the subject work contract. No extra cost will be paid in this regard.
- Providing trench for cables in carriageway & footpath, laying of HDPE pipes/ G.I. Pipes, construction of Controller Foundation, Construction of Pole foundation, Installation of Pole etc. and temporary reinstatement of the trenches as per BMC guidelines.
- 10. Removal of existing street furniture from the conventional signal junction if any
- 11. Shifting/ Relocating work of Traffic Signal utilities to facilitate various infrastructure works at the signal junction if any during the defect liability period.
- 12. Damage rectification work during Defect Liability period.
- 13. Preparation of signal drawings i.e. civil drawing, electrical drawing and signal phase drawing.

**BILL OF QUANTITIES** 

	ame of Work	Supply, Installation, Testing Traffic Signal systems in Subsequent Preventive and period of Defect Liability.	Eastern	Suburb of E	Brihan	mumbai and
		BILL OF QU	JANTITY	7		
Sr. No.	Item Code	Discription	Unit	Schedule Rate (Rs.)	Qty.	Amount (Rs.)
1	R2-RT- NATC 1.5	Supply of Microprocessor based Automatic traffic signal controller with housed in a water proof, dust proof & dust tight cabinet with internal locking arrangement, Police panel etc., incorporating the following – minimum 16 timing plans & 12 phases, 7 day clock, with 16 groups with minimum 48lines with conflict management facility and GPS clock system.	Nos	120,806.00	12	1,449,672.00
2	R2-RT- ATC 1.10	Sealing of controller with bitumen /foam for achieving IP 55 protection.	Nos	7,132.00	12	85,584.00
3	R2-RT- NATC 1.11	Installation & commissioning of Non ATC Traffic Signal Controller Including all Fittings on PCC foundation. (Excluding PCC foundation).	Nos	4,564.00	12	54,768.00
4	R2-RT- NATC 1.13	Removal of NON ATC signal controller from foundation or pole	Nos	2,224.00	1	2,224.00
5	R2-RT- NATC 1.14	Supply of digital count down timer for non-ATC Signal Junctions ( EN 12966 ) Graphic Type	Nos	25,960.00	126	3,270,960.00
6	R2-RT- NATC 1.15	Installation and commissioning of contdown timer for non-ATC Signal Junctions.	Nos	763.00	126	96,138.00
7	R2-RT- NATC 1.17	Removal of count down timer from pole as specified.	Nos	192.00	11	2,112.00
8	R2-RT- NATC 3.1	Supply of single120mm (OD)/103.5 mm (ID) double walled corrugated High Density Poly Ethylene (HDPE) Pipes conforming to the IS 14930 (Part-II) including supply of	Mtr	224.00	1110	248,640.00

		necessary sockets, couplings etc.				
9	R2-RT- NATC 3.2	Laying of single 120mm (OD)/ 103.5mm (ID) double walled corrugated High Density Poly Ethylene (HDPE) Pipes including pull wire along with necessary sockets, couplings etc.	Mtr	14.00	1110	15,540.00
10	R2-RT- NATC 3.5	Supply of single 50 mm (OD)/ 37 mm (ID) double walled corrugated High Density Poly Ethylene (HDPE) Pipes conforming to the IS 14930 (Part-II) including supply of necessary sockets, couplings etc.	Mtr	73.00	810	59,130.00
11	R2-RT- NATC 3.6	Laying 50 mm (OD)/ 37mm (ID) double walled corrugated High Density Poly Ethylene (HDPE) Pipes including pull wire along with necessary sockets, couplings etc. as per drawing no. RT- NATC-3.2A & RT-NATC-3.2B	Mtr	8.00	810	6,480.00
12	R2-RT- ATC 4.1	Supply of Galvanised Iron Class B Traffic Signal straight pole of 6 mtr height as per Specification	Nos	14,369.00	105	1,508,745.00
13	R2-RT- ATC 4.2	Supply of Galvanised Iron Class B Traffic Signal cantilever pole of as per Specification	Nos	40,627.00	2	81,254.00
14	R2-RT- ATC 4.24	Removal of Traffic signal straight pole	Nos	4,993.00	9	44,937.00
15	R2-RT- ATC 4.25	Removal of Traffic signal cantilever pole with extension arm or camera pole assembly	Nos	9,272.00	2	18,544.00
16	R2-RT- NATC 5.4	Supply of power supply box 600mmX 400mm X 300mm (HXWXD), with canopy made in welded construction of S.S. 304 material having sheet of thickness 1.6mm with IP 55 protection as per technical specification and as per requirement of power supply authority	Nos	13,516.00	12	162,192.00
17	R2-RT- NATC 5.5	Installation & commissioning of power supply box.	Nos	2,310.00	14	32,340.00

18	R2-RT- NATC 5.6	Removal / dismantling of existing power supply box (M.S./S.S.)	Nos	278.00	2	556.00
19	R2-RT- ATC 6.1	Supply of 300 mm dia – single source – LED retrofit - Red (blow) as per Specification	Nos	6,490.00	129	837,210.00
20	R2-RT- ATC 6.2	Supply of 300 mm dia – single source – LED retrofit - Amber (blow) as per Specification	Nos	6,490.00	129	837,210.00
21	R2-RT- ATC 6.3	Supply of 300 mm dia – single source – LED retrofit - Green (arrow/U- Turn) EN-12368 as per Specification	Nos	7,725.00	232	1,792,200.00
22	R2-RT- ATC 6.7	Supply of 300 mm dia - No Right Turn/No Left turn/No Straight/No 'U' Turn aspects by using UV stabilized ink on face plate EN-12368 as per Specification	Nos	3,974.00	4	15,896.00
23	R2-RT- ATC 6.8	Supply of Polycarbonate LED Signal head housing 300 mm dia. as per ATC technical specification and drawing alongwith brackets & accessories etc. (For all type of LED Retrofit)	Nos	4,000.00	502	2,008,000.00
24	R2-RT- ATC 6.15	Installation of Polycarbonate LED Signal aspect of 300 mm dia. on standard traffic signal straight pole	Nos	389.00	454	176,606.00
25	R2-RT- ATC 6.16	Installation of Polycarbonate LED Signal aspect of 300 mm dia. on standard traffic signal cantilever pole	Nos	784.00	94	73,696.00
26	R2-RT- ATC 6.17	Removal of Polycarbonate LED Signal aspect of 300 mm dia. On standard traffic signal straight pole	Nos	392.00	36	14,112.00
27	R2-RT- ATC 6.18	Removal of Polycarbonate LED Signal aspect of 300 mm dia. on standard traffic signal cantilever pole	Nos	713.00	10	7,130.00
28	R2-RT- ATC 7.2	Supply of PVC insulated armoured cable - 2.5 Sq.mm. 3 core copper conductor	Mtrs	111.00	70	7,770.00
29	R2-RT-	Supply of PVC insulated	Mtrs	166.00	5990	994,340.00

	ATC 7.4	armoured cable - 1.5 Sq.mm. 8 core copper conductor				
30	R2-RT- ATC 7.6	Supply of PVC insulated armoured cable - 1.5 Sq.mm. 16 core copper conductor	Mtrs	229.00	2750	629,750.00
31	R2-RT- ATC 7.14	Laying of signal cables (all types including communication cables withmulti pairs as described above) intrenches, existing ducts / G.I. Pipes including ferruling, testing etc. butexcluding any cable joint, excavation etc.	Mtrs	38.00	8910	338,580.00
32	R2-RT- ATC 7.15	Relaying of signal cables (all types including communication cables with multi pairs as described above) in existing trenches, ducts / G.I. Pipes including ferruling, testing etc. but excluding any cable joint, excavation etc.	Mtrs	29.00	120	3,480.00
33	R2-RT- ATC 7.16	Removal of signal cables (all types including communication cables with multi pairs as described above) in existing trenches, ducts / G.I. Pipes including ferruling, testing etc.	Mtrs	25.00	100	2,500.00
34	R2-RT- NATC 7.20	Supply of cable jointing Kit and joining of 1.5 Sq.mm. 8 core copper conductor control cable	Nos	1,446.00	8	11,568.00
35	R2-RT- NATC 7.22	Supply of cable jointing Kit and joining of 1.5 Sq.mm. 16 core copper conductor control cable	Nos	1,644.00	10	16,440.00
36	R2-RT- 14.1	Supply & application of primer to the Road Traffic Signal Controller foundation two coats as per technical specification.	Nos	190.00	11	2,090.00
37	R2-RT- 14.2	Supply & application of the yellow & purple coloured strips to the Controller foundation of Road Traffic Signal Controller as per technical Specification and drawing no. RT.14.2.	Nos	1,232.00	11	13,552.00
38	R2-RT- 14.3	Supply & painting of Junction Name, junction Number, no sticking of bills with Black Paint to the Road Traffic Signal	Nos	273.00	11	3,003.00

		Controller cabinet of M.S. material as per Technical pecification and drawing no. RT.14.2 & RT.14.3.				
39	R2-RT- 14.4	Painting Junction Number, Meter Number/consumer number etc with Black Paint to the Road Traffic Signal Controller Power supply box of M.S. material as per Technical pecification.	Nos	238.00	11	2,618.00
40	R2-RT- 14.7	Supply & painting of yellow coloured circles on straight poles & cantilever poles as per technical specification and drawing no. RT.14.5 & RT.14.6.	Nos	108.00	123	13,284.00
41	R2-RT- 14.8	Supply & Painting of pole numbers to the Road Traffic Signal poles in the yellow circle with black paint as per technical specification and drawing no. RT.14.5 & RT.14.6.	Nos	138.00	123	16,974.00
42	R2-RT- 14.13	Excavation of trench for traffic signals andVMS boards cables and conduiting as perrequirement of the signal junction up to the depth of 1000mm below the ground surface and width 500mm in the Carriage way (Asphalt/ Mastic Asphalt/ paver block) including refilling of the trench in carriage way and removal of debris as per the MCGM guidelines.	Cum	2,514.00	495	1,244,430.00
43	R2-RT- 14.14	Excavation of trench for traffic signals and VMS boards cables and conduiting as per requirement of the signal junction up to the depth of 1000mm below the ground surface and width 500mm in the Carriage way (Cement Concrete) including refilling of the trench in carriage way and removal of debris as per the MCGM guidelines.	Cum	4,400.00	433	1,905,200.00
44	R2-RT- 14.15	Excavation of trench for traffic signals andVMS boards cables and conduiting as perrequirement	Cum	1,508.00	83	125,164.00

		of the signal junction up to the depth of 600mm below the ground surface and width 500mm in the footpath/soft soil including refilling of the trench in footpath and removal of debris as per the MCGM guidelines.				
45	R2-RT- 14.16	Cutting of two rows RCC/PQC carriageway slabs upto slab depth by special RCC Cutting machine (Diamond Cutter) for laying duct with double cut.	Mtr	6,650.00	866	5,758,900.00
46	R2-RT- 14.17	Excavate and install brick built or equivalent sectional chamber to be450mm (L)X 450mm (B) X 600mm(D) to tie into proposed 120 mmducts/65mm G.I. Pipe in footpathinclude permanent reinstatementand backfill material as per MCGMtechnical specification and drawingno. RT.14.17.	Nos	11,785.00	149	1,755,965.00
47	R2-RT- 14.19	Excavate and install brick built or equivalent sectional chamber to be 560mm (L)X 450mm (B) X 600 mm(D) to tie into proposed 120 mm ducts/65mm G.I.Pipe in footpath include permanent reinstatement and backfill material as per MCGM technical specification and drawing no. RT.14.19	Nos	12,413.00	21	260,673.00
48	R2-RT- 14.25	Erecting straight pole in polefoundation of concrete M20 gradecircular in shape of depth 1.3m below and/or above ground level having dia. Of 300mm only, as per technical specification and drawingno. RT- 14.25	Nos	7,882.00	114	898,548.00
49	R2-RT- 14.26	Erecting cantilever pole in pole foundation of concrete M20 grade circular in shape of depth 1.3m below and/or above ground level having dia. Of 450mm only, as per technical specification and drawing no. RT-14.26	Nos	12,315.00	4	49,260.00
50	R2-RT-	Construction of signal controller	Nos	7,517.00	12	90,204.00

	14.30	foundation upto 600mm height above ground level and 600 mm below ground level on C.C. M20 grade pedestal, having size (LXBXH) with				
51	R2-RT- ATC 15.17	Providing Power supply 1 KW Single phase with wooden plank, MCCB etc. from power supply company	Nos	4,749.00	11	52,239.00
52	R2-RT- ATC 16.11	Supply, installation & Testing Chemical earthing which includes Chemo MF Earthing electrodes field with SSC compound, seal from both the end having dia 80 mm length 1000mm, terminal 50 * 6 mm, MOC-SDGI with soil resistivity improvement powder with moister booster compound by manually digging process fixing of FRP earthing chamber cover, connection of earthing Pit to grip with each other & accessories i.e. cables, lux, nuts, bolts, GI strips (25X3) 1 mtr etc. as directed by engineer.	Nos	7,558.00	12	90,696.00
53	R2-RT- ATC 16.13	Supply & installation of FRP Chamber Cover size 510 X 510 X35 mm as per EN 124:2004 for 25 MT load capacity	Nos	6,608.00	149	984,592.00
54	R2-RT- ATC 16.14	Supply & installation of FRP Chamber Cover Frame of size 620 (L) X 620(B) X72 (W) mm suitable of FRP cover size 510 X 510 X45 mmas per EN 124:2004 for 25 MT load capacity	Nos	2,282.00	149	340,018.00
55	R2-RT- ATC 17.36	Supply of FRP Chamber Cover size 537 X 687 X45 mm as per BS EN 124 :1994 for 25 MT load capacity	Nos	6,490.00	21	136,290.00
56	R2-RT- ATC 17.37	Supply of FRP Chamber Frame Size 654 X 804 X74 mm for the cover 537 X 687 as per BS EN 124 :1994 for 25 MT load capacity	Nos	2,254.00	21	47,334.00
57	R2-SE- 5-9-a	Providing, Laying and Jointing 160 mm dia (OD) HDPE pipes	Mtr	983.00	2550	2,506,650.00

		Total	Amount <b>R</b>	s.		3,79,89,628.00
61	RT- ATC- FAIR-34	specification and drawing	Nos	59,000.00	18	1,062,000.00
60	RT- ATC- FAIR-33	Installation & Commissioning of New type LED cantiliver Traffic Signal	Nos	12,980.00	18	233,640.00
59	RT- ATC- FAIR-32	Fabrication, Supply of New type LED cantiliver Traffic Signal pole of GI ERW square pipe including 6 Nos of LED Modules, fixtrues, control units, drivers, relays, wires, cables , necessary accessories, transportation of pole to MCGM Depot etc. and as per the technical specifications and drawings (Type 2)	Nos	305,000.00	14	4,270,000.00
58	RT- ATC- FAIR-31	with butt joints etc. complete as specified and directed Fabrication, Supply of New type LED cantiliver Traffic Signal pole of GI ERW square pipe including 6 Nos of LED Modules, fixtrues, control units, drivers, relays, wires ,cables , necessary accessories, transportation of pole to MCGM Depot etc. and as per the technical specifications and drawings (Type 1)	Nos	305,000.00	4	1,220,000.00
		5 1				

**GENERAL CONDITIONS OF CONTRACT** 

# **GENERAL CONDITIONS OF CONTRACT - DEFINITION AND INTERPRETATION**

General Conditions of Contract (G.C.C.) revised up to date, are available on BMC web site <u>https://portal.mcgm.gov.in</u> for reference.

**SPECIFICATIONS & SELECTION OF MATERIAL** 

# **TECHNICAL SPECIFICATION**

#### **CONTRACTOR'S OBLIGATIONS**

The works comprise the "Supply, Installation, Testing and Commissioning of conventional Road Traffic Signal systems in Eastern Suburb of Brihanmumbai and Subsequent Preventive and Corrective Maintenance up to 12 months period of Defect Liability." including all necessary associated Civil works

The construction and installation of all new traffic signal equipment including but not limited to cabling, signal aspect, poles, and cabinet housings, controllers etc;

The Contractor shall be responsible for all the supply, installation, testing and commissioning of the following:-

- 1. Traffic Signal controllers, street furniture and supporting cable infrastructure in a fully ducted signal installation;
- 2. Provision of new electricity supply connection to the junction installed under this contract.

The traffic signal equipment shall be in accordance with the following requirements:-

- i) Each unit shall carry its functional code or title, and type or part number.
- ii) The marking or labelling of main units shall be clearly visible without dismantling the unit.
- iii) The marking or labelling of encased units shall be clearly visible without dismantling when the unit is removed from its normal position and covers, if fitted, taken off.
- iv) Components shall not be marked with circuit references. The markings shall either be adjacent to the component or annotated in the diagram or photograph in the relevant handbook or manual.
- v) Markings required for controls, maintenance or working shall be adjacent to the part concerned.
- vi) Markings shall maintain legibility throughout the life of the equipment in the specified environmental condition.

The clauses in this section are meant to provide general guidelines and compliance requirements to the Contractor. It does not however relieve the Contractor from taking every other steps and precautions as deemed necessary to carry out the work

#### **Contractor's Inspection of Sites**

- i The Contractor is deemed to have visited the sites and familiarised himself of the conditions and restrictions under which the work will be executed.
- ii The omission of any details shall not relieve the Contractor of his prima facie obligation and responsibility under the Contract to carry out and successfully complete the rehabilitation works.
- iii No monetary or other claims made by the Contractor on the grounds of want of knowledge will be entertained by the BMC.
- iv The Contractor is advised that it is his sole responsibility to ascertain for himself the extent of work that is required to be done in site and to generally obtain his own information on all matters affecting directly or indirectly the execution of the whole works involved in the contract to the complete satisfaction of the Engineer.
- v No claim of extras in consequence of any alleged ignorance in any aspect will be entertained by the Engineer. It must be clearly and definitely understood that the contractor shall be held solely responsible for making all necessary arrangement and coordinating with relevant authorities, competent agencies and specialist contractors etc., to ensure satisfactory completion of the Contract

#### PERSONNEL AND ACCESS

The Contractor shall supply with his Bid the Curriculum Vitae of personnel and their specific staff task definitions to be employed on the Contract including Sub-Contractors. Any proposed changes to the Contractor's, including Sub-Contractors, team during the Contract shall be notified to the Engineer's and shall be to his satisfaction. The BMC shall ensure that the Contractor has reasonable access to enable the Contractor to execute his responsibilities within the terms of the Contract. However, access to certain locations may be by arrangement, these shall be defined by the BMC during the period of the Contract. If the Contractor find that he encounters unexpected delays in executing his programme due to lack of access to relevant locations and/or sites, then he shall through the established reporting procedures identifying this to the Engineer.

#### **COMPLIANCE WITH STANDARDS**

The Bidder shall provide evidence that the equipment offered has type approval in the original country of design and manufacture, that the equipment fully complies with the standards and specifications quoted in USOR-2018 and FAIR ITEMS 2022

#### **SELECTION OF MATERIAL**

1. All materials brought shall be the best of their respective kinds, from fresh stock and to the approval of the Engineer. The Engineer or his representative will accept that the materials are

really the best of their kinds, when it is proved beyond doubt that no better materials of the particular kind in question are available in the market.

- 2. The Engineer will have the option to have any of the materials tested to find out whether they are in accordance with the Specifications and the Contractor will bear all expenses for such testing. All the bills, vouchers and test certificates, which in the opinion of the Engineer or his representative are necessary to convince him as to the quality of the materials or their suitability shall be produced for his inspection when required.
- 3. Any materials that have not been found to conform to the specifications will be rejected forthwith and shall be taken back by the contractor at his own cost within 24 hrs.

## **INTER-UTILITY CODE OF CONDUCT**

- i. This Code of Conduct for road excavations has been adopted by the following utilities operating in the area of Brihanmumbai Municipal Corporation.
  - a. Brihanmumbai Municipal Corporation.
  - b. Bombay Telephone
  - c. Bombay Electric Supply and Transport Undertaking
  - d. Reliance Energy Ltd.
  - e. Tata Electric Companies Ltd.
  - f. Bombay Gas Company Limited.
  - g. Maharashtra State Electricity Board.
  - ii. Scope

This Code of Conduct regulates the trenching activities of the above utilities only to the extent of ensuring minimized hazard to life of operating personnel and the road user, minimized inconvenience to the road user, minimized damages to the underground plant I services of one utility by another excavating utility, and coordinated works programs in the interest of overall economy.

#### iii. Prior Information on Trenching Activities

Prior intimation shall be given to BMC for all planned works through the respective Ward Officers who issue the permit. In case of emergency trenching for restoring service, the Ward Officers shall be intimated, of the exact location of the trench being taken, likely duration of the trench being kept open and the particular unit responsible for trenching. This intimation shall be given to the ward officer no later than the closing time of the office on the next working day.

#### iv. Intimation to Traffic Police

Prior intimation on trenching along footpaths of roads shall be given to the Traffic Police Authorities to enable them to divert or regulate traffic around the location of trenching. Trenching in carriageways shall be carried out in consultation with the Traffic Police.

### v. Information to Other Utilities

Prior information on trenching works shall be given to those utilities who desire it to enable them to take necessary steps to safeguard their underground plants/ services. This information shall be given over phone at least 24 hours in advance, except in case of cable faults where it shall be given as soon as practicable and each utility seeking such information shall have its own central information center to receive it.

#### vi. Caution and Information Boards

The information board shall be installed at the place where the excavation commences. Where street lighting inadequate, fluorescent paint for the letter shall be used for these boards.

# vii. Temporary Traffic Arrangements and Control

Temporary traffic diversions and pedestrian routes shall be provided where work in roads or footways obstruct existing vehicular or pedestrian access. The relevant work shall not commence until the approved temporary traffic arrangements and control have been implemented.

Temporary traffic arrangements and control for work in roads and footways shall comply with the requirements of Indian Regulations.

Temporary traffic signs, including posts, backing plates and faces, shall comply with the requirements for traffic signs contained in Indian Regulations for Road Signs.

The arrangement of information contained on sign faces for temporary traffic directional signs shall be designed by the Contractor. The details of the background, borders and legends, including letter, numerals, characters and symbols, shall comply with the requirements of the Indian Regulations for Road Signs.

Temporary traffic arrangements and control shall be inspected and maintained regularly, both by day and night.

Traffic lights, signs and lighting shall be kept clean and easy to read. Equipment which is damaged, dirty, incorrectly positioned or not in working order shall be repaired or replaced immediately.

## viii Approval for Temporary Traffic Arrangements and Control

In addition to any other requirements stated in the Contract, temporary traffic arrangements shall be in accordance with conditions and restrictions imposed by the BMC.

The Contractor shall make all arrangements with and obtain the necessary approvals from the Engineer for temporary traffic arrangements and control.

No temporary traffic arrangements shall be implemented until all approvals have been obtained and agreement reached with the relevant authorities. Copies of correspondence, approvals and agreements shall be forwarded to the Engineer at least 1 week before the planned implementation.

#### ix Lighting of Excavations

All excavations, trenches, obstructions, materials, etc. taken, kept or deposited in connection with the work would be sufficiently lighted at night in order to guard against any damage or danger to the traffic and to take all precautions to keep all the lamps lighted through the hours of darkness for the guidance of the traffic.

### x. Precautions

If the work for which the excavation shall have been made not be completed by the 20th May or before the day fixed by the BMC or Engineer of the contact for filling in any excavation on account of the Ganesh Festival, Mohurum, or Diwali or other holiday or of any special occasion or ceremony, the contractors shall refill any such excavation or the BMC may refill and compact at their expense, notwithstanding the non-completion of the work as aforesaid and in no such case shall the contractors have any claim for such excavation at such time, together with the cost of such procedure as may be adopted by the BMC.

#### xi. Special Traffic Precaution

Attention is specially drawn to the requirements by the traffic police and road and rail authorities and specifications regarding Traffic Control, Access and the Reinstatement of road surfaces etc. It is necessary to obtain separate permission for each section of works from the respective Senior Inspector of Police (Traffic), road, railways and municipal ward authorities, etc. The progress/ programme and road opening schedule must be arranged in details for discussion with the Engineer and the Traffic Police. The road traffic signal installation work shall be broken into suitable sub sections wherever necessary so that special traffic diversions can be arranged. Whenever carriage ways are affected, it is the responsibility of the Contractor to contain the works within the narrowest possible area and as allowed by the traffic authorities. The Contractor is deemed to have done his own investigation and made adequate provisions in his method of work and rates quoted for the work to carry out and complete the work successfully within the prevailing constraints existing on sites. It is necessary to carry out the work in such a manner as to cause minimum interference with the public use of roads, footpaths and other thorough fares. The administrative help will be extended by Engineer's staff to the contractor to pursue the matter with the concern authorities

### LIAISON

The Contractor shall interact with different departments and agencies involved with regard to the co-ordination of civil engineering, electricity and all other works associated with the con tract for successful execution of the contract. It will be his sole responsibility to coordinate with different agencies and get the work done successfully. The BMC will provide the neces sary help in respect of required letters to these agencies and no more.

#### SAFE WORKING CONDITIONS AND CONTRACTOR'S COMPLIANCE

The Contractor shall ensure that all the necessary safety requirements for persons working on the signal junctions installations are fully complied with provisions in the Corporation's Gen eral Safety Precautions and the clauses in the specification. The requirements and precautions to be taken when working on height, on road. In addition, while working on roads & at height is also included in this tender for Contractor's full compliance.

### **CIVIL WORKS: GENERAL**

The Contractor will be responsible for the implementation of all necessary civil engineering works included in his scope to implement this signal installation tender. This will include:-

- a. Excavation of Trenches in footpath and carriageway and temporary reinstatement of the same.
- b. The installation of the hardware necessary for the signal system itself such as signal controller basis, signal poles, cables and cable ducts.
- c. The provision of a fully ducted network for traffic signal infrastructure in the form of ducts and chambers in line with the detailed standards outlined in this specification.

All Civil Engineering Works will be undertaken in accordance with the Specifications for Road Works of BMC or Trenching policy guidelines unless otherwise stated in this document. Separation Between Power and Telecom cables While laying power and communication cables, the following standard shall be adhered as far as possible. The horizontal and vertical separation between power and communication cables shall be preferably 0.6 meter, and it shall not be less than 0.4 meter for signal & core cable and 0.3 meter for multi-core cables. The power and communication cables shall cross at I right angles to each other. The Contractor, prior to the start of any civil engineering works associated with either Junction Improvements or Traffic Signal Installation and Ducting shall produce engineering drawings.

#### i. Works in Roads and Footways

The Contractor shall be responsible for all Civil Engineering work included in his scope under this tender in roads and footways for those elements described above. Works for the implementation of traffic signals system shall be carried out to minimize disruption to traffic and pedestrians. Work in sections shall be completed and the road shall be reinstated and opened to traffic before work commences in the next section. Work in any section, including loading and unloading, shall be carried out in such a manner that traffic and utilities in the adjacent footway will be adequately maintained. Unless otherwise defined in the Contract, excavations shall be formed with a clean edge in such a manner that the adjacent road or footways, including edges are not damaged to ensure reinstatement to match and be continuous with the adjacent area. The Contractor shall be responsible for any excess reinstatement required arising from failure to provide a clean edge and any other remedial works specified by the BMC from failing to comply with this clause. Excavated material shall not be stored adjacent to excavations in roads or footways unless permitted by the Engineer. The excess of Excavated material shall be disposed off by the contractor at his own within time period specified in the guidelines of BMC for trenches, otherwise strict action as stated in the trenching policy will be applicable to the contractor. The Contractor shall ensure that excavations are fully supported at all times to ensure the safety of his own employees and the public. Inspection of supports shall be carried out by competent persons at regular intervals and remedial action taken immediately to correct any defects identified.

#### ii. Reinstatement of Roads and Footways

The Contractor shall be responsible for all reinstatement undertaken as part of this Contract in roads & footways as per BMC guidelines upto temporary reinstatement with excavated earth surface levelling. Temporary traffic diversion, pedestrian access and lighting, signing, guarding and traffic control equipment shall be removed immediately if they are no longer required. Roads, footways and other items affected by temporary traffic arrangements and control shall be reinstated to the same condition as existed before the work started or to such other condition as may be agreed or instructed by the BMC or otherwise defined in the Contract.

#### iii Use of Roads and Footways by the Contractor

Roads and footways on the site in which work is not being carried out shall be maintained in a clean and passable condition and shall not be used to store materials or park constructional plant or other vehicles. Measures shall be taken to prevent excavated material, silt or debris from entering drainage systems in roads and footways. Entry of water to any gullies shall not

be obstructed. Surfaced roads on the Site and leading to the Site shall not be used by tracked vehicles unless protected against damage is provided. Measures shall be taken to prevent excavated material, silt or debris from entering drainage systems in roads and footways. Entry of water to any gullies shall not be obstructed. Loads shall be covered or protected to prevent dust being emitted. The wheels of constructional plant and other vehicles shall be washed when necessary before leaving the Site to avoid the deposition of mud and debris on roads.

#### **CABLE INSTALLATION**

Contractor shall install and test the cables specified in accordance with the plans. Cables shall be laid in HDPE and G.I./ M.S. conduits.

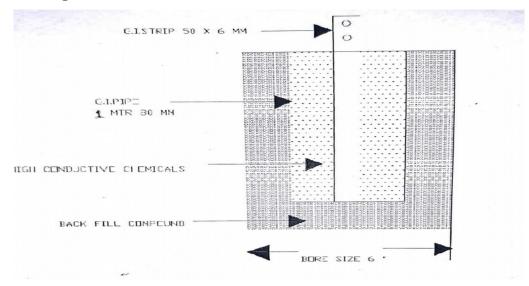
All new cables shall be megger-tested before commissioning. The test voltage for pressure testing shall be as per IS:1255. 1100/650 Volt grade cables shall be tested by a 1000 Volt Megger. Cable cores shall be tested for:

- a) Continuity
- b) Absence of cross phasing.
- c) Insulation of resistance to earth.
- d) Insulation resistance between conductors.

#### **BONDING AND GROUNDING (EARTHING)**

Earthing conductor shall be so placed and connected that it is not likely to be accidentally damaged or cut. It shall be fixed over its entire length by clamps, clips, saddles, staples which in no way will damage the conductor. Protection against mechanical damage and/ or corrosion shall be provided wherever necessary by carrying earth conductor in G.I. pipe of 12.7 mm nominal size. Joints in earthing conductors shall be avoided as far as possible. Joints in main earthing conductors shall be made by soldering Brazing or welding. The earthing arrangement shall generally conform the continuous earth of all the metallic parts by continuous running earth. The chemical earthing shall be used for the earthing of the signal junction as per relevant IS. The entire system of earthing shall be tested for mechanical and electrical continuity through out in addition to tests of effectiveness of earth. Chemical Earthing rod size shall be chosen as per soil condition such as wet marshy ground, clay/loamy soil, clay soil, clay & loam mixed with varying properties of sand, ground & sand, dam & wet sand. Back filled Compound Back filled compound containing of minimum 11 types of high conductive and 11 types of anti corrosive to reduce corrosion and increase conductivity.

#### **Reference drawing:**



## **ELECTRICITY SUPPLY**

In all cases the electric supply shall be made available from supply companies viz the Bom bay Electric Supply and Transport (BEST), Adani Electricity Mumbai Ltd. and the Maha rashtra State Electric Distribution Company Limited (MSEDC Ltd.), after appropriate li aisoning by the Contractor. The Contractor shall be responsible for all costs associated with the provision of electric supplies required in order to meet the contractual requirements. It shall be the Contractors responsibility to make the necessary arrangements with the appropri ate electric supplier in all matters relating to the provision of a suitable cubicle for receiving and metering, termination. In case of Traffic signal control equipment replacement it may be necessary to provide new electric cut out or otherwise improve such terminations so that they conform with the requirements of the IS:3043 - 1987,CL. 19.3 or other Internationally ac cepted equivalent standard. The Contractor shall be responsible for all costs incurred in the testing, liaisoning and the to tal costs associated with the provision of any new supply. The Contractor is required to notify the appropriate electric supplier well in advance regard

ing new supply and will meet the cost for the provision of an electric supply to enable con nection of equipment provided by this Contract. The Contractor shall make himself aware of the lead in time scales required before an electric supply would be provided. The Employer reserves the right to claim against the Contractor for any delay caused to the commissioning program caused by the non availability of an electric supply. The penalty will be proportion ate to the loss of benefit that would otherwise have been gained by the Employer.

#### CONDUIT

It is assumed that concrete conduct exists at all signalized intersections. This conduit shall be used for cable installation where it crosses an intersection if possible. Where conduit does not exist, such will be installed by contractor.

The high density polyethylene corrugated pipe conforming to IS14930 (part-II) with all tests enumerated in the IS & certificate to that effect. All surplus material shall be removed from the right-ofway and the excavation finished flush according to the plans.

The Contractor shall inform the Engineer of the intention to switch off any traffic signal junctions at least 48 hours in advance of any planned disruption to traffic signal operation.

The Contractor shall take all reasonable measures to ensure that the traffic signals are off only for the minimum period of time practically possible.

In all cases the Contractor shall endeavor to ensure that no planned work to traffic signal installations causes or is likely to cause a lamp's off situation during peak hours.

## **PRESERVATION OF PROPERTY**

The contractor shall take all reasonable precautions for the protection and preservations of any or all existing road side trees, drains, sewers, or other, which may be affected by construction, operations, and which in the opinion of the Engineer shall be continued in use.

Safeguards taken by the contractors in this respect shall be got approved by him from the Engineer. However, it shall be replaced or restored to the original condition at his expense.

### **RATES TO INCLUDE ALL METHOD RELATED COSTS**

It is deemed that the rates offered by the Contractor have included everything required to comply with all the required provisions as above and any additional requirements as necessary to carry out the installation of road traffic signal & its commission successfully considering the defect liability period. Innovation in relation to the best product and the best practice is encouraged and the BMC will consider all the options to get the best installed product at competitive price. Hence sufficient documentation must be submitted with the Technical Schedules of the bid to enable the BMC to carry out an initial investigation and appraisal of the product and to ascertain the benefit and the advantage of the product to the BMC.

#### **SPECIFICATION**

These specifications are intended for general description of site conditions, scope of work and requirements, products, execution, quality of workmanship and finished work. They are not intended to cover minute details. The work shall be executed in accordance with best modern practices and using special techniques. The Contractor shall read this Technical Specification in conjunction with the standard specifications/ SOR/ FMR/ FMB etc., of the BMC for Traffic Signal Works and other documents and technical manual, papers, guidelines, standards and specification etc. referred to in the specification. Other detailed Technical Specifications are available on BMC website 'http://www.portal.mcgm.gov.in' for reference.

# FRAUD AND CORRUPT PRACTICES

#### FRAUD AND CORRUPT PRACTICES

- The Bidders 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 bid without being liable in any manner whatsoever to the Bidder if it determines that the Bidder 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 Bidder 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 Bidder 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 Bidder 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 relevant 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 Bidders 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 contexdt, "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;
- iv. "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.
- x. A "party" refers to a participant in the procurement process or contract execution.

# **SECTION 12**

LIST OF APPROVED BANKS

# LIST OF APPROVED BANKS

- The following Banks with their branches in Brihanmumbai 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.

#### List of the Approved Banks

- (A) S.B.I. and its subsidiary Banks:
  - 1. State Bank of India

#### **(B)** Nationalised Banks:

- 2. Allahabad Bank
- 3. Andhra Bank
- 4. Bank of Baroda
- 5. Bank of India
- 6. Bank of Maharashtra
- 7. Central Bank of India
- 8. Dena Bank Indian
- 9. Indian Bank
- 10. Overseas Bank
- 11. Oriental Bank of Commerce
- 12. Punjab National Bank
- 13. Punjab & Sind Bank
- 14. Syndicate Bank
- 15. Union Bank of India
- 16. United Bank of India
- 17. UCO Bank
- 18. Vijaya Bank
- 19. Corporation Bank

#### (C) Scheduled Commercial Banks:

- 20. Bank of Madura Ltd.
- 21. Bank of Rajasthan Ltd.
- 22. Banaras State Bank Ltd.
- 23. Bharat Overseas Bank Ltd.
- 24. Catholic Syrian Bank Ltd.
- 25. City Union Bank Ltd.
- 26. Development Credit Bank

- 27. Dhanalakshmi Bank Ltd.
- 28. Federal Bank Ltd.
- 29. Indus Ind. Bank Ltd.
- 30. I.C.I.C.I. Banking Corporation Ltd.
- 31. Global Trust Bank Ltd.
- 32. Jammu and Kashmir Bank Ltd.
- 33. Karnataka Bank Ltd.
- 34. Karur Vysya Bank Ltd.
- 35. Lakshmi Vilas Bank Ltd.
- 36. Nadungadi Bank Ltd.
- 37. Ratnakar Bank Ltd.
- 38. Sangli Bank Ltd.
- 39. South Indian Bank Ltd.
- 40. S.B.I. Commercial & Int. Bank Ltd.
- 41. Tamilnadu Mercantile Bank Ltd.
- 42. United Western Bank Ltd.
- 43. Vysya Bank Ltd.

#### (D) Scheduled Urban Co-op. Banks:

- 44. Abhyudaya Co.op.Bank Ltd.
- 45. Bassein Catholic Co.op. Bank Ltd.
- 46. Bharat Co.op. Bank Ltd.
- 47. Bombay Mercantile Co.op. Bank Ltd.
- 48. Cosmos Co.op. Bank Ltd.
- 49. Brihanmumbai Co.op. Bank Ltd.
- 50. Janata Sahakari Bank Ltd.
- 51. Mumbai Dist.Central Co.op. Bank Ltd.
- 52. Maharashtra State Co.op. Bank Ltd.
- 53. New India Co.op. Bank Ltd.
- 54. North Canara G.S.B.Co.op. Bank Ltd.
- 55. Rupee Co.op. Bank Ltd.
- 56. Sangli Urban Co.op. Bank Ltd.
- 57. Saraswati Co.op. Bank Ltd.
- 58. Shamrao Vithal Co.op. Bank Ltd.
- 59. Mahanagar Co-op. Bank Ltd.
- 60. Citizen Bank Ltd.
- 61. Yes Bank Ltd.

#### (E) Foreign Banks:

- 62. AMRO (N.Y.) Bank.
- 63. American Express Bank Ltd.
- 64. ANZ Grindlays Bank
- 65. Bank of America N.T. & SA.
- 66. Bank of Tokyo Ltd.
- 67. Bank Indosuez
- 68. Banque Nationale de Paris
- 69. Barclays Bank
- 70. City Bank N.A.
- 71. Hongkong & Shanghai Banking Corpn.
- 72. Mitsui Taiyokbe Bank Ltd.
- 73. Standard Chartered Bank Ltd.
- 74. 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 **www.rbi.org.in** From this list of RBI bank under following heads with their branches in Brihanmumbai 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.

However Bank Guarantee issued by IDBI is not acceptable as per circular CA/FBK/303 Dated 17.03.2018.

# **SECTION 13**

# **SPECIAL INSTRUCTIONS TO BIDDERS**

#### **SPECIAL INSTRUCTIONS TO BIDDERS**

- 1. Before tendering, the bidders shall visit signal junction sites. In case of doubt they may obtain 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.
- 2. The Bidders are directed to go through the entire Tender document including directions/ specifications, etc. and get the clarifications, if any, before filling up of the tender. Such requests regarding clarifications, if any shall be in writing and shall reach the office of Ex. Engr. (Area Traffic control) atleast 07 days prior to due date of the tender.
- 3. Wherever the word Quotation/ Quotationer or Tender/ Tenderer is appeared, it should be read as Bid/ Bidder.
- 4. The successful contractor will have to pay the legal & stationery charges as per the prevailing norms of BMC at the time of contract execution.
- 5. Time is the essence of the contract.
- 6. The Tender is on percentage basis & all the items covered under USOR uploaded on the BMC portal are part of bill of quantity. Before starting the work contractor shall consult the Site Engineer and shall take actual measurements on the site for procurement of material.
- 7. The Bidder shall procure all material required for the work of approved make with valid BIS/ IS/ EN/ relevant standards certificates and as per BMC Requirements/ specifications wherever applicable. The Bidder shall produce on demand such details as called by the Engineer to prove the genuineness of the material. The contractor shall be taken back Defective/Rejected material at his own cost within 24 Hrs.
- 8. All material required for the work can be stacked near the site of work in such manner so as not to cause any inconvenience to the pedestrian and vehicular traffic. If no space is available on site then bidder shall make his own arrangement for stacking of material etc. No extra payment will be made on this account. The entire work shall be done without causing any disturbance to nearby residents / land users & pedestrians
- 9. The contract period is **08 Months (Excluding Monsoon)**. The contract period is inclusive of period required for mobilization and procurement of material and shall be reckoned from the date mentioned in the work order.
- 10. Program of Work: The detail programme of the works will have to be made available from time to time in the office of Ex. Engineer (Area Traffic Control). If at any stage the previously approved programme is required to be modified, the bidder shall do so, immediately as directed by the Engineer. In case of necessary to modify/ alter the work programme, as directed, the bidder shall do so without claiming any extra payment. The programme shall be reviewed periodically and rescheduled as directed.

- 11. The Bidder shall have to obtain all the permission of the concerned authorities/ other agencies required for carrying out the work on their own. Only recommendatory letters will be issued by BMC.
- 12. The contractors will have to obtain permission from the Traffic Police Dept. well in advance either for closing down the road or for diversion of traffic for execution of the work. The work may be required to be executed in phases as per Traffic Police permission. The contractors should therefore take this factor into account while quoting.
- 13. The excavation permission for signal installation works and other related maintenance works from the respective ward offices/ Road dept./ P.W.D./ M.S.R.D.C./ M.M.R.D.A./ Traffic Police etc. will be arranged by the successful Bidder, however, all excavated portion will have to be refilled & temporarily reinstated as per BMC trenching policy guidelines by the signal Contractor. Surplus excavated earth from work site shall be removed within 24 hours as per the BMC guidelines in this regard from the site. No extra payment for carrying the material by head load to work site, shall be considered under any circumstances. Only recommendatory letters will be issued by BMC.
- 14. All the excavated material belongs to the Brihanmumbai Municipal Corporation and therefore shall be the property of Brihanmumbai Municipal Corporation. It is the responsibility of the contractor to dump the surplus excavated material at their cost. No transportation charges or any other charges will be paid to the contractor. The rate of excavation is deemed to include the cost of transportation and disposal of surplus excavated material.
- The successful Bidder(s) shall provide various boards on site to have smooth traffic as per the requirement of Traffic Police Department and shall have proper co-ordination with Ward staff & Traffic Police Department.
- 16. The barricading shall be provided free of cost as per circular vide u/no.- MGC/F/6342 Dated 05.05.2018 and as per annexure I,II and III of standard drawings and specifications with slogans and department wise colour codes. The copy of circular is available on BMC Portal Website.
- 17. The contractor will have 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.
- 18. The whole work shall be finished in workman like manner and to the entire satisfaction of the Municipal Commissioner. 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.
- 19. The contractor will have to take care to restrict the noise level within the permissible limits and shall employ only such equipments on site which will not make noise and cause vibrations. The relevant noise level specifications to work in different areas shall be strictly adhered. The noise level in the vicinity of residential & public places shall be below 70 db.

- 20. Compliances of Rules: All works shall be carried out in accordance with the latest rules under the Indian Electricity Act, 1910 as applicable. The contractor shall comply strictly to Indian Standards Institution Code (IS 732-1950) of practice for Electrical wiring and fittings in Buildings. Installation shall comply with all the laws and regulations in effect with the regulations of the competent authorities and the requirement of the Government and the Electric Supply Company's.
- 21. The specifications included in the tender follow corresponding standards of IRC & BMC. In case of any contradiction in specification, the decision of Engineer will be final and binding.
- 22. All General conditions for different works i.e. electrical, mechanical, civil etc., as stipulated by the BMC from time to time, as amended upto date shall be applicable to the contract.
- The contractors shall comply with inter utility organizations and code of conduct for road excavations wherever such applies to the conduct of this contract.
- 24. Contract Labour (Regulation and Abolition act 1970): The Bidder should specifically note that the successful Bidder shall have to strictly comply with all the statutory requirements under the provision of the Contract Labour (Regulation and Abolition) Act, 1970 and with the Maharash-tra State Contract Labour (Regulation and Abolition) Rules 1971 and indemnify the Corporation against any claim(s) whatsoever.
- 25. Bidders are requested 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 will be taken.
- 26. The contractors 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. They shall also indemnify the BMC form any claims whatsoever arising there from and shall be solely responsible for consequences thereof.
- 27. The BMC 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.
- 28. The BMC is not bound to accept the lowest or any Tender and they reserve the right to relax any of the stipulated conditions and reject any or all Tenders, without assigning any reason.
- Previous bad/ good records of Bidders as well as their previous experience in major cities in India shall be considered while evaluating the tender.
- 30. 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.

- Rates of each item of work mentioned in the unified schedule of rates are inclusive of all Taxes and Duties & no correspondence will be entertained in this regard.
- 32. The rates quoted shall be firm and inclusive of delivery of materials at site and/ or transportation of damaged/ retrieved materials from site. Separate transportation charges will not be paid by BMC
- 33. Bidder should specifically state their official addresses along with the telephone and mobile number. The contractor or their partners and authorized representative shall be available on a given telephone number during any hours of the day.
- 34. The Bidder/ property owners/ other private parties paying contract deposits in the form of Government Securities/ Bonds/ N.S.C. to the Brihanmumbai Municipal Corporation shall have to pay service charges and depositing/ withdrawing charges on the face value of the securities at prevailing rates approved by the Corporation from time to time for the entire period of deposit. The charges shall be paid in cash before submitting the securities/ Bonds/ N.S.C. etc.
- 35. 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.
- 36. If it is found that firms as described in the direction vide Clauses 35 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.
- 37. All the details regarding the staff proposed shall be approved and if any change in that regard shall be immediately intimated to the BMC. Name and Bio-data of the technically qualified personnel employed to supervise the work should be submitted to the BMC before start of the work.
- 38. The work will be treated as completed only after cleaning the site in all respect after completion of the work and to the satisfaction of the Engineer.
- 39. The overall liability including damages & penalty is limited to the amount not exceeding more than 10% of the Contract Value. If the penalty exceeds 10% of Contract Value, The Contractor will be liable for the action as per BMC guidelines in this regard.

- 40. The items supplied and installed under the contract should be guaranteed for satisfactory performance during the entire contract period except for consumables etc.
- 41. The successful bidder will have to make their own arrangements for spare parts and Laptop with relevant software programme and replace any required part, at their own cost, wherever necessary.
- 42. The contractor shall hand over the entire signal system/spares under their contract in working condition to the agency as and when appointed by BMC after expiry of the Contract Period.
- 43. The contractor shall endeavour in expediting various matters in respect of power supply of road traffic signals with the power supply companies viz. BEST, Reliance Energy Ltd. and MSEDCL including restoration of power supply.
- 44. The contractor shall apply to respective electricity supply companies to provide electric supply in the name of Executive Engineer (ATC) and shall make initial payments for new connection charges. The new connection charges will be reimbursed to successful bidder during their running bill against BOQ Activity No.- R2-RT-ATC- 15.17. However, the monthly recurring charges of energy bill will be paid by BMC.
- 45. The Contractor shall provide necessary cut-outs and G.I. pipes, earthing and submit the electrical "TEST REPORT" as and when required by BEST, Reliance Energy Limited, or MSEDCL, as the case may be, in the course of maintenance.
- 46. The Contractor is required to maintain the minimum stock level of each material required for maintenance. If any damage occurred, the Contractor should replace the same within resolution period, else penalty will be imposed as per Penalty Clause.
- 47. It will not be binding on BMC/ Traffic Police Dept. to provide any space/ set up to the signal companies for enabling them to operate for maintenance work. However, in case any special provision is made for such space/ set up etc., the standard rent shall be charged as per Municipal rules and regulations.
- 48. The bidder shall bear the expenses towards the testing of material as specified in the tender at any of the test laboratory/manufacturers works recommended by BMC. The order will be revoked in case it fails in Tests in meeting the tender specifications.
- 49. The Successful bidder shall furnish test certificates on demand.
- 50. Maintenance team shall be available on all weekdays including public holidays.
- 51. If it is observed that the contractors carrying out the work fail to comply with the instructions given by the higher Authorities at A.M.C./ M.C. level during execution of work twice, the work will be terminated and will be carried out at the risk and cost of the contractor and penal action will be taken against them. This decision will not be arbitrable at all.

- 52. The bidder should have a dedicated team of qualified personnel to install and maintain these signals. They should have the necessary infrastructural facilities including office situated in Brihanmumbai along with telephone facility.
- 53. The Engineer or his representative will strictly supervise the work at all levels and hence witness tests at all levels. The contractor shall submit the all test certificates and shall observe strict adherence to the given standards unless, otherwise specified in writing by competent authority is expected. Any deviation from the given standards will not be tolerated.
- 54. The entire work shall be completed within contract period as specified from the date of issue of the work order. The individual works shall be completed within the stipulated period.
- 55. The bidder shall make every effort to optimize Phase, plan or Offset using traffic study in coordination and consultation with TPHQ to make Road Traffic Signal System functional.
- 56. Departure from Specifications: Should the bidder wish to depart from the provisions of the specifications or general conditions of contract, he shall clearly mention them giving his reasons thereof. Unless this is done, the equipment offered and work executed shall be deemed to comply in every respect with the terms and conditions of the specifications without claiming any extra charges whatsoever.
- 57. If a particular work of SITC/damage rectification is delayed inordinately, the same work will be got executed from some another agency at the risk & cost of the regular maintenance agency.
- 58. The payment of the bills and other claims arising out of the contract will be made in the name of Bidder's Bank by Cheque/ 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 up-dated information when there is any change in this regard.
- 59. The bidder should furnish the following information:- The bidder shall furnish all the details about the subcontractors employed for different activities for this contract. The personnel and subcontractors proposed for this contract shall be approved by the Engineer.
- 60. The bidder shall follow relevant standards for executing the works of signals.
- 61. The Contractor is required to maintain all signal junctions in good condition throughout the DLP period.
- 62. The successful bidder(s) if not registered with the BMC, shall apply for their registration with BMC in appropriate class of "Mechanical and Electrical works" within 3 months from the date of award of contract.

- 63. The contractor shall submit the applicable insurance policies valid for entire contract period under this contract.
- 64. The Contractor shall provide Maintenance team during Monsoon period in the night as and when instructed by an Engineer.
- 65. It will be the responsibility of the concern contractor to collect monthly electricity bills during the DLP period from respective supply companies and submit it to BMC in time and also take require followup to add these new installed Account numbers in common Account no. created by electricity companies for regular and timely billing.
- 66. Bidder shall be registered under the GST act 2017 on the transfer of property in goods involved in the execution of works contracts (Re-enacted) Act 1989 and should produce documentary evidence to that effect (a copy of registration of certificate from the GST authority) along with tender.
- 67. The contractor shall submit the monthly routine cleaning programme for each traffic signal junction in advance during DLP period.
- 68. The contractor shall maintain post commissioning activities carried out at the signal junction till the end of defect liability period and handover the History Sheet Report to BMC.
- 69. The Contractor will receive instruction about fault or modification in the signal system from Traffic Police/BMC engineers. The contractor should attend the fault and carryout the modifications and send action taken / status report to concerns authority.
- 70. The successful bidder shall have to submit the documentation of this job to the department such as operation and Maintenance manuals, Testing and commissioning reports, challans of various supply materials, photographs of the work, records as insisted by the site engineer.
- 71. 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 tenderer should submit undertaking in that regard on Rs. 200/- Stamp Paper.
- 72. The tenderer should submit the Certificate of Registration under E.S.I.C. Act, 1948 in case:

1) 10 or more workers/ persons employed and manufacturing process is carried out with power in any part or

2) 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 tenderer should submit undertaking in that regard on Rs. 200/- Stamp Paper.

# **SECTION 15**

**APPENDIX & PROFORMAS** 

#### FORM OF TENDER

To, The Municipal Commissioner for Brihanmumbai Sir,

I/ We have read and examined the following documents relating to the work of

- i. Notice inviting tender.
- ii. Directions to tenderers (General and special)
- iii. General condition of contract for Civil Works of the Brihanmumbai Municipal Corporation as amended up to date.
- iv. Relevant drawings
- v. Specifications.
- vi. Special directions
- vii. Annexure A and B.
- viii. Bill of Quantities and Rates.
- 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 .....

.....

.....

Referred to in the specifications and schedule to the accompanying form of con-tract 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."  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.

3. According to your requirements for payment of Earnest Money amounting to Rs. \_\_\_\_\_\_\_\_\_)

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 be-fore 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 Engineer 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 Brihanmumbai Municipal Corporation 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 with-drawn by the Corporation,"

#### Address

.....

Yours faithfully,

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.

#### **AGREEMENT FORM**

Tender No dated
Standing Committee Committee Resolution No dated
CONTRACT FOR THE WORK of
This agreement made this day of Two thousand Between
inhab-
itants of Mumbai, carrying on business at
in
Mumbai under the style and name of
(Hereinafter called "the contractor of the
one part and Shrithe 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 Brihanmumbai Municipal Corporation (hereinafter called "the Corpora-
tion") of the third part, WHEREAS the contractor has tendered for the construction, completion
and maintenance of the works described above and his tender has been accepted by the Commis-
sioner (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:-
- 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 B.M.C.
- 3) In consideration of the payments to be made by the Commissioner to the contractor as hereinafter mentioned the contractor 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 Contractor 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 Contractor, sealed & delivered by the Contractor/s Trading under the name & style of

In 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 Dy. Municipal Commissioner,	Director (E.S. & P.) / D.M.C. (Infrastructure)
The Director (E.S. & P.) / D.M.C.	
(Infrastrucure) in the presence of	
1	

Name and Signature of Concern Dy. Ch. Engr. & Ch. Engr. (HOD) with Designation Stamp

	Dy.Ch.Engr.	Chief Engineer
	(Traffic)	(Roads & Traffic)
	Shri	Shri
The Common Seal of the Brihanmumbai		
Municipal Corporation was affixed on the		
Day of 20 in the presence		
of		
1		
2		
Two members of the Standing Committee of the		
Brihanmumbai Municipal Corporation.		
Witness:		
(Shri/Smt)		
Office Superintendent,		

Municipal Secretary's Office

#### **ANNEXURE - A**

- 1. The Engineer for this works : Ex. Eng. (ATC)
- 2. The Estimated Cost of the work: Rs.3,79,89,628/-

Sr. No.	Description of work	Total Amount Rs.
1	Civil Work	
2	Electrical Work	
3	Total Amount	

- I. Earnest Money Deposit (1% of the Estimated cost) Rs.3,79,900/-
- II. Time Period- 08 Months Excluding monsoon.
- III. Percentage to be charged as supervision charges for the work got executed through other means 3.125 percent.
- IV. The "Actual cost of the work" shall mean in the case of percentage rate contracts the actual cost of the work executed at the rates as mentioned in the Contract Schedule adjusted by the Contractor's percentage rate and cost of extra and excess, but excluding the cost on account of Water Charges and Sewerage Charges if any, payable by the contractor and also excluding cost on account of price variation claims as provided in price variation clause as amended up to date.
- V. In case of item rate contracts the actual cost calculated for the work executed at the rates mentioned in the contract schedule for different items including cost of excess and extra items of the work excluding the cost of water charges and sewerage charges if any, payable by the contractor and excluding cost on account of price variation claims as provided in extra excess conditions as amended up to date.
- VI. In case of lump sum contract the cost of the work actually carried out as per break up and programme of the work and the schedule of payment included in the contract including cost of any excess and/or extra items, of the work, excluding the cost on account of water charges and sewerage charges and also excluding cost on account of price variation claims as provided in extra excess conditions as amended up to date.

#### **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 B.M.C., 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 B.M.C. 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 B.M.C. 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 B.M.C. 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 a Bid without being liable in any manner whatsoever to the Bidder if it determines that the Bidder 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:

- i. "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 ;
- ii. "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;
- iii. "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;
- iv. "restrictive practice" means forming a cartel or arriving at any understanding or arrangement among Bidders with the objective of restricting or manipulating a full and fair competition in the Bidding Process.

Signature of Tenderer/ Bidder

#### **ANNEXURE- C**

(On Rs. 500/- Stamp Paper)

#### **DECLARATION CUM INDEMNITY BOND**

- I, \_\_\_\_\_\_ of \_\_\_\_\_, do hereby declared and undertake as under.
- 1. I declare that I have submitted certificates as required to Executive engineer (Monitoring) at the time of registration of my firm/ company \_\_\_\_\_ and there is no change in the contents of the certificates that are submitted at the time of registration.
- I declare that I \_\_\_\_\_\_ in capacity as Manager/ Director/ Partners/ Proprietors of \_\_\_\_\_\_ has not been charged with any prohibitory and/ or penal action such as banning(for specific time or permanent)/ de-registration or any other action under the law by any Government and/or Semi Government and/or Government undertaking.
- I declare that I have perused and examined the tender document including addendum, condition of contract, specifications, drawings, bill of quantity etc. forming part of tender and accordingly, I submit my offer to execute the work as per tender documents at the rates quoted by me in capacity as of .
- 4. I further declare that if I am allotted the work and I failed to carry out the allotted work in accordance with the terms and conditions and within the time prescribed and specified, B.M.C. is entitled to carry out the work allotted to me by any other means at my risk and cost, at any stage of the contract.
- 5. I also declare that I will not claim any charge/damages/compensation for non availability of site for the contract work at any time.
- I declare that I will positively make the arrangements of the required equipment on the day of commencement or with respect to the progress of the work in phases, as per the instructions of site in charge

Signature of Tenderer/ Bidder

#### **BANKERS GURANTEE IN LIEU OF CONTRACT DEPOSIT**

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 assigns) deemed include its successors and of the first to part inhabitants carrying on business at \_\_\_\_\_ in Mumbai under the style and name of Messer's \_\_\_\_\_(hereinafter referred to as 'the contractor') of the second part Shri.

and the terms of such tender/ contract

require that the contractor shall deposit with the Commissioner as/ contract deposit/ earnest money and/ or the security a sum of Rs. \_\_\_\_\_(Rupees \_\_\_\_\_) AND WHEREAS if and when any such tender is accepted by the Commissioner, the contract to be entered into in furtherance thereof by the contractor 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 contractor, 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 contractor are constituents of the Bank and in order to facilitate the keeping of the accounts of the contractor, the Bank with the consent and concurrence of the contractor has requested the Commissioner to accept the undertaking of the Bank hereinafter contained, in place of the contractors 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 contractor (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	y under the above guarante	ee is restricted to Rs.
only and guarantee shall remain in	n force upto	unless the demand or claim under
this guarantee is made on us in w	riting 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 A	Attorney Manager
address	_	
the Bank and the said Messer's		
	(Name of the	e 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.

The amount shall be inserted by the Guarantor, representing the Contract Deposit in Indian Rupees.

#### **ANNEXURE -E**

#### **Irrevocable Undertaking**

(on Rs. 500/- Stamp paper)

I Shri./	/ Smt					aged,		years	India	n Inhabita	ant.
Proprietor/	Partner/	Director	of	M/s.						resident	at
					do hereby g	ive Irre	vocabl	e unde	rtakin	g as unde	 r;

- 1) I say & undertake that as specified in section 171 of CGST Act, 2017, any reduction in rate of tax on supply of goods or services or the benefit of input tax credit shall be mandatorily passed on to B.M.C. by way of commensurate reduction in prices.
- 2) I further say and undertake that I understand that in case the same is not passed on and is discovered at any later stage, B.M.C. shall be at liberty to initiate legal action against me for its recovery including, but not limited to, an appeal to the screening Committee of the GST Counsel.
- 3) I say that above said irrevocable undertaking is binding upon me/ my partners/ company/ other Directors of the company and also upon my/ our legal heirs, assignee, Executor, administrator etc.
- 4) If I fail to compliance with the provision of the GST Act, I shall be liable for penalty/ punishment or both as per the provisions of GST Act.

Whatever has been stated here in above is true & correct to my/ our own knowledge & belief.

Solemnly affirmed at

DEPONANT

This day of

BEFORE ME

Interpreted Explained and Identified by me.

### ANNEXURE D

# Rate Analysis

Item I	Description:				
Sr. No.	Description of Rate Analysis Parameters	Unit	Quantity	Rate	Amount
1	Basic Material (Rate should be inclusive of all taxes)				
2	Machinery Hire Charges				
3	Labour Type		(labour components)		
4	Total of all components				
5	Overhead & Proffit 15% on 4				
6	Total Rate (4+5)				
7	Per unit rate				

#### **PROFORMA-I**

The list of similar works as stated in Post qualification during last Seven years-

Sr. No.	Name of the Project	Name of the employer	Stipulated date of completion	Actual date of completion	Actual Cost of work done
1	2	3	4	5	6

NOTE:

- 1) Scanned self Attested copies of completion/performance certificates from the Engineer-in-Charge for each work should be annexed in the support of information furnished in the above proforma.
- 2.) Works shall be grouped financial year-wise.

#### **PROFORMA- II**

Yearly turnover of Works during the last five years.

Sr. No.	Financial year	Annual Turnover of Works	Updated value to current year	Average of last 3 preceding financial years	Page No.
1					
2					
3					
4					
5					
Total					

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

#### **PROFORMA-III**

### Details of similar works as stated in Post qualification during last Seven years.

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

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

## PROFORMA- IV Technical Personnel (as per clause 6.9)

Sr. no.	Post	Name	Qualification	Experience

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

### **PROFORMA – V**

Machinery: (for special work only)

# NOT APPLICABLE

#### PROFORMA - VI / A

#### Details of Existing Commitments and ongoing works -

Description of work	Place	Contract No. & Date	Name & Addresses of employer	Value of Contract in Rs.	Scheduled date of completion	Value of work remaining to be completed	Anticipated Date of completion
1	2	3	4	5	6	7	8

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

#### PROFORMA - VI / B

Details of works for which bids are already uploaded -

Description of work Place		Name & Addresses of employee	Value of Contract in Rs.	Time Period	Date on which decision is expected	Remarks
1	2	3	4	5	6	7

**Note**: Scanned self Attested copies of certificates from the Engineer-in-charge for each work shall be annexed.

#### **PROFORMA-VII**

#### AFFDAVIT FOR BEST PRICE

Tender No.

To,

The Commissioner,

For the Brihanmumbai Municipal Corporation,

Sir,

Bid No.

"I/ We .....

...... (Full name in capital letters, starting with surname), the Proprietor/ Managing Partner/ Managing Director/ Holder of the Business/ Manufacturer/ Authorized Dealer, for the establishment/ firm/ registered company, named herein below, do hereby, state and declare that I/ We \_\_\_\_\_\_ whose names are given herein below details with addresses have not filled in this tender under any other name or under name of any other establishment/ firm otherwise, nor are we in any way related to concerned with any establishment / firm or any other person, who have filled in the tender for aforesaid work".

"I/ We do hereby further undertake that, we have offered the best prices for the subject supply work as per present market rates. Further, we do hereby undertake and commit that we do not offered/ supplied the subject product/ similar product/ systems or sub systems in the past one year in the Maharashtra State for quantity variation upto -50% or +10% at a price lower than that offered in the present bid to any other outside agencies including Govt./ Semi Govt. agencies within B.M.C. also. Further, we have filled in the accompanying tender with full knowledge of the above 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 instruction and direction given in this behalf in this tender.

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 Brihanmumbai Municipal Corporation for any such losses or inconvenience caused to the Corporation, in any manner and will not raise 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."

However, in case of price difference, if it is a result differential tax structure, different Dollar values of Rupee, considering this aspect, before invoking the penalty, blacklisting etc., I/ We will be given a reasonable opportunity being heard by representing our case as to why such price variation/ differential has arisen.

In case, if the explanation submitted by me/us is unsatisfactory then action as stated above including forfeiture of Deposit & blacklisting may be taken against me/us.

#### TENDERER'S FULL SIGNATURE

#### WITH FULL NAME & RUBBER STAMP

(Note: This affidavit should be given on Rs. 200/- stamp paper duly notarized by Notary with red seal and registration Number.)

## PROFORMA – VIII

# Structure and Organisation

1.		The bidder is
	a)	an individual
	b)	a proprietary firm
	c)	a firm in partnership
	d)	a limited Company or Corporation
	e)	a group of firms/joint venture
		(if yes, give complete information in respect of each partner)
2.		Attach the organization chart showing the structure of
3.		Number of years of experience:
	a)	As a Prime Contractor
		(Contractor shouldering major responsibility)
		i) in own country
		ii) in other countries (specify country)
4.		Name and address of any associates the bidder has in India (in case the bidder happens to be from foreign country) who are knowledgeable in the procedures of customs, immigration, taxes and other information necessary to do the work
5.		For how many years has your organization been inBusiness of Installation & maintenance of road traffic Signal system work?
6.		Were you ever required to suspend construction for a
7.		Have you ever left the work awarded to you
		(If so, give name of project and reasons for not completing work)

# PROFORMA - IX Litigation History

Name of Bidder or partner of a joint venture

Bidders, including each of the partners of a joint venture, shall provide information on any history of litigation or arbitration resulting from contracts executed in the last seven years or currently under execution. A separate sheet should be used for each partner of a joint venture.

Year	Award FOR or AGAINST Bidder	Name of client, cause of litigation and matter in dispute	Disputed amount (Cur- rent Value- Rs. equiva- lent)

#### **PROFORMA - X**

#### Declaration from the Bidder for supply of supply of Truck mounted Aerial/Boom Lift Crane

Name & Signature of Bidder

# **PROFORMA – XI**

# **EQUIPMENT MANUFACTURER DECLARATION**

(On Letterhead of OEM)

To,

Ex. Eng. (ATC), Brihanmumbai Municipal Corporation, Ground Floor, Engineering Hub, Dr. E. Moses Road, Worli, Mumbai – 400 018. India.

We hereby extend our full support for the supply of LED Signal Head Retrofits / Traffic Signal Controller / Digital Count Down Timer with their accessories. We also hereby declare that we and...... [Insert: name of the Bidder] have entered into a formal relationship in which, during the duration of the Contract (including warranty).

We, the Approved Equipment Manufacturer, will make our technical and engineering staff fully available to the technical and engineering staff of the successful Bidder to assist on a reasonable and best effort basis, in the performance of all its obligations to the bidder under the Contract.

Authorized Signatory Name: Contact: Address: E-mail Id:

#### **Undertaking for Equipment Capabilities**

(on Rs.500/- Stamp Paper)

The contractor shall give undertaking on Rs.500/- stamp paper i.e. the required machineries either owned / on lease or hire basis for said work will be arranged at site before start of the work and the same will be his sole responsibility.

Name & Signature of Bidder