



# **THANE SMART CITY LIMITED**

**(2017-2018)**

**Name of Work: Construction of Nallas in Smart City  
ABD area of Thane City.**

**COMPLETE BIDDING DOCUMENT  
FOR CIVIL WORKS  
PART-I**

## **INVITATIONS FOR BIDS (IFB)**

**THANE SMART CITY LIMITED, THANE**

**SMART CITY PROJECT**

**TENDER NOTICE NO : TMC/PRO/PWD/ 1331/2017-18 Date: 10.01.2018**

<b>Name of work</b>	:	<b>Construction of Nallas in Smart City ABD area of Thane City</b>
<b>Period of download of bidding document online</b>	:	<b>From 11/01/2018 date to 14/02/2018 date upto 4:30 hrs.</b>
<b>Time and date of pre-bid conference</b>	:	<b>Pre-bid meeting will be held on date at 30/01/2018 at 12:30 hrs in the office of CTO/City Engineer Thane Smart City Limited, 3rd floor, Thane Municipal Corporation, Thane, Gen. Arunkumar Vaidya Marg, Panchpakhadi, Thane (West).</b>
<b>Last date and time for receipt of online bids (bid due date)</b>	:	<b>Date 14/02/2018 upto 16:00 Hrs</b>
<b>Date &amp; time of submission of bid security and cost of tender fee document in original</b>	:	<b>Till Date 14/02/2018 upto 16.00 hrs. hrs in the office of CTO/City Engineer Thane Smart City Limited, 3rd floor, Thane Municipal Corporation, Thane, Gen. Arunkumar Vaidya Marg, Panchpakhadi, Thane (West).</b>
<b>Time, date of opening technical bids</b>	:	<b>Date 17/02/2018 at 16:30 Hrs if possible</b>
<b>Time, date of opening financial bids</b>	:	<b>Will be announced later, After completion of Technical bids scrutiny.</b>
<b>Place of opening of technical bids</b>	:	<b>In the office of CTO/City Engineer Thane Smart City Limited, 3rd floor, Thane Municipal Corporation, Thane, Gen. Arunkumar Vaidya Marg, Panchpakhadi, Thane (West).</b>
<b>Officer inviting bids</b>	:	<b>CTO/City Engineer Thane Smart City Limited, 3rd floor, Thane Municipal Corporation, Thane, Gen. Arunkumar Vaidya Marg, Panchpakhadi, Thane (West).</b>

**Thane Smart City Limited, THANE**

The Chief Executive Officer, Thane Smart City Limited, Thane invites bids for the construction of works detailed in the table. The bidders may submit bids for any or all of the following works.

<b>Work No.</b>	<b>Name of Work</b>	<b>Approximate value of work (Rs.)</b>	<b>Bid Security /Earnest Money deposit (EMD) (Rs.)</b>	<b>Cost of Document (Rs.)</b>	<b>Period of completion</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
1	Construction of Nallas in Smart City ABD area of Thane City	38,43,03,027/-	19,21,600 (0.5 % of tender cost)	5600/-	24 Months Excluding Monsoon

1. Tender form, conditions of contract, specifications and contract drawing can be downloaded from <https://mahatenders.gov.in> from date **11/01/2018** to date **14/02/2018** upto 16.00 Hrs after a non-refundable payment of tender document fee of Rs5600/- (Rupees Five Thousand Six Hundred Rupees Only) at the time of download of the Tender.
2. The Proposals must be submitted online at the e-tender portal of the Public Works Department, Thane Municipal Corporation, Thane i.e. [www.mahatenders.gov.in](http://www.mahatenders.gov.in) on or before date 14/2/2018 upto 16:00 Hrs.
3. Before submitting the proposal, the bidders shall mandatorily register and enlist themselves (the firm and all key personnel), on [www.mahatenders.gov.in](http://www.mahatenders.gov.in). Further, the bidders shall follow the operating procedure as may be prescribed on the said website.

**SECTION 1 – INSTRUCTIONS TO BIDDERS (ITB)**

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## A. GENERAL

### 1. Scope of Bid

- 1.1. The Employer Thane Smart City Limited, Thane invites bids for the constructions of works Construction of R.C.C Nalla and Culvert in the ABD Area of Thane under Smart City Mission referred to as “the works”) detailed in the table given in IFB. The bidders may submit bids for any or all of the works detailed in the table given in IFB.
- 1.2. The successful bidder will be expected to complete the works by the intended completion datespecified in the Contract data.
- 1.3. Throughout these bidding documents, the terms ‘bid’ and ‘tender’ and their derivatives(bidder/tenderer, bid/tender, bidding/tendering etc.) are synonymous.

### 2. Sources of Funds

- 2.1. The expenditure on this project will be met from the Smart City Mission.

### 3. Eligible Bidders

- 3.1. This invitation for Bids is open to all bidders. HoweverParticipation in this tenders will be prohibited for those bidders against whom penal action of de-registration has been taken / initiated by any Government/ semi government/ public sector under taking /urban local body /municipal corporation etc.
- 3.2. All bidders shall provide in Section 2, Forms of Bid and Qualification Information, a statement thatthe Bidder is neither associated, nor has been associated, directly or indirectly, with the Consultant or any other entity that has prepared the design, specification, and other documents for the Project or being proposed as Project Manager for the Contract. A firm that has been engaged by the Employer to provide consulting services for the preparation of supervision of the works, and any of itsaffiliates, shall not be eligible to bid.

### 4. Qualification of the Bidder

- 4.1. All bidders shall provide in Section 2, Forms of Bid and Qualification Information, a preliminarydescription of the proposed work method and schedule, including drawings and charts, as necessary. The proposed methodology should include program of construction backed with equipmentplanning and deployment duly supported with broad calculations and quality assurance proceduresproposed to be adopted justifying their capability of execution and completion of work as per technical specifications, within stipulated period of completion.
- 4.2. All bidders shall include the following information and documents with their bids in Section 2.
  - (a) **Scan Copies of original documents** defining the constitution or legal status, place of registrationunder partnership or companies Act and principal place of business, written power of attorneyof the signatory of the Bid to commit the Bidder;
  - (b) **Total monetary valueof construction work** performed for **each of the last five years**;

- (c) **Experience in works of a similar nature and size for each of the last five years and details** of works underway or contractually committed and clients who may be contacted for further information on those contracts;
- (d) Major items of construction equipment proposed to carry out the Contract.
- (e) **Qualifications and experience of key site management and technical personnel** proposed for contract;
- (f) **Reports on the financial standing of the Bidder, such as profit and loss statements and auditor's reports for the past five years;**
- (g) Evidence of access to line(s) of credit and availability of other financial resources facilities (10% of contract value) certified by the Bankers or bank solvency (Not more than 3 months old) **(To be deleted for works costing less than Rs.5 Crores);**
- (h) **Undertaking that the bidder will be able to invest a minimum cash up to 25% of contract value of work** during implementation of work;
- (i) Authority to seek references from the Bidder's bankers;
- (j) Information regarding any litigation, current or during the last five years, in which the Bidder is involved, the parties concerned and disputed amount;
- (k) Proposals for subcontracting components of the Works amounting to more than 10 percent of the Bid Price (for each, the qualifications and experience of the identified subcontractor in the relevant field should be annexed); and
- (l) The proposed methodology and program of construction, backed with equipment planning and deployment, duly supported with broad calculations and quality control procedures proposed to be adopted, justifying their capability of execution and completion of the work as per technical specifications within the stipulated period of completion as per milestones.

#### **4.3. Bids from Joint ventures are acceptable.**

- i. In case of JV firm the partnership deed should be irrevocable till the completion of work for which they have combined and till all the liabilities therefore are liquidated and the share of the JV partner of the higher category should not be less than 50% (Fifty Percent).
- ii. The percentage share of the JV partner of the lower category in such a partnership / combination, should not be more than his limit of the eligibility to quote for works divided by the estimated cost of the work put to tender (i.e. when such a percentage is applied to the cost of the work, his share of cost should not exceed his own eligibility limit of tendering for works)
- iii. Registered JV deed should be registered from Registrar of firms, Maharashtra state. It is necessary to enclose the registration certificate of joint venture firm with the Registrar of the Firm or the receipt of payment made to Registrar of the Firm on account of fees towards joint venture firm. In case of J.V. tenderer who had submitted receipts of J.V. at the time of submission shall furnish the registration certificates of joint venture from the Registrar of the Partnership Firm Maharashtra State before issuing the work order. In case of J.V. tenderer outside the Maharashtra state, Joint Venture registration certificate from the office of Registrar of firm of other states will be considered.
- iv. Tenderer bidding individually or as a member of joint Venture shall not be entitled to submit another bid either as a member of any joint venture or individually for this bid.

The addresses of registration of firms are as under.

Department of Registrar of firms has 4 offices in Maharashtra situated at Mumbai, Pune, Nagpur and Aurangabad. The address of offices are as follows.

- 1) Registrar of firms, Maharashtra State, Mumbai.  
New Administrative Building, 6<sup>th</sup> Floor,  
Near Chetna Collage, Govt. Colony,  
Bandra(E), Mumbai 400051.  
Ph No. 022-26551149,022-26551944.
- 2) Assistant Registrar of firms, Pune.  
Survey No.47/30, SarswatiparvatiBhavan, 2<sup>nd</sup>  
floor, Behind Lokesh Hotel, Arnyshwar  
Corner, Pune Satara Road, Pune 411009  
Ph. No. 95250-24221808
- 3) Assistant Registrar of firms, Nagpur.  
118,oldSachivalay Building,  
Civil Lines, Nagpur 440001.  
Ph.No.95712-2530897
- 4) Assistant Registrar of firms, Aurangabad.  
Gadiya Building, House No. 5/1/100,  
Near Divisional library Office,  
Eknathnagar Road, Usmanpura,  
Aurangabad 431005.  
Ph.no.952402336798

In case of J.V. tenderer outside the Maharashtra state, Joint Venture registration certificate from the office of Registrar of firm of other states will be considered.

**4.4. A. To qualify for award of the contract, each bidder in its name should have in the last five years as referred to in Appendix.**

- (a) Achieved a maximum annual financial turnover (in all classes of civil engineering construction works only) amount indicated in Appendix in any one year (usually not less than 75% of the estimated annual payments under the contract);
- (b) Satisfactorily completed (not less than 90% of contract value), as a prime contractor (or as a nominated subcontractor, where the subcontract involved execution of "all main items of work described in the bid document, provided further that all other qualification criteria are satisfied) at least one similar work of value not less than amount indicated in Appendix (*usually not less than 50% of estimated value of contract for the work upto Rs 10 crores and not less than 60% of estimated value of contract for the work above Rs 10 Crores*);

(c) Executed in anyone year, the minimum quantities of the following items of work as indicated in Appendix. (*usually not less than 30% of estimated quantity of major items*);

▪ **M 30 Grade RCC -Minimum 8061 cum**

~~The contractor or his identified sub-contractor should possess required valid electrical license for executing the building electrification works upto Rs.15 lakh and should have executed similar electrical works for a minimum amount as indicated in Appendix in anyone year. (Delete if not applicable)~~

~~The contractor or his identified sub-contractor should possess required valid license for executing the water supply/sanitary engineering works up to Rs.7.5 lakh and should have executed similar water supply/sanitary engineering works for a minimum amount as indicated in Appendix in anyone year. (Delete if not applicable)~~

**B. Each bidder should further demonstrate:**

(a) availability (either owned or leased) of the following key and critical equipment for this work:

*NOTE: (To be deleted for works up to Rs. 1.50 Crore, above Rs. 1.50 Crore applicable)*

Based on the studies, carried out by the Engineer the minimum suggested major equipment to attain the completion of works in accordance with the prescribed construction schedule is shown in the **Annexure-I**.

The bidders should, however, undertake their own studies and furnish with their bid, a detailed construction planning and methodology supported with layout and necessary drawings and calculations (detailed) as stated in clause 4.1 above to allow the employer to review their proposals. The numbers, types and capacities of each plant/equipment shall be shown in the proposals along with the cycle time for each operation for the given production capacity to match the requirements.

(b) Availability for this work of personnel with adequate experience as required; as per Annexure-II.

(c) liquid assets and/or availability of credit facilities of no less than amount indicated in Appendix

*(Credit lines / letter of credit / certificates from Banks for meeting the funds requirement etc. -usually the equivalent of the estimated cash flow for 3 months in peak construction period.)*

**C. To qualify for a package of contracts made up of this and other** contracts for which bids are invited in the IFB, the bidder must demonstrate having experience and resources sufficient to meet the aggregate of the qualifying criteria for the individual contracts.

4.5. Sub-contractors' experience and resources shall not 'be taken into account in determining the bidder's compliance with the qualifying criteria except to the extent stated in 4.4 above.

4.6. Bidders who meet the minimum qualification criteria will be qualified only if their available bid capacity is more than the total bid value. The available bid capacity will be calculated as under:

**Assessed Available Bid capacity = (A\*N\*2 -B)**

where

A = Maximum value of civil engineering works executed in anyone year during the last five years (updated to the price level of the year indicated in Appendix) taking into account the completed as well as works in progress.

N = Number of years prescribed for completion of the works for which bids are invited.

B = Value (updated to the price level of the year indicated in Appendix) of existing commitments and on-going works to be completed during the period of completion of the works for which bids are invited.

**Note:** *The statements 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 countersigned by the Engineer in charge, not below the rank of an Executive Engineer or equivalent.*

- 4.7. Even though the bidders meet the above qualifying criteria, they are subject to be disqualified if they have:
- i. made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements; and/or
  - ii. record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.; and/or
  - iii. Participated in the previous bidding for the same work and had quoted unreasonably high bid prices and could not furnish rational justification to the employer.

**5. One Bid per Bidder**

- 5.1. Each bidder shall submit only one bid for one work. A bidder who submits or participates in more than one Bid (other than as a subcontractor or in cases of alternatives that have been permitted or requested) will cause all the proposals with the Bidder's participation to be disqualified.

**6. Cost of Bidding**

- 6.1. The bidder shall bear all costs associated with the preparation and submission of his Bid, and the Employer will in no case be responsible and liable for those costs.

**7. Site Visit**

- 7.1. The Bidder, at the Bidder's own responsibility and risk is encouraged to visit and examine the Site of Works and its surroundings and obtain all information that may be necessary for preparing the Bid and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the Bidder's own expense.

## B. BIDDING DOCUMENTS

### 8. Content of Bidding Documents

- 8.1. The set of bidding documents comprises the documents listed below and addenda issued in accordance with Clause 10.

Section	Particulars	Volume No.
	Invitation for Bids	I
1	Instruction to Bidders	
2	Qualification information and other forms	
3	Conditions of Contract	
4	Contract Data	
5	Technical Specification	II
6	Form of Bid	III
7	Bill of Quantities	
8	Securities and other forms	
9	Drawings	IV
10	Documents to be furnished by bidder	V

- 8.2. One copy of each of the volumes I, II, III and IV will be issued to the bidder. Documents to be furnished by the bidder in compliance to section 2 will be prepared by him and furnished as Volume-V in two parts (refer clause 12).
- 8.3. The bidder is expected to examine carefully all instructions, conditions of contract, contract data, forms, terms, and technical specifications, bill of quantities, forms, Annexes and drawings in the Bid Document. Failure to comply with the requirements of Bid Documents shall be at the bidder's own risk. Pursuant to clause 26 hereof, bids which are not substantially responsive to the requirements of the Bid Documents shall be rejected.

### 9. Clarification of Bidding Documents

- 9.1. A prospective bidder requiring any clarification of the bidding documents may notify the Employer in writing or by Fax /email at the Employer's address indicated in the invitation to bid before the date and time of the pre-bid meeting specified in the Tender Schedule. The Employer will respond to any request for clarification which he received, earlier than 3 days prior to the Bid due date. Copies of the Employer's response will be uploaded in "edit attachment option" of concern tender on e-tendering portal and viewable to all tenderer, including a description of the enquiry but without identifying its source.

## **9.2. Pre-bid meeting**

- 9.2.1 The bidder or his official representative is invited to attend a pre-bid meeting which will take place at the address, venue, time and date as indicated in **IFB**
- 9.2.2 The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.
- 9.2.3 The bidder is requested to submit any questions in writing by fax or by e-mail to reach the Employer well before the date & time of the pre-bid meeting.
- 9.2.4 Minutes of the meeting, including the text of the questions raised (without identifying the source of enquiry) and the responses given will be transmitted by uploading on e-tender portal without delay for information to all intended bidder. Any modifications of the bidding documents listed in sub clause 8.1 which may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an Addendum pursuant to clause 10 and not through the minutes of the pre-bid meeting.
- 9.2.5 Non-attendance at the pre-bid meeting will not be a cause for disqualification of a bidder.

## **10. Amendment of Bidding Documents**

- 10.1. Before the deadline for submission of bids, the Employer may modify the bidding documents by issuing addenda.
- 10.2. Any addendum thus issued shall be part of the bidding documents and will be uploaded on E-tender portal without delay for information to all intended bidder. It will be responsibility of bidders to be updated by visiting E-portal .
- 10.3. To give prospective bidders reasonable time in which to take an addendum into account in preparing their bids, the Employer may, at his discretion, extend as necessary the deadline for submission of bids, in accordance with Sub-Clause 20.2 below.

## **C. PREPARATION OF BIDS**

### **11. Language of the Bid**

- 11.1. All documents relating to the bid shall be in the English language.

### **12. Documents Comprising the Bid**

- 12.1. The bid to be submitted by the bidder as Volume V of the bid document (refer Clause 8.1) shall be in two separate parts:

**Part I** shall be named "Technical Bid" and shall comprise

- (i) Bid Security in the form specified in section 8
- (ii) Qualification Information and supporting documents as specified in Section 2.
- (iii) Certificates, undertakings, affidavits as specified in Section 2.
- (iv) Any other information pursuant to Clause 4.2 of these instructions.
- (v) Undertaking that the bid shall remain valid for the period specified in Clause 15.1.

(vi) Acceptance/ non-acceptance of Dispute Review Expert proposed in Clause 36.1.

**Part II** shall be named "Financial Bid" and shall comprise

- (i) Form of Bid as specified in Section 6.
- (ii) Priced Bill of Quantities for items specified in Section 7.

12.2. The bidder shall prepare two copies of the bid and shall upload on E-portal .

12.3. Following documents, which are not submitted with the bid, will be deemed to be part of the bid.

Section	Particulars	Volume No.
	Invitation for Bids (IFB)	Volume I
1	Instruction to Bidders	
2	Conditions of Contract	
3	Contract Data	
4	Specifications	Volume II
5	Drawings	Volume IV

**13. Bid Prices.**

13.1. The contract shall be for the whole works as described in Sub-Clause 1.1, based on the priced Bill of Quantities submitted by the Bidder.

13.2. The bidder shall fill rates and prices and line item total (both in figures and words) for all items of the Works described in the Bill of Quantities along with total bid price (both in figures and words). Items for which no rate or price is entered by the bidder will not be paid for by the Employer when executed and shall be deemed covered by the other rates and prices in the Bill of Quantities

13.3. All duties, taxes and other levies payable by the contractor under the contract, or for any other cause shall be included in the rates, prices and total Bid Price submitted by the Bidder.

13.4. The rates and prices quoted by the bidder are subject to adjustment during the performance of the Contract in accordance with the provisions of Clause 47 of the Conditions of Contract (For contracts more than 12 months period).

13.5. Bidder shall quote the tender rates considering the cost required for carry out Total Station survey, level survey, preparation of plane table drawing, Soil investigation, testing of material, proof checking from well-known government institution like VJTI Matunga, IIT Bombay or similar institution as directed by Engineer-in-Charge.

13.6. Bidder shall quote the tender rates considering the cost required for Computer Facility:

The contractor shall provide One branded Laptop with internet connection and one Computer with printer of latest configuration at work site within 7 days of issue of work order for the use of TMC representative throughout the construction period. Any maintenance and payment of necessary charges required during contract period shall be responsibility of contractor at no extra cost.

Minimum Configuration: 14" WXGA EA Series -Intelcore i5-520M (2.40 GHz) with turbo Boost upto 2.93 GHz, 320 GB, 3 GB DDR3 SDRAM, Intel Graphics Media Acc HD, BT, VGA, Windows 7 Professional 64-Bit, 2.7 Kg, Quick web access, HDMI Out, eSATA, 1 yr Intl with Multimedia Key board, Optical mouse, multimedia kit etc. complete.

Printer :Laser Jet

Note :- Specification given above is only guidelines however best configuration and software should be provided related in work.

Site Office and Laboratory for the Departmental Staff

- 13.7. On receipt of the work order the contractor will have to erect readymade site chowky and laboratory in form of porta cabin/ container cabin. Before erecting the chowky and laboratory he shall have to obtain permission from the concern department. If the site chowkey and laboratory proposed by the contractor will not be comfortable then Engineer-in-charge may instruct to get another suitable site. The portable cabin/ container cabin shall preferably admeasure 12.2 x 2.5 m with 2 doors and proper ventilation. It should have toilet facility. This chowky should be exclusively for use of municipal staff only and should be installed before commencement of work. The chowky shall be equipped with electric supply, fans, Air conditioner, telephone arrangement, sufficient tables, chairs, water filter and cupboard with locking arrangement, Computer/Laptop with Internet Connection, office boy, computer operator etc. No separate payment will be made for providing the chowky and ancillary items mentioned above. The site chowky and laboratory will have to be removed from the site, leaving the site clear of all materials within the period of 7 days from the date of completion of work. In case of failure to do so the chowky will be demolished without any intimation to the contractor on the risk and cost and no request for compensation will be entertained.

The contractor shall provide Car for the municipal staff for transportation from site to site through out the contract period.

#### **14. Currencies of Bid and Payment**

- 14.1. The unit rates and the Prices shall be quoted by the bidder entirely in Indian Rupees. All payment shall be made in Indian Rupees.

#### **15. Bid Validity**

- 15.1. Bids shall remain valid for a period not less **than 120 days** after the deadline date for bid submission specified in Clause 20. A bid valid for a shorter period shall be rejected by the Employer as non-responsive. In case of discrepancy in bid validity period between that given in the undertaking pursuant to Clause 12.1 (v) and the Form of Bid submitted by the bidder, the latter shall be deemed to stand corrected in accordance with the former and the bidder has to provide for any additional security that is required.
- 15.2. 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 except as provided in 15.3 hereinafter, but

will be required to extend the validity of his bid security for a period of the extension, and in compliance with Clause 16 in all respects.

~~15.3. \*In the case of contracts in which the Contract Price is fixed (not subject to price adjustment), in the event that the Employer requests and the Bidder agrees to an extension of the validity period the contract price, if the Bidder is selected for award shall be the bid price corrected as follows: (delete if the contract is for more than 12 months period)~~

~~The price shall be increased by the factor of 0.2% for each week or part of a week that has elapsed from the expiration of the initial bid validity to the date of issue of letter of acceptance to the successful Bidder.~~

15.4. Bid evaluation will be based on the bid prices without taking into consideration the above correction.

## 16. Bid Security/Earnest Money deposit (EMD)

16.1 The Bidder shall furnish, as part of his Bid, a Bid security in the amount as shown in column 4 of the table of IFB for this particular work. This bid security shall be in favor of name mentioned in the appendix.

The amount of Earnest Money is **Rs. 19,21,600/- (Rs. Nineteen Lakh Twenty Thousand Six Hundred Rupees only )** and the amount of tender form fee including GST is **Rs. 5600/- (Rs. Five Thousand Six Hundred Rupees Only)** and shall be payable through Net-Banking only.

The bidder has choice to submit the EMD in the form of Bank guarantee/FDR when amount of **earnest money is more than Rs one lakh**. In such case, the amount of EMD shall be paid in the form of Bank Guarantee of any nationalized Bank/ Scheduled Bank (In the form prescribed by the Thane Smart City Limited, Thane On stamp paper worth Rupees as per Bombay Stamp Act.). The standard format prescribed in **Section 8**. The scan copy for the same should be uploaded with the tender document along with technical bid.

Earnest money deposit Exemption certificate issued by state government organization shall not be accepted.

**The tenderer shall submit the original copy of bank guarantee/FDR at the time of opening of the technical bid or may submit at the time of original document verification** then only price bid of the eligible bidders will be opened.

If tenderer fails to submit the original Bank **Guarantee/FDR for EMD**, his tender will not be taken for further evaluation & such bidder may be disqualified from tendering for further works in Thane Smart City Limited, Thane for the period of one year.

**Amount of tender form fee shall be payable through Net-Banking** and the amount for tender form fee is to be submitted as per e- tendering Procedure and online receipt for the same should be uploaded with the tender document along with technical bid.

Earnest Money in the form of Cheque or any other mode than prescribed above will not be accepted. If during the tender validity period, the tenderer withdraws his tender, the Earnest money deposit shall be forfeited and the tenderer may be disqualified from tendering for further works in the Thane Smart City Limited, Thane for the period of one year.

16.2 Bank guarantees/FDR (and other instruments having fixed validity) issued as surety for the bid shall be valid for 45 days beyond the validity of the bid.

- 16.3 Any bid not accompanied by an acceptable Bid Security and not secured as indicated in Sub-Clauses 16.1 and 16.2 above shall be rejected considering it to be non-responsive.
- 16.4 The Bid Security of unsuccessful bidders will be returned within 28 days of the end of the bid validity period specified in Sub-Clause 15.1.
- ~~16.5 The Bid Security of the successful bidder will be discharged when the bidder has signed the Agreement and furnished the required Performance Security. ( delete if contract is more than 12 months period)~~
- 16.6 The Bid Security may be forfeited
- (a) if the Bidder withdraws the Bid after Bid opening during the period of Bid validity;
  - (b) if the Bidder does not accept the correction of the Bid Price, pursuant to Clause 27; or
  - (c) in the case of a successful Bidder, if the Bidder fails within the specified time limit to
    - (i) sign the Agreement; or
    - (ii) Furnish the required Performance Security.

## **17. Alternative Proposals by Bidders**

- 17.1 Bidders shall submit offers that fully comply with the requirements of the bidding documents, including the conditions of contract (including mobilization advance or time for completion), basic technical design as indicated in the drawing and specifications. Conditional offer or alternative offers will not be considered further in the process of tender evaluation.

## **18. Format and Signing of Bid**

- 18.1 The Bidder shall prepare one original and one copy of the documents comprising the bid as described in Clause 12 of these *Instructions to Bidders*, bound with the volume containing the "Technical Bid" and "Financial Bid" in separate parts and clearly marked "**ORIGINAL**" and "**COPY**" as appropriate. In the event of discrepancy between them, the original shall prevail.
- 18.2 The original and copy of the Bid shall be typed or written in indelible ink and shall be signed by a person or persons duly authorized to sign on behalf of the Bidder, pursuant to Sub-Clauses 4.3. All pages of the bid where entries or amendments have been made shall be initialed by the person or persons signing the bid.
- 18.3 The Bid shall contain no alterations or additions, except those to comply with instructions issued by the Employer, or as necessary to correct errors made by the bidder, in which case such corrections shall be initialed by the person or persons signing the bid.

## D. SUBMISSION OF BIDS

### **19 TECHNICAL BID (Submitted as per E-Tendering procedure)**

Bidder shall submit his bid On-Line as per E-Tendering procedure on <http://mahatenders.gov.in>. Also Bidder shall submit sealed one hard copy of document uploaded in Technical Bid within Three working days after opening of Technical Bid. In case of non submission of hard copy of bid, online bid will be considered for further process. The bidder shall submit the following documents in Envelope-1 on-line.

- 19.1 Earnest money deposits **Rs. 19,21,600- (Rs. Nineteen Lakh Twenty Thousand Six Hundred Rupees only)** and tender document fees of **Rs. 5600/- (Rs. Five Thousand Six Hundred Rupees Only)** along with the tender should be deposited on-line as per E-tendering procedure and receipt shall upload in Technical bid.

**Department Code-1000, Function Code-232, Budget Code-413203**

- 19.2 Scanned copy of bank Guarantee for EMD/FDR if EMD paid in the form of BG/FDR
- 19.3 Scanned copy of completion certificate of similar type of work as mentioned in Appendix to ITB
- 19.4 Scanned copy of certificate showing the executed quantities of major item as mentioned in Appendix to ITB
- 19.5 Scanned copy of completion certificate of similar type of work as mentioned in Appendix to ITB
- 19.6 Scanned copy of certificate of maximum annual turnover certified by Chartered Accountant as mentioned in Appendix to ITB.
- 19.7 Scanned copy of certificate of Bid Capacity certified by Chartered Accountant.
- 19.8 In case of JV firm, enclose the Scanned copy of registration certificate of joint venture firm with the Registrar of the Firm or the receipt of payment made to Registrar of the Firm on account of fees towards joint venture firm .

**And**

**Enclose the** Scanned copy of joint venture form In case of the lowest Joint Venture, bidder (L1) shall submit the registration certificates of joint venture from the Registrar of the Partnership Firm Maharashtra State before issuing work order.

- 19.9 Scanned copy of showing details of other works Tendered for and in hand with value of unfinished works on the date of submission of this Tender with supporting document
- 19.10 List of Machinery and Plants in possession with the bidder individually with supporting document i.e. Invoice, Purchase Bill, R.C. book etc. List of plant and machinery bidder processes to use for this work & in how much time same could be shifted to work site, Contractor should state, the present status & use of machinery. If on verification by TSCL it is found that machinery is not adequate, TSCL shall reject the said tender & not take for further evaluation. In

casebidderdesires to use machinery hired from elsewhere same should be notified undertaking agreement to be submitted mentioning in how much time, machinery could be made available and where is the machinery presently under use. To this TSCL shall assess about the availability if found information is not correct the said tender will not be taken for further evaluation. In case hired machinery fail at the execution stage what are the alternative arrangement proposed, this should be supported firm document.TSCL if necessary may call original document for verification.

- 19.11 Scanned copy of showing details of Technical Personnel on the Rolls of the bidder to be appointed on the work with supporting document.
- 19.12 Scanned copy of Bar chart showing execution of work and deployment of Manpower & Machinery for this tender work.
- 19.13 Scanned copy of Affidavit as per format given in section 2.
- 19.14 Scanned copy of undertaking as per format given in section 2.
- 19.15 Scanned copy of declaration-
- 19.16 Scanned copy of bank certificate/bank solvency showing availability of credit facilities

19.17 **Price-Bid Documents submitted as per E-Tendering Procedure:**

The bidder should quote his offer on item rate basis (in B-2 Form) as appropriate place,online on website <https://mahatenders.gov.in>. **Hard copy of price bid shall not be accepted.**

**All the bidder should produce original documents for verifications of online submitted documents at the time of opening of the technical bid or within 3 days from the opening of technical bid, then only price bid of the eligible bidders will be opened.**

20 **Deadline for Submission of the Bids**

- 20.1 Complete Bids (including Technical and Financial) must be upload on web site <http://mahtenders.gov.in> not later than the date indicated in appendix.
- 20.2 The Employer may extend the deadline for submission of bids by issuing an amendment inaccordance with Clause 10, in which case all rights and obligations of the Employer and thebidders previously subject to the original deadline will then be subject to the new deadline.

21 **Late Bids**

Any Bid received by the Employer after the deadline prescribed in Clause 20 will be returnedunopened to the bidder.

22 **Modification and Withdrawal of Bids**

- 22.1 Bidders may modify or withdraw their bids online before the deadlineprescribed in Clause 20 or pursuant to Clause 23.
- 22.2 No bid may be modified after the deadline for submission of Bids except if pursuance of Clause23.
- 22.3 Withdrawal or modification of a Bid between the deadline for submission Of bids and theexpiration of the original period of bid validity specified in Clause 15.1 above or as

extended pursuant to Clause 15.2 may result in the forfeiture of the Bid security pursuant to Clause 16.

## **E. BID OPENING AND EVALUATION**

### **23 Bid Opening**

- 23.1 The Employer will open all the Bids received on E-portal in the presence of the Bidders or their representatives who choose to attend at time, date and the place specified in Appendix in the manner specified in Clause 20 and 23.3. In the event of the specified date of Bid opening being declared a holiday for the Employer, the Bids will be opened at the appointed time and location on the next working day.
- 23.2 The envelope containing "Technical Bid" shall be opened. The amount, form and validity of the bid security furnished with each bid will be announced. If the bid security furnished does not conform to the amount and validity period as specified in the Invitation for Bid (ref. Column 4 and paragraph 3), and has not been furnished in the form specified in Clause 16, the remaining technical bid and financial bid will be not be open.
- 23.3 (i) Subject to confirmation of the bid security by the issuing Bank, the bids accompanied with valid bid security will be taken up for evaluation with respect to the Qualification Information and other information furnished in Part I of the bid pursuant to Clause 12.1.
- (ii) After receipt of confirmation of the bid security, the bidder will be asked in writing (usually within 10 days of opening of the Technical Bid) to clarify or modify his technical bid, if necessary, with respect to any rectifiable defects.
- (iii) The bidders will respond in not more than 7 days of issue of the clarification letter, which will also indicate the date, time and venue of opening of the Financial Bid (usually on the 21st day of opening of the Technical Bid)
- (iv) Immediately (usually within 3 or 4 days), on receipt of these clarifications the Evaluation Committee will finalize the list of responsive bidders whose financial bids are eligible for consideration.
- 23.4 At the time of opening of "Financial Bid", the names of the bidders were found responsive in accordance with Clause 23.4(iv) will be announced. The bids of only these bidders will be opened. The responsive Bidders' names, the Bid prices, the total amount of each bid, any discounts, Bid Modifications and withdrawals, and such other details as the Employer may consider appropriate, will be announced by the Employer at the opening. Any Bid price or discount, which is not read out and recorded, will not be taken into account in Bid Evaluation.
- 23.5 In case bids are invited in more than one package, the order for opening of the "Financial Bid" shall be that in which they appear in the "Invitation For Bid".

23.6 The Employer shall prepare minutes of the Bid opening, including the information disclosed to those present in accordance with Sub-Clause 23.6.

**24 Process to be Confidential**

Information relating to the examination, clarification, evaluation, and comparison of Bids and recommendations for the award of a contract shall not be disclosed to Bidders or any other persons not officially concerned with such process until the award to the successful Bidder has been announced. Any effort by a Bidder to influence the Employer's processing of Bids or award decisions may result in the rejection of his Bid.

**25 Clarification of Financial Bids**

25.1 To assist in the examination, evaluation, and comparison of Bids, the Employer may, at his discretion, ask any Bidder for clarification of his Bid, including breakdowns of unit rates. The request for clarification and the response shall be in writing or by cable, but no change in the price or substance of the Bid shall be sought, offered, or permitted except as required to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the Bids in accordance with Clause 27.

25.2 Subject to sub-clause 25.1, no Bidder shall contact the Employer on any matter relating to his bid from the time of the bid opening to the time the contract is awarded. If the Bidder wishes to bring additional information to the notice of the Employer, it should do so in writing.

25.3 Any effort by the Bidder to influence the Employer in the Employer's bid evaluation, bid comparison or contract award decisions may result in the rejection of the Bidders' bid.

**26 Examination of Bids and Determination of Responsiveness**

26.1 During the detailed evaluation of "Technical Bids", the Employer will determine whether each Bid (a) meets the eligibility criteria defined in Clause 3 and 4; (b) has been properly signed online (c) is accompanied by the required securities and; (d) is substantially responsive to the requirements of the Bidding documents. During the detailed evaluation of the "Financial Bid", the responsiveness of the bids will be further determined with respect to the remaining bid conditions, i.e., priced bill of quantities, technical specifications, and drawings.

26.2 A substantially responsive "Financial Bid" is one which conforms to all the terms, conditions, and specifications of the Bidding documents, without material deviation or reservation. A material deviation or reservation is one (a) which affects in any substantial way the scope, quality, or performance of the Works; (b) which limits in any substantial way, inconsistent with the Bidding documents, the Employer's rights or the Bidder's obligations under the Contract; or (c) whose rectification would affect unfairly the competitive position of other Bidders presenting substantially responsive Bids.

26.3 If a "Financial Bid" is not substantially responsive, it will be rejected by the Employer, and may not subsequently be made responsive by correction or withdrawal of the non-conforming deviation or reservation.

**27 Correction of Errors**

27.1 "Financial Bids" determined to be substantially responsive will be checked by the Employer for any arithmetic errors. Errors will be corrected by the Employer as follows:

- (a) where there is a discrepancy between the rates in figures and in words, the rate in words will govern; and
  - (b) Where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern.
- 27.2 The amount stated in the "Financial Bid" will be corrected by the Employer in accordance with the above procedure and the bid amount adjusted with the concurrence of the Bidder in the following manner:
  - (a) If the Bid price increases as a result of these corrections, the amount as stated in the bid will be the 'bid price' and the increase will be treated as rebate;
  - (b) If the bid price decreases as a result of the corrections, the decreased amount will be treated as the 'bid price' Such adjusted bid price shall be considered as binding upon the Bidder. If the Bidder does not accept the corrected amount the Bid will be rejected, and the Bid security may be forfeited in accordance with Sub-Clause 16.6 (b).
- 28 **Deleted**
- 29 **Evaluation and Comparison of Financial Bids**
- 29.1 The Employer will evaluate and compare only the Bids determined to be substantially responsive in accordance with Sub-Clause 26.2.
- 29.2 In evaluating the Bids, the Employer will determine for each Bid the evaluated Bid Price by adjusting the Bid Price as follows:
  - (a) making any correction for errors pursuant to Clause 27; or
  - (b) making appropriate adjustments for any other acceptable variations, deviations; and
  - (c) Making appropriate adjustments to reflect discounts or other price modifications offered in accordance with Sub-Clause 23.6.
- 29.3 The Employer reserves the right to accept or reject any variation or deviation. Variations and deviations and other factors, which are in excess of the requirements of the Bidding documents or otherwise result in unsolicited benefits for the Employer shall not be taken into account in Bid evaluation.
- 29.4 The estimated effect of the price adjustment conditions under Clause 47 of the Conditions of Contract, during the period of implementation of the Contract, will not be taken into account in Bid evaluation.
- 29.5 If the Bid of the successful Bidder is seriously unbalanced in relation to the Engineer's estimate of the cost of work to be performed under the contract, the Employer may require the Bidder to produce detailed price analyses for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analyses, the Employer may require that the amount of the performance security set forth in Clause 34 be increased at the expense of the successful Bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract.

- 29.6 A bid which contains several items in the Bill of Quantities which are unrealistically priced low and which cannot be substantiated satisfactorily by the bidder, may be rejected as non-responsive.
- 30 **Deleted**

## F. AWARD OF CONTRACT

### 31 **Award Criteria**

- 31.1 Subject to Clause 32, the Employer will award the Contract to the Bidder whose Bid has been determined
- (i) to be substantially responsive to the Bidding documents and who has offered the lowest evaluated Bid Price; and
  - (ii) to be within the available bid capacity adjusted to account for his bid price which is evaluated the lowest in any of the packages opened earlier than the one under consideration.

In no case, the contract shall be awarded to any bidder whose available bid capacity is less than the evaluated bid price, even if the said bid is the lowest evaluated bid. In such case Hon Municipal Commissioner reserves the right to reject or withhold or cancel or award the contract.

### 32 **Employer's Right to Accept any Bid and to Reject any or all Bids**

- 32.1 Notwithstanding Clause 31, the Employer reserves the right to accept or reject any Bid, and to cancel the Bidding process and reject all Bids, at any time prior to the award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Employer's action.

### 33 **Notification of Award and Signing of Agreement**

- 33.1 The Bidder whose Bid has been accepted will be notified of the award by the Employer prior to expiration of the Bid validity period by cable, telex or facsimile confirmed by registered letter. This letter (hereinafter and in the Conditions of Contract called the "Letter of Acceptance") will state the sum that the Employer will pay the Contractor in consideration of the execution, completion, and maintenance of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Contract called the "Contract Price").
- 33.2 The notification of award will constitute the formation of the Contract, subject only to the furnishing of a performance security in accordance with the provisions of Clause 34.
- 33.3 The Agreement will incorporate all agreements between the Employer and the successful Bidder. It will be signed by the Employer and sent to the successful Bidder, within 28 days following the notification of award along with the Letter of Acceptance. Within 21 days of receipt, the successful Bidder will sign the Agreement and deliver it to the Employer.

33.4 Upon the furnishing by the successful Bidder of the Performance Security, the Employer will promptly notify the other Bidders that their Bids have been unsuccessful.

34 **Performance Security and Additional Performance Security (APS)**

34.1 Within 21 days of receipt of the Letter of Acceptance, the successful Bidder shall deliver to the Employer a Performance Security in any of the forms given below for an amount **equivalent to 2% of** the Contract price.

1. a bank guarantee in the form given in Section 8; or
2. Bank demand Draft as indicated in Appendix.

Plus

Additional security for unbalanced Bids in accordance with Clause 29.5 of ITB and Clause 52 of Conditions of Contract.

The tenderer offering rates lower than the estimated cost put to tender shall have to pay Additional Performance Security as per GR Ref. No. बीडीजी 2016/ पं. 2/इमा.2 dated 12.02.2016 and its corrigendum GR No. बीडीजी 2016/ पं. 2/इमा.2 dated 17.03.2016.

In case tenderer offers less than the estimated cost put to tender, tenderer should submit the rate analysis with explanation of how the work will be carried out in the quoted offer (rate) and tenderer will have to pay additional performance security irrespective of general security deposit prescribed in tender, for performance of the work. The amount of additional performance Security shall be as follows :

3. In case the tenderer offers the rates lower than the estimated cost put to tender but not less than 10%, tenderer should have to pay additional performance security of 1% of estimated cost to put to tender in the form of Demand Draft /FDR/BG of any Nationalized or Scheduled Bank drawn in the favour of Thane Smart City Limited.
4. In case the tenderer offers the rates upto 1% below the estimated cost put to tender there will be no additional performance security.
5. In case the tenderer offers the rates lower than 10% below the estimated cost put to tender, tenderer should have to pay additional performance security of amount equal to rebate offered beyond the 10% of cost put to tender in addition to the amount of 1% amount of cost put to tender in the form of Demand Draft /FDR/BG of any Nationalized or Scheduled Bank drawn in the favour of Thane Smart City Limited. The amount of additional Security shall be as follows :

FORMULA :

Additional Performance Security (APS) =  $1 * (X/100) * \text{cost put to tender}$

Where X= Percentage rebate quoted on the cost put to tender by the tenderer

For Examples :

(For example, if the rebate quoted rate is 14% below, the additional security shall be 1% (As per Para I above) + (14%-10%) = 4% (As per Para II above.) Thus the total additional security shall be 5% of the estimated cost of work)

**6. Manner of submission of the Additional Performance Security –**

- a) Demand Draft should have MICR and IFSC code and valid for minimum 3 months from the date of submission of tender.
- b) Demand Draft should be drawn in favor of Thane Smart City Limited,
- c) Scanned copy of the Demand Draft should be uploaded while submitting the price bid.
- d) Original Demand Draft/FDR/BG should be submitted in sealed envelope marked with name of work on top right corner and tender notice number / tender ID on right left corner within 3 working days from the prescribed date of submission of bid in the office of **CTO/City Engineer Thane Smart City Limited.**

**7. Manner of refund of the Additional Performance Security –**

- a) In case of bidders those who are not qualified after scrutiny of technical bid, Demand Draft will be refunded within 7 days from the date of opening of tender (technical bid) subject to written request for refund of APS
  - b) After opening of financial bid, Demand Draft of the tenderers other than first two lowest will be refunded within 7 days from the date of opening of tender (financial bid) subject to written request for refund of APS.
  - c) After issue of work order to the successful tenderer, Demand Draft of the second lowest tenderer, will be refunded within 7 days from the date of work order subject to written request for refund of APS.
  - d) Additional Performance Security of the successful bidder will be returned immediately upon the satisfactory completion of work, the certificate of which shall be issued by the Executive Engineer before releasing the additional security subject to written request for refund of APS.
- 34.2 If the performance security is provided by the successful Bidder in the form of a Bank Guarantee, it shall be issued either (a) at the Bidder's option, by a Nationalized Scheduled Indian bank or (b) by a foreign bank located in India and acceptable to the Employer.
- 34.3 Failure of the successful Bidder to comply with the requirements of Sub-Clause 34.1 shall constitute sufficient grounds for cancellation of the award and forfeiture of the Bid Security.

~~35 **Advance Payment and Security**~~

~~35.1 The Employer will provide an Advance Payment on the Contract Price as stipulated in the Conditions of Contract, subject to maximum amount, as stated in the Contract Data.~~

**36 Dispute Review Expert**

36.1 The Employer proposes Chief Executive Officer, Thane Smart City Limited will be appointed as Dispute Review Expert under the Contract.

36.2 For works costing above Rs.5 Crore the procedure for arbitration will be as per G.R of Law & Judiciary Department issued vide Sankirn- 2016/C.R. 20/ Ka-19 dt. 13/10/2016 regarding "Institutional Arbitration Policy".

**37 Corrupt or Fraudulent Practices**

37.1 The Employer will reject a proposal for award if it determines that the Bidder recommended forward has engaged in corrupt or fraudulent practices in competing for the contract in question and will declare the firm ineligible. either indefinitely or for a stated period of time, to be awarded a contract with National Highways Authority of India / State PWD and any other agencies, if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for the contractor, or in execution.

37.2 Furthermore, Bidders shall be aware of the provision stated in Sub-Clause 23.2 and Sub-Clause 59.2 of the Conditions of Contract.

**APPENDIX TO ITB**

		<b>Clause Reference With respect to Section- I.</b>								
1	Name of the Employer is –Thane Smart City Limited, Thane	[ Cl. 1.1]								
2	The last five years 2016-2017 2015-2016 2014-2015 2013-2014 2012-2013									
3	The Average annual financial turn over amount is 14,41,14,000/- ( Rs Fourteen Crore Forty One Lakh Forty One Thousand)	[Cl. 4.5 A(a)]								
4	Value of successfully completed with Government / Semi Government/Municipal Corporation/ Municipal Council/ Public Sector undertaking at least one similar type of work in last 5 year (Five Years) from the date of submission of tender costing not less than Rs.23,05,82,000/- ( Rs Twenty Three Crore Five Lakhs Eight Two Thousand Rupees Only) <b>Definition of similar work :</b> RCC M 30 Grade in Gutter/Nalla/Bridge/culvert /Retaining wall works . The bidder shall submit the Experience certificate from the officer not below the rank of Executive Engineer.	[Cl. 4.5 A(b)]								
5	<b>Quantities of work are –</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Sr.No.</th> <th style="width: 40%;">Item</th> <th style="width: 20%;">Quantity</th> <th style="width: 30%;">Unit</th> </tr> </thead> <tbody> <tr> <td align="center">1</td> <td><b>M 30 grade RCC</b></td> <td align="center">8061</td> <td align="center">Cu.m</td> </tr> </tbody> </table>	Sr.No.	Item	Quantity	Unit	1	<b>M 30 grade RCC</b>	8061	Cu.m	[Cl. 4.5 A ( c )]
Sr.No.	Item	Quantity	Unit							
1	<b>M 30 grade RCC</b>	8061	Cu.m							
6	Availability of Equipment's and Machinery for this work as per Annexure -I									
7	Availability for this work of personnel with adequate experience as required as per Annexure –II									
8	Defect Liability Period of this work is <b>12 Months</b>									
9	<del>The cost of electric work is Rs..... (In Words)</del>	[Cl. 4.5 A(d)]								
10	<del>The cost of water supply/ sanitary work is Rs..... (In Words)</del>	[Cl. 4.5 A(e)]								
11	Liquid assets and/or availability of credit facilities i.e. bank over draft facility shall have ( 10% of Contract Value) Minimum Rs3,84,31,000/- (Rs Three Crore Eighty Four Lakh Thirty One Thousand Rupees Only)	[Cl. 4.5 B ( c )]								
12	Price level of the financial year 2016-17	[Cl. 4.7]								
13	Pre-bid meeting will be held on <b>date 30/01/2018</b> at	[Cl. 9.2.1]								

	12.30 hrs in the office of <b>CTO/City Engineer Thane Smart City Limited</b> , 3rd floor, Thane Municipal Corporation, Thane, Gen. Arunkumar Vaidya Marg, Panchpakhadi, Thane (West)	
14	The technical bid will be opened online before date at the office of <b>CTO/City Engineer Thane Smart City Limited</b> , 3rd floor, Thane Municipal Corporation, Thane, Gen. Arunkumar Vaidya Marg, Panchpakhadi, Thane (West) <b>As per NIT</b>	
15	Address of the Employer: <b>CTO/City Engineer Thane Smart City Limited</b> , 3rd floor, Thane Municipal Corporation, Thane, Gen. Arunkumar Vaidya Marg, Panchpakhadi, Thane (West)	[Cl. 4.5(a)]
16	<b>Identification :</b> <b>Bid for -</b> Bid Reference:No.. Do not open before ..... <b>As per NIT</b>	[Cl. 19.2(b)]
17	The bid should be submitted online on or before date 14/02/2018 upto 16.00 Hrs.on web site <a href="http://mahatenders.gov.in">http://mahatenders.gov.in</a>	[Cl. 20.1]
18	The Financial bid will be opened after technical scrutiny, at office of <b>CTO/City Engineer Thane Smart City Limited</b> , 3rd floor, Thane Municipal Corporation, Thane, Gen. Arunkumar Vaidya Marg, Panchpakhadi, Thane (West)	[Cl. 23.1]
19	The Bank Guarantee / Draft /FDR in favor of <b>THANE SMART CITY LIMITED,THANE.</b> payable at <b>THANE</b>	[Cl. 34.1]
20	The name of Dispute Review Expert is <b>Chief Executive Officer, Thane Smart City Limited ,Thane</b>	[Cl. 36.1]
21	Escalation factors (for the cost of works executed and financial figure to acommon base value for works completed) <u>Year beforeMultiply factor</u> One 1.10 Two 1.21 Three 1.33 Four 1.46 Five 1.61	

**CTO/City Engineer  
Thane Smart City Limited,  
Thane.**

**ANNEXURE-I**  
**List of Key Plant & Equipment to be deployed on Contract Work**  
**[Reference Cl. 4.4 (B) (a)]**

Sr.	Type of Equipment	Maximum age as on 01.4.2017 (Years)	For this Contract machinery Minimum required in numbers	Remark
1	Front end Loader (JCB)	15	2	Own or can be hire
2	Poclain	15	2	Own or can be hire
3	Water Tanker min capacity 5000 Lits	15	3	Own or can be hire
4	Truck/Tipper	15	5	Own or can be hire
5	Needle vibrator	15	5	Own or can be hire
6	5 to 9 bhp Pumps	15	5	Own or can be hire
7	Fully Automatic Micro Processor based Programmable Logical Control (PIC) with SCADA Enabled Concrete Mix Plant ( Pan Mixer) of Minimum 12-15 Cum/Hrs Capacity of standard company	15	1	own
8	Concrete Transit Mixer (5to 6 Cum)	5	15	Own or can be hire
9	Compression Testing Machine (CTM) for the testing cement mortar concrete the site (2000 KN Capacity)	1	1	Own
10	Slum Cone	2	2 nos	Own
11	Cube Moulds(150x150x150)	5	3 set ( 6 cube each)	Own
13	Total Station	5	1	Own or can be hire
14	Auto level	5	2	Own
15	Desktop Personal Computer	1	1	Own

- Note :**
- 1) The bidder shall not that wherever the word used hire in above chart the self attested hire agreement shall be submitted. If the self attested hire agreement is found false or erroneous, stringent action shall be initiated by the department
  - 2) The life of new machinery will be considered as 15 years.
  - 3) There will no need of fitness certificate from SE (Mechanical)/Approved Govt. Valuer for first 6 years
  - 4) After 6<sup>th</sup> year , the machinery shall be checked and certified for its fitness by SE Mechanical/ACE (Mechanical)/ Approved government valuer every 3<sup>rd</sup> year till the 15<sup>th</sup> year.

**ANNEXURE-II**

**List of Key Personnel to be deployed on Contract Work [Reference Cl. 4.4 (B) (b)]**

<b>Sr. No.</b>	<b>Personnel</b>	<b>Qualification</b>	<b>For this Contract Minimum required in numbers</b>
1	Project Manger	B.E. Civil + 15 Years Exp. (5 years as Manager)	1 No.
2	Site Engineer	B.E. Civil + 5 Years Exp. Or Dip. Civil + 8 years Exp.	3 No.
3	Quantity Survey Engineer	B.E. Civil + 5 years Exp. or Dip. Civil + 8 years Exp	2 No.
4	Site Supervisor	10th standard pass with Minimum 2 years site Experience .	6 No
	<b>Total</b>		<b>12Nos</b>

**SECTION 2**  
**QUALIFICATION INFORMATION**

## SECTION – 2

### QUALIFICATION INFORMATION

The information to be filled in by the bidder in the following pages will be used for purposes of post qualification as provided for in clause 4 of the Instructions to bidders.

This information will not be incorporated in the contract

#### 1. For Individual Bidders

##### 1.1 Constitution or legal status of Bidder

**(Attach Copy)**

Place of registration: -----

Principal place of business: -----

Power of attorney of signatory of bid

**(Attach)**

##### 1.2 Total value of civil Engineering

##### 1.3 Construction work performed in the last five years \*\* β

(Rs. in lakh)

2016-2017 -----

2015-2016 -----

2014-2015 -----

2013-2014 -----

2012-2013 -----

1.3.1 Work performed as prime contractor, work performed in the past as a nominated subcontractor will also be considered provided the Sub-contract involved execution of all main items of work described in the bid document, provided further that all other qualification criteria are satisfied (in the same name) on works of a similar nature over the last five years \*\*

Project Name	Name of the Employer *	Description of work	Contract No.	Value of Contract (Rs. Crore)	Date of Issue of work order	Stipulated period of completion	Actual date of completion *	Remarks explaining reasons for delay & work completed

\* Attach certificate(s) from the Engineer(s)-in-charge.

\*\* Immediately preceding the financial year in which bid are received.

β Attach certificate(s) from Chartered Accountant.

1.4 Information on Bid capacity (works for which bids have been submitted and works which are yet to be completed) as on the date of this bid.

**Existing commitments and on-going works :**

Description of work	place & State	Contract No.	Name & Address of employer	Value of Contract (Rs. Cr.)	stipulated period of completion	Value of works* remaining to be completed (Rs. Cr.)	Anticipated date of completion
1	2	3	4	5	6	7	8

\* Attach certificate(s) from the Engineer(s)-in-charge.

@ The item of works for which data is requested should tally with that specified in ITB clause 4.4 A().

\*\* Immediately preceding the financial year in which bid are received.

The list is indicative and may be suitably modified by the DTP approving authority suiting to the requirements of work (Viz. Buildings/ Bridges/ Roads)

1.5. Availability of key items of Contractor's Equipment essential for carrying out the Works [Ref. Clause 4.4(B)(a)]. The Bidder should list all the information. Refer also to Sub Clause 4.3 of the Instructions to Bidders.

1.6. Qualifications and experience of key personnel required for administration and execution of the Contract [Ref. Clause 4.4(B)(b)]. Attach biographical data. Refer also to Sub Clause 4.3 of instructions to Bidders and Sub Clause 9.1 of the Conditions of Contract.

Position	Name	Qualification	Year of Experience (General)	Years of experience in the proposed position
Project Manager				
Etc				

1.7. \*Proposed sub-contracts and firms involved. [Refer ITB Clause 4.2 (k)]

**\*(Applicable for Specialized work only)**

Sanctions of the works	Value of Sub-contract	Sub-contractor (Name & Address)	Experience in similar work
<b><i>Not applicable for this work</i></b>			

~~Attach copies of certificates on possession of valid license for executing water supply / sanitary work / building electrification works [Reference Clause 4.4(d) & Clause 4.4 (e)]~~

**1.7 Additional Requirements**

3.1 Bidders should provide any additional information required to fulfill the requirements of Clause 4 of the Instructions to the Bidders, if applicable.

(i) Affidavit

(ii) Undertaking

**SAMPLE FORMAT FOR EVIDENCE OF ACCESS TO OR AVAILABILITY OF CREDIT FACILITIES  
(CLAUSE 4.2 (i) OF ITB)**

**BANK CERTIFICATE**

This is to certify that M/s. \_\_\_\_\_ is a reputed company with a good financial standing.

If the contract for the work, namely \_\_\_\_\_ is awarded to the above firm, we shall be able to provide overdraft/credit facilities to the extent of Rs \_\_\_\_\_ to meet their working capital requirements for executing the above contract during the contract period.

\_\_\_\_\_  
(Signature)

Name of Bank

Senior Bank Manager

Address of the Bank

**(Not required for works costing less than Rs. 5 Crores)**

**AFFIDAVIT**

**(To be executed on stamp paper of appropriate value)**

1. I, the undersigned, do hereby certify that all the statements made in the required attachments are true and correct.
2. The undersigned also hereby certifies that neither our firm M/s----- have abandoned any work on Building/Bridges/Roads etc. nor any contract awarded to us for such works have been rescinded, during last five years prior to the date of this bid. Also I declare that neither our firm /company is black listed nor any penal action of de-registration has taken/initiated against our firm/company by any Government /semi-government /Public Sector undertaking/urban local body/municipal Corporation etc.
3. The undersigned hereby authorize (s) and request(s) any bank, person, firm or corporation to furnish pertinent information deemed necessary and requested by the Department to verify this statement or regarding my (our) competence and general reputation.
4. The undersigned understand and agrees that further qualifying information may be requested, and agrees to furnish any such information at the request of the Department, Project implementing agency.
5. I hereby declare that I am fully responsible for above information /documentation. You may initiate legal action against me/above mentioned firm/company if you find that the information/documentation is false or incorrect.

-----  
(Signed by an Authorized Officer of the Firm)

-----  
Title of Officer

-----  
Name of Firm

-----  
DATE

**UNDERTAKING**

**(On bidder's letter Head)**

I, the undersigned do hereby undertake that our firm M/s -----  
would invest a minimum cash up to 25% of the work during implementation of the Contract.

-----  
(Signed by an Authorized Officer of the Firm)

-----  
Title of Officer

-----  
Name of Firm

-----  
DATE

**DECLARATION OF THE BIDDER**

I/We, hereby declare that I/We have made myself/ourself thoroughly conversant with the sub-soil conditions local conditions regarding all materials (such as stone, murum, sand. source of water, etc.) and Labour of which I/We have based my/our rates of this work. The specifications, conditions, bore results and lead of materials on this work have been carefully studied and understood by me/us before submitting this tender. I/We undertake to use only the best materials approved by the **CTO/City Engineer Thane Smart City Limited**, Thane of his duly authorized assistant before starting the work and to abide by his decision.

I/We have gone through all the contract document carefully.

Signature of Bidder(s).

**SECTION 3**  
**CONDITIONS OF CONTRACT**

## Conditions of Contract

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## CONDITIONS OF CONTRACT

### A. GENERAL

#### 1. Definitions

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

The **Adjudicator** (synonymous with **Institutional Arbitration Policy**) is the person appointed jointly by the Employer and the Contractor to resolve disputes in the first instance, as provided for in Clauses 24 and 25. The name of the Adjudicator is defined in the Contract Data.

**Bill of Quantities** means the priced and completed Bill of Quantities forming part of the Bid.

**Compensation Events are those defined in Clause 44 hereunder.**

The **Completion Date** is the date of completion of the Works as certified by the Engineer in accordance with Sub Clause 55.1.

The **Contract** is the contract between the Employer and the Contractor to execute, complete and maintain the Works. It consists of the documents listed in Clause 2.3 below.

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

The **Contractor** is a person or corporate body whose Bid to carry out the Works has been accepted by the Employer.

The **Contractor's Bid** is the completed Bidding document submitted by the Contractor to the Employer and includes Technical and Financial bids.

The **Contract Price** is the price stated in the Letter of Acceptance and thereafter as adjusted in accordance with the provisions of the Contract.

**Days** are calendar days; months are calendar months.

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

The **Defects Liability Period** is the period named in the Contract Data and calculated from the Completion Date.

The **Employer** is the party who will employ the Contractor to carry out the Works.

The **Engineer** is the person named in the Contract Data (or any other competent person appointed and notified to the contractor to act in replacement of the Engineer) who is responsible for supervising the Contractor, administering the Contract, certifying payments due to the Contractor, issuing and valuing Variations to the Contract, awarding extensions of time, and valuing the Compensation Events.

**Equipment** is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.

The **Initial Contract Price** is the Contract Price listed in the Employer's Letter of Acceptance.

**The Intended Completion Date** is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is specified in the Contract Data. The Intended Completion Date may be revised only by the Engineer by issuing an extension of time.

**Materials** are all supplies, including consumables, used by the contractor for incorporation in the Works.

**Plant** is any integral part of the Works which is to have a mechanical, electrical, electronic or chemical or biological function.

**The Site** is the area defined as such in the Contract Data.

**Site Investigation Reports** are those which were included in the Bidding documents and are factual interpretative reports about the surface and sub-surface conditions at the site.

**Specification** means the Specification of the Works included in the Contract and any modification or addition made or approved by the Engineer.

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

**A Subcontractor** is a person or corporate body who has a Contract with the Contractor to carry out a part of the work in the Contract which includes work on the Site.

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

**A Variation** is an instruction given by the Engineer, which varies the Works.

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

## **2. Interpretation**

- 2.1 In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Engineer will provide instructions clarifying queries about the Conditions of Contract.
- 2.2 If sectional completion is specified in the Contract Data, references in the Conditions of Contract to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion date for the whole of the Works).
- 2.3 The documents forming the Contract shall be interpreted in the following order of priority:
  - (1) Agreement
  - (2) Letter of Acceptance, notice to proceed with the works
  - (3) Contractor's Bid
  - (4) Contract Data
  - (5) Conditions of Contract including Special Conditions of Contract
  - (6) Specifications

- (7) Drawings
- (8) Bill of quantities and
- (9) Any other document listed in the Contract Data as forming part of the Contract.

### **3. Language and Law**

- 3.1 The language of the Contract and the law governing the Contract are stated in the ContractData.

### **4. Engineer's Decisions**

- 4.1 Except where otherwise specifically stated, the Engineer will decide contractual matters between theEmployer and the Contractor in the role representing the Employer.

### **5. Delegation**

- 5.1 The Engineer may delegate any of his duties and responsibilities to other people except to theAdjudicator after notifying the Contractor and may cancel any delegation after notifying theContractor.

### **6. Communications**

- 6.1 Communications between parties which are referred to in the conditions are effective only when inwriting. A notice shall be effective only when it is delivered (in terms of Indian Contract Act).

### **7. Sub-contracting**

- 7.1 **\*The Contractor may** sub-contract any portion of work, upto a limit specified in Contract Data, withthe approval of the Engineer but may not assign the Contract without the approval of the Employer inwriting. Sub-contracting does not alter the Contractor's obligations.

**\*(This is applicable for specialized work only)**

### **8. Other Contractors**

The Contractor shall cooperate and share the Site with other contractors, public authorities, utilities, andthe Employer between the dates given in the Schedule of other Contractors. The Contractor shall asreferred to in the Contract Data, also provide facilities and services for them as described in theSchedule. The employer may modify the schedule of other contractors and shall notify the contractor ofany such modification.

### **9. Personnel**

- 9.1 The Contractor shall employ the key personnel named in the Schedule of Key Personnel as referredto in the Contract Data to carry out the functions stated in the Schedule or other personnel approvedby the Engineer. The Engineer will approve any proposed replacement of key personnel only if theirqualifications, abilities, and relevant experience are substantially equal to or better than those of thepersonnel listed in the Schedule.
- 9.2 If the Engineer asks the Contractor to remove a person who is a member of the Contractor's staff orhis work force stating the reasons the Contractor shall ensure that the person leaves the Site withinseven days and has no further connection with the work in the Contract.

**10. Employer's and Contractor's Risks**

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

**11. Employer's Risks**

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

**12. Contractor's Risks**

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

**13. Insurance**

- 13.1 The Contractor shall provide, in the joint names of the Employer and the Contractor, insurance cover from the Start Date to the end of the Contract Period, in the amounts and deductibles stated in the Contract Data for the following events which are due to the Contractor's risks:

- (a) loss of or damage to the Works, Plant and Materials;
- (b) loss of or damage to Equipment;
- (c) loss of or damage of property (except the Works, Plant, Materials and Equipment) in connection with the Contract; and
- (d) Personal injury or death.

- 13.2 Policies and certificates for insurance shall be delivered by the Contractor to the Engineer for the Engineer's approval before the Start Date. All such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.

- 13.3 Contractor shall take out necessary Insurance Policy/Policies ( viz. contractor's All Risks Insurance Policy, Erection All Risks Insurance Policy etc .as decided by the Directorate of Insurance ) so as to provide adequate insurance cover for execution of the awarded contract work for total contract value and complete contract period compulsorily from the Directorate of Insurance ,Maharashtra State Mumbai only. Its postal address for correspondence is 264, MAHADA, First Floor, Opp. Kalanagar, Bandra (East) Mumbai 400 051.( Telephone number 26590403/26590690 and Fax number 26592461/26590403). Similarly all workmen's appointed to complete the contract work are required to insure under workmen's compensation Insurance Policy/ Insurance Policies taken out from any Insurance company, the same will not be accepted and the amount of premium calculated by the Government Insurance Fund will be recovered directly from the amount payable to the contractor for the executed contract work and paid to the

Directorate of Insurance Fund, Maharashtra State, Mumbai. The Director of Insurance reserves the right to distribute the risks of insurance among the other insurers.

13.4 If the Contractor does not provide any of the policies and certificates required, the Employer may affect the insurance which the Contractor should have provided and recover the premiums the Employer has paid from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.

13.5 Alterations to the terms of insurance shall not be made without the approval of the Engineer.

13.6 Both parties shall comply with any conditions of the insurance policies.

**14. Site Investigation Reports**

The Contractor, in preparing the Bid, shall rely on any site Investigation Reports referred to in the Contract Data, supplemented by any information available to the Bidder.

**15. Queries about the Contract Data**

15.1 The Engineer will clarify queries on the Contract Data.

**16. Contractor to Construct the Works**

16.1 The Contractor shall construct and install the Works in accordance with the Specification and Drawings.

**17. The Works to be completed by the Intended Completion Date**

17.1 The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the program submitted by the Contractor, as updated with the approval of the Engineer, and complete them by the Intended Completion Date.

**18. Approval by the Engineer**

18.1 The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Engineer, who is to approve them if they comply with the Specifications and Drawings.

18.2 The Contractor shall be responsible for design of Temporary Works.

18.3 The Engineer's approval shall not alter the Contractor's responsibility for design of the Temporary Works.

18.4 The Contractor shall obtain approval of third parties to the design of the Temporary Works where required.

18.5 All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Engineer before their use.

**19. Safety**

19.1 The Contractor shall be responsible for the safety of all activities on the Site.

## **20. Discoveries**

20.1 Anything of historical or other interest or of significant value unexpectedly discovered on the Site is the property of the Employer. The Contractor is to notify the Engineer of such discoveries and carryout the Engineer's instructions for dealing with them.

## **21. Possession of the Site**

21.1 The Employer shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date stated in the Contract Data the Employer is deemed to have delayed the start of the relevant activities and this will be Compensation Event.

## **22. Access to the Site**

22.1 The Contractor shall allow the Engineer and any person authorized by the Engineer access to the Site, to any place where work in connection with the Contract is being carried out or is intended to be carried out and to any place where materials or plant are being manufactured / fabricated /assembled for the works.

## **23. Instructions**

23.1 The Contractor shall carry out all instructions of the Engineer pertaining to works which comply with the applicable laws where the Site is located.

23.2 The Contractor shall permit the Employer to inspect the Contractor's accounts and records relating to the performance of the Contractor and to have them audited by auditors appointed by the Employer, if so required by the Employer.

## **24. Disputes**

24.1 If the Contractor believes that a decision taken by the Engineer was either outside the authority given to the Engineer by the Contract or that the decision was wrongly taken, the decision shall be referred to the Dispute Review Expert within 14 days of the notification of the Engineer's decision.

## **25. Procedure of Disputes**

25.1 The Employer proposes that [name of proposed Dispute Review Expert as indicated in Appendix] be appointed as Dispute Review Expert under the Contract, at a daily fee as indicated in Appendix plus reimbursable expenses. If the Bidder disagrees with this proposal, the Bidder should so state in the Bid. If in the Letter of Acceptance, the Employer has not agreed on the appointment of the Dispute Review Expert, the Dispute Review Expert shall be appointed by the Council of Indian Roads Congress at the request of either party.

25.2 For works costing above Rs.5 Crore the procedure for arbitration will be as per G.R of Law & Judiciary Department issued vide Sankirn- 2016/C.R. 20/ Ka-19 dt. 13/10/2016 regarding "Institutional Arbitration Policy".

## ~~**26. Replacement of Dispute Review Expert**~~

~~26.1 Should the Dispute Review Expert resign or die, or should the Employer and the Contractor agree that the Dispute Review Expert is not fulfilling his functions in accordance with the provisions of the Contract, a new Dispute Review Expert will be jointly appointed by the Employer and the Contractor. In case of disagreement between the Employer and (he~~

~~Contractor, within 30 days, the Dispute Review Expert shall be designated by the Appointing Authority designated in the Contract Data at the request of either party, within 14 days of receipt of such request.~~

## B. TIME CONTROL

### 27. Programme

- 27.1 Within the time stated in the Contract Data the Contractor shall submit to the Engineer for approval a Programme showing the general methods, arrangements, order, and timing for all the activities in the Works along with monthly cash flow forecast.
- 27.2 An update of the Programme shall be a programme showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work including any changes to the sequence of the activities.
- 27.3 The Contractor shall submit the Engineer, for approval, an updated Programme at intervals no longer than the period stated in the Contract Data. If the Contractor does not submit an updated Programme within this period, the Engineer may withhold the amount stated in the Contract Data from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Programme has been submitted.
- 27.4 The Engineer's approval of the Programme shall not alter the Contractor's obligations. The Contractor may revise the Programme and submit it to the Engineer again at any time. A revised Programme is to show the effect of Variations and Compensation Events.

### 28. Extension of the Intended Completion Date

- 28.1 The Engineer shall extend the Intended Completion Date if a Compensation Event occurs or Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining work and which would cause the Contractor to incur additional cost.
  - 28.2 The Engineer shall decide whether and by how much to extend the Intended Completion Date within 35 days of the Contractor asking the Engineer for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information.  
If the Contractor has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended Completion Date.
  - 28.3 The Engineer shall within 28 days of receiving full justification from the contractor for extension of Intended Completion Date refer to the Employer his decision. The Employer shall in not more than 42 days communicate to the Engineer the acceptance or otherwise of the Engineer's decision. If the Employer fails to give his acceptance, the Engineer shall not grant the extension and the contractor may refer the matter to the Dispute Review Expert under Clause 24.1.
29. All works to be executed under the contract shall be executed under the direction and subject to the approval in all respect of the **CTO/City Engineer Thane Smart City Limited**, Thane for the time being, who shall be entitled to direct at what points and in what manner they are to be commenced and from time to time carried on.

### 30. Delays Ordered by the Engineer

- 30.1 The Engineer may instruct the Contractor to delay the start or progress of any activity within the Works.

**31. Management Meetings**

- 31.1 Either the Engineer or the Contractor may require the other to attend a management meeting. The business of a management meeting shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.
- 31.2 The Engineer shall record the business of management meetings and is to provide copies of his record to those attending the meeting and to the Employer. The responsibility of the parties for actions to be taken is to be decided by the Engineer either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.

**32. Early Warning**

- 32.1 The Contractor is to warn the Engineer at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the work, increase the Contract Price or delay the execution of works. The Engineer may require the Contractor to provide an estimate of the expected effect of the future event or circumstance on the Contract Price and Completion Date. The estimate is to be provided by the Contractor as soon as reasonably possible.
- 32.2 The Contractor shall cooperate with the Engineer in making and considering proposals for how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the work and in carrying out any resulting instruction of the Engineer.

**C. QUALITY CONTROL**

**33. Identifying Defects**

- 33.1 The Engineer shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Engineer may instruct the Contractor to search for a Defect and to uncover and test any work that the Engineer considers may have a Defect.

**34. Tests**

If the Engineer instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples. If there is no Defect the test shall be a Compensation Event.

**35. Correction of Defects**

- 35.1 The Engineer shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion and is defined in the Contract Data. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.
- 35.2 Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time specified by the Engineer's notice.

**36. Uncorrected Defects**

If the Contractor has not corrected a Defect within the time specified in the Engineer's notice, the Engineer will assess the cost of having the Defect corrected, and the Contractor will pay this amount.

**D. COST CONTROL**

**37. Bill of Quantities**

37.1 The Bill of Quantities shall contain items for the construction, installation, testing, and commissioning work to be done by the Contractor.

37.2 The Bill of Quantities is used to calculate the Contract Price. The Contractor is paid for the quantity of the work done at the rate in the Bill of Quantities for each item.

**38. Changes in Quantities**

38.1 Quantities in respect of the several items shown in the tender are approximate and no revision in the tendered rate shall be permitted in respect of any of the items so long as, subject to any special provision contained in the specifications, prescribing different percentage of permissible variations or the quantity of the item does not exceed 25% of the tender quantity which shall be finalized at the time of pre-bid meeting.

38.2 The contractor shall, if ordered in writing by the Chief Executive Officer so to do, also carry out any quantities in excess of the limit mentioned in sub-clause (1) hereof on the same conditions as and in accordance with the specifications in the tender and on at the rates (i) derived from the rates entered in the current schedule of rates and in the absence of such rates, (ii) at the rate prevailing in the market, For purpose of operation of this clause, this cost shall be taken to be **Rs.38,43,03,027/- (Rs. Thirty Eight Crore Forty Three Lakh Three Thousand Twenty Seven Rupees Only)**

38.3 The quantities shown in the tender are tentative and may be reduced. No compensation or increase in rate will be applicable if quantities are reduced

38.4. There is no change in the rate for the excess upto 25% of the tendered quantity

38.5 **Extra Item** :-Any item not covered by schedule of variation but covered in DSR(Latest) of PWD, Government of Maharashtra-Thane region, rate of item will be worked as per DSR and on such item no price adjustment ( Escalation) will be paid.

38.6 **Extra Item**:-The rates for items not covered by the schedule of variation or DSR shall be worked out from actual expenses plus 15% for overheads and profit and for such items no escalation will be paid. In latter case the bidder shall submit his account of actual expenses in such cases duly countersigned periodically in the form and manner directed by Engineer-In-Charge. The Engineer may call for contractor's books of accounts for verification at any time.

39. Deleted

40. No compensation shall be allowed for any delay caused in the starting of the work, on account of any acquisition of land or in the case of the clearance works, on account of any delay in according sanction to estimates.

**41. Cash Flow Forecasts**

41.1 When the Programme is updated, the contractor is to provide the Engineer with an updated cash flow forecast.

**42. Payment Certificates**

42.1 The Contractor shall submit to the Engineer monthly statements of the estimated value of the work completed less the cumulative amount certified previously.

42.2 The Engineer shall check the Contractor's monthly statement within 14 days and certify the amount to be paid to the Contractor after taking into account any credit or debit for the month in question in respect of materials for the works in the relevant amounts and under conditions set forth in sub-clause 51(3) of the Contract Data (Secured Advance).

42.3 The value of work executed shall be determined by the Engineer.

42.4 The value of work executed shall comprise the value of the quantities of the items in the Bill of Quantities completed.

42.5 The value of work executed shall include the valuation of Variations and Compensation Events.

42.6 The Engineer may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.

**43. Payments**

43.1 Payments shall be adjusted for deductions for advance payments, retention, other recoveries in terms of the contract and taxes at source, as applicable under the law. The bill shall be paid after due verification and upon availability of budget.

43.2 Items of the Works for which no rate or price has been entered in will not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.

**43.3 Royalty Charges :**

As per instruction issued vide P.W.D. Government of Maharashtra Resolution of Revenue and Forest Department No. Gaukhani-10/1009/CR-309/Kh (1) dated 11.2.2010 while framing estimate,royalty charges for the items of excavation and supply of materials like rubble,metal,crushmetal,softmurum/hard murum ,sand and soil shall be considered in the rate analysis of respective items as per actual rate and shall be recovered.

The contractor has to pay these charges directly to Revenue Department and original challans ,permission document shall be produced to the concerned Executive Engineer. If contractor fails to produce these original document then royalty charges shall be recovered from contractor's bill

**44. Compensation Events**

44.1 Compensation shall be applicable and only extension may be considered on merits if not on part of Contractor

44.2 The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor not having given early warning or not having cooperated with the Engineer.

**45. Tax**

- 45.1 The rates quoted by the Contractor shall be deemed to be exclusive of goods & Services tax (GST) and inclusive of all other taxes that the Contractor will have to pay for the performance of this Contract. The Employer will perform such duties in regard to the deduction of such taxes at source as per applicable law.

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 Thane Smart City Limited.

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

**46. Currencies**

- 46.1 All payments shall be made in Indian Rupees.

**47. Price Adjustment**

- 47.1 Contract price shall be adjusted for increase or decrease in rates and price of labour, materials, fuels and lubricants in accordance with the following principles and procedures and as per formula given in the contract data:

- a) The price adjustment shall apply for the work done from the start date given in the contract data not apply to the work carried out beyond the stipulated time for reasons attributed to the contractor up to end of the initial intended completion date or extensions granted by the Engineer –in –charge.
- b) The price adjustment shall be determined during each month from the formula given in the contract data.
- c) Following expressions and meaning are assigned to the work done during each month:  
P= Total value of work done during the month. It would include the amount of secured advance granted, if any, during the month, less the amount of secured advance recovered, if any during the month. It will exclude value for works executed under variations for which price adjustments will be worked separately based on the terms mutually agreed.

- 47.2 To the extent that full companions for any rise or fall in costs to the contractor is not covered by the provisions of this or other clauses in the contract, the unit rate and prices included in the contract shall be deemed to include amounts to cover the contingencies of such other rise or fall in the costs.

**48. Retention**

- 48.1 The Employer shall retain from each payment due to the Contractor the proportion stated in the Contract Data until Completion of the whole of the Works.

48.2 On Completion of the whole of the Works total amount retained is repaid to the Contractor after contract Period has passed and the Engineer has certified that all the works completed as per specification of contract document.

48.3 On completion of the whole works, the contractor may substitute retention money with an "on demand" Bank guarantee.

#### **49. Liquidated Damages**

49.1 The Contractor shall pay liquidated damages to the Employer at the rate per day stated in the Contract Data for each day that the Completion Date is later than the Intended Completion Date (for the whole of the works or the milestone as stated in the contract data). The total amount of liquidated damages shall not exceed the amount defined in the Contract Data. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages does not affect the Contractor's liabilities.

49.2 If the Intended Completion Date is extended after liquidated damages have been paid, the Engineer shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate. No interest shall be payable in case of any delay of payment

49.3 If the contractor fails to comply with the time for completion as stipulated in the tender, then the contractor shall pay to the employer the relevant sum stated in the Contract Data as Liquidated damages for such default and not as penalty for everyday or part of day which shall elapse between relevant time for completion and the date stated in the taking over certificate of the whole of the works on the relevant section, subject to the limit stated in the contract data.

The employer may, without prejudice to any other method of recovery deduct the amount of such damages from any monies due or to become due to the contractor. The payment or deduction of such damages shall not relieve the contractor from his obligation to complete the works on from any other of his obligations and liabilities under the contract.

49.4 If, before the Time for Completion of the whole of the Works or, if applicable, any Section, a Taking - Over Certificate has been issued for any part of the Works or of a Section, the liquidated damages for delay in completion of the remainder of the Works or of that Section shall, for any period of delay after the date stated in such Taking-Over Certificate, and in the absence of alternative provisions in the Contract, be reduced in the proportion which the value of the part so certified bears to the value of the whole of the Works or Section, as applicable. The provisions of this Sub-Clause shall only apply to the rate of liquidated damages and shall not affect the limit thereof.

#### **50. Deleted**

#### ~~51. Secured Advance~~

~~The Engineer shall make advance payment in respect of materials intended for but not yet incorporated in the Works in accordance with conditions stipulated in the Contract Data.~~

**52. Securities**

52.1 The Performance Security (including additional security for unbalanced bids) shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount and form and by a bank or surety acceptable to the Employer, and denominated in Indian Rupees. The Performance Security shall be valid until a date 28 days from the date of expiry of Defects Liability Period and additional security for unbalanced bids shall be valid until a date 28 days from the date of issue of the certificate of completion.

**53. Deleted**

**54. Cost of Repairs**

54.1 Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions.

**E. FINISHING THE CONTRACT**

**55. Completion**

55.1 The Contractor shall request the Engineer to issue a Certificate of Completion of the Works and the Engineer will do so upon deciding that the Work is completed.

**56. Taking Over**

56.1 The Employer shall take over the Site and the Works within 28 days of the Engineer issuing a certificate of Completion.

**57. Final Account**

57.1 The Contractor shall supply to the Engineer a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Engineer shall issue a Defect Liability Certificate and certify any final payment that is due to the Contractor within 56 days of receiving the Contractor's account if it is correct and complete. If it is not, the Engineer shall issue within 56 days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Engineer shall decide on the amount payable to the Contractor and issue a payment certificate, within 56 days of receiving the Contractor's revised account.

**58. Operating and Maintenance Manuals-**

58.1 If "as built" Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the Contract Data.

58.2 If the Contractor does not supply the Drawings and/or manuals by the dates stated in the Contract Data, or they do not receive the Engineer's approval, the Engineer shall withhold the amount stated in the Contract Data from payments due to the Contractor.

## **59. Termination**

- 59.1 The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.
- 59.2 Fundamental breaches of Contract include, but shall not be limited to the following:
- (a) the Contractor stops work for 15 days when no stoppage of work is shown on the current Programme and the stoppage has not been authorized by the Engineer;
  - (b) the Engineer instructs the Contractor to delay the progress of the Works and the instruction is not withdrawn within 28 days;
  - (c) the Employer or the Contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
  - (d) a payment certified by the Engineer is not paid by the Employer to the Contractor within 56 days of the date of the Engineer's certificate;
  - (e) the Engineer gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Engineer;
  - (f) the Contractor does not maintain a security which is required;
  - (g) the Contractor has delayed the completion of works by the number of days for which the maximum amount of liquidated damages can be paid as defined in the Contract data; and
  - (h) if the Contractor, in the judgment of the Employer has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

For the purpose of this paragraph: "corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution. "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition."

- 59.3 When either party to the Contract gives notice of a breach of contract to the Engineer for a cause other than those listed under Sub Clause 59.2 above, the Engineer shall decide whether the breach is fundamental or not.
- 59.4 Notwithstanding the above, the Employer may terminate the Contract for convenience.
- 59.5 If the Contract is terminated the Contractor shall stop work immediately, make the Site safe and secure and leave the Site, Soon as reasonably possible.

## **60. Payment upon Termination**

- 60.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Engineer shall issue a certificate for the value of the work done less advance payments received up to the date of the issue of the certificate, less other recoveries due in terms of the contract, less taxes due to be deducted at source as per applicable law and less

the percentage to apply to the work not completed as indicated in the Contract Data. Additional Liquidated Damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor the difference shall be a debt payable to the Employer.

- 60.2 If the Contract is terminated at the Employer's convenience or because of a fundamental breach of Contract by the Employer, the Engineer shall issue a certificate for the value of the work done, the cost of balance material brought by the contractor and available at site, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the contract and less taxes due to be deducted at source as per applicable law.

**61. Property**

- 61.1 All materials on the Site, Plant, Equipment, Temporary Works and Works are deemed to be the property of the Employer, if the Contract is terminated because of a Contractor's default.

**62. Release from Performance**

If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of either the Employer or the Contractor the Engineer shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which commitment was made.

**F. SPECIAL CONDITIONS OF CONTRACT**

**1. LABOUR:**

The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.

The Contractor shall, if required by the Engineer, deliver to the Engineer a return in detail, in such form and at such intervals as the Engineer may prescribe, showing the staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such other information as the Engineer may require.

**2. COMPLIANCE WITH LABOUR REGULATIONS:**

During continuance of the contract, the Contractor and his sub-contractors shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications and bye laws of the State or Central Government or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or the local authority. Salient features of some of the major labour laws that are applicable to construction industry are given below. The Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent

authority on account of contravention of any of the provisions of any Act or rules made there under, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/bye laws/Acts/Rules/regulations including amendments, if any, on the part of the Contractor, the Engineer/Employer shall have the right to deduct any money due to the Contractor including his amount of performance security. The Employer/Engineer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer.

The employees of the Contractor and the Sub-Contractor in no case shall be treated as the employees of the Employer at any point of time.

### **SALIENT FEATURES OF SOME MAJOR LABOUR LAWS APPLICABLE TO ESTABLISHMENTS ENGAGED IN BUILDING AND OTHER CONSTRUCTION WORK.**

- (a) Workmen Compensation Act 1923 :- The Act provides for compensation in case of injury by accident arising out of and during the course of employment.
- (b) Payment of Gratuity Act 1972 :- Gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if an employee has completed 5 years service or more on death, the rate of 15 days wages for every completed year of service. The Act is applicable to all establishments employing 10 or more employees.
- (c) Employees P.P. and Miscellaneous Provision Act 1952: The Act Provides for monthly contributions by the employer plus workers @ 10% or 8.33%. The benefits payable under the Act are:
  - (i) Pension or family pension on retirement or death, as the case may be.
  - (ii) Deposit linked insurance on the death in harness of the worker.
  - (iii) Payment of P.P. accumulation on retirement/death etc.
- (d) Maternity Benefit Act 1951:- The Act provides for leave and some other benefits to women employees in case of confinement or miscarriage etc.
- (e) Contract Labour (Regulation & Abolition) Act 1970:- The Act provides for certain welfare measures to be provided by the Contractor to contract labour and in case the Contractor fails to provide, the same are required to be provided, by the Principal Employer by Law. The Principal Employer is required to take Certificate of Registration and the Contractor is required to take licence from the designated Officer. The Act is applicable to the establishments or Contractor of Principal Employer, if they employ 20 or more contract labour.
- (f) Minimum Wages Act 1948 :- The Employer is supposed to pay not less than the Minimum Wages fixed by appropriate Government as per provisions of the Act, if the employment is as scheduled employment. Construction of Buildings, Roads, and Runways are scheduled employments.
- (g) Payment of Wages Act 1936:- It lays down as to by what date the wages are to be paid, when it will be paid and what deductions can be made from the wages of the workers.

- (h) Equal Remuneration Act 1979 :- The Act provides for payment of equal wages for work of equal nature to Male and Female workers and for not making discrimination against Female employees in the matters of transfers, training and promotions etc.
- (i) Payment of Bonus Act 1965 :- The Act is applicable to all establishments employing 20 or more employees. The Act provides for payments of annual bonus subject to a minimum of 8.33% of wages and maximum of 20% of wages to employees drawing Rs.3500/- per month or less. The bonus to be paid to employees getting Rs.2500/- per month or above upto Rs.3500/- per month shall be worked out by taking wages as Rs.2500/- per month only. The Act does not apply to certain establishments. The newly set-up establishments are exempted for five years in certain circumstances. Some of the State Governments have reduced the employment size from 20 to 10 for the purpose of applicability of this Act.
- (j) Industrial Disputes Act 1947 :- The Act lays down the machinery and procedure for resolution of Industrial disputes, in what situations a strike or lock-out becomes illegal and what are the requirements for laying off or retrenching the employees or closing down the establishment.
- (k) Industrial Employment (Standing Orders) Act 1946 :- It is applicable to all establishments employing 100 or more workmen (employment size reduced by some of the States and Central Government to 50). The Act provides for laying down rules governing the conditions of employment by the Employer on matters provided in the Act and get the same certified by the designated Authority.
- (l) Trade Unions Act 1926 :- The Act lays down the procedure for registration of trade unions of workmen and employers. The Trade Unions registered under the Act have been given certain immunities from civil and criminal liabilities.
- (m) Child Labour (Prohibition & Regulation) Act 1986 :- The Act prohibits employment of children below 14 years of age in certain occupations and processes and provides for regulation of employment of children in all other occupations and processes. Employment of Child Labour is prohibited in Building and Construction Industry.
- (n) Inter-State Migrant workmen's (Regulation of Employment & Conditions of Service) Act 1979:- The Act is applicable to an establishment which employs 5 or more inter-state migrant workmen through an intermediary (who has recruited workmen in one state for employment in the establishment situated in another state). The Inter-State migrant workmen, in an establishment to which this Act becomes applicable, are required to be provided certain facilities such as housing, medical aid, travelling expenses from home upto the establishment and back, etc.
- (o) The Building and Other Construction workers (Regulation of Employment and Conditions of Service) Act 1996 and the Cess Act of 1996 :- All the establishments who carry on any building or other construction work and employ 10 or more workers are covered under this Act. All such establishments are required to pay cess at the rate not exceeding 2% of the cost of construction as may be modified by the Government. The Employer of the establishment is required to provide safety measures at the Building or construction work and other welfare measures, such as Canteens, First-Aid facilities, Ambulance,

Housing accommodations for workers near the work place etc. The Employer to whom the Act applies has to obtain registration certificate from the Registering Officer appointed by the Government.

- (p) Factories Act 1948:- The Act lays down the procedure for approval of plans before setting up a factory, health and safety provisions, welfare provisions, working hours, annual earned leave and rendering information regarding accidents or dangerous occurrences to designated authorities. It is applicable to premises employing 10 persons or more with aid of power or 20 or more persons without the aid of power engaged in manufacturing process.(q) The Contractor shall ..... of works DGIC at a .

### 3 ARBITRATION

- 3.1. The Employer proposes Hon Chief Executive Officer Thane Smart City Limited as Dispute Review Expert
- 3.2 For works costing above Rs.5 Crore the procedure for arbitration will be as per G.R of Law & Judiciary Department issued vide Sankirn- 2016/C.R. 20/ Ka-19 dt. 13/10/2016 regarding "Institutional Arbitration Policy".

### 4 ALTERATIONS IN AND ADDITIONS

The **CTO/City Engineer Thane Smart City Limited** shall have power to make any alterations in or additions to the original specification drawings, designs and instructions that may appear to be necessary or advisable during the progress of the work and the contractor shall be bound to carry out the work in accordance with any instructions in this connection which may be given to him in writing signed by the **CTO/City Engineer Thane Smart City Limited** and such alteration shall not invalidate the contract, and any additional work which the contractor may be directed to do in the manner above specified as part of the work shall be carried out by the contractor on the same conditions in all respect on which he agreed to do the main work, and at the same rates as per specified in the tender for the main work. And if the additional and altered work includes any class of work for which no rate is specified in this contract, then such rates will be taken as per Clause 38 as extra items.

### 5 SUSPENSION OF WORK

- 1) If at anytime after the execution of the contract documents, the **CTO/City Engineer Thane Smart City Limited** shall for reasons whatsoever (other than default on the part of the contractor for which the **TSCL**, Thane is entitled to rescind the contract) desires that the work or any part of the work specified in the tender should be suspended for any period of that the whole or part of the work should not be carried out at all, he shall give to the contractor a notice in writing of such desire and upon receipt of such notice the contractor shall forthwith suspend or stop the work wholly or in part as required, after having due regard to the appropriate stage at which the work should be stopped or suspended so as not to cause any damage or injury to the work already done or endanger the safety thereof provided that the decision of the **CTO/City Engineer Thane Smart City**

**Limited** as to the stage at which the work any part of it could be or could have been safely stopped or suspended shall be final and conclusive against the contractor. The contractor shall have no claim to any payment of compensation whatsoever by reason of or in pursuance of any notice as aforesaid on account of any suspension stoppage or curtailment except to the extent specified hereinafter.

2) Where the total suspension of work ordered as aforesaid continued for a continuous period exceeding 90 days, the contractor shall be at liberty to withdraw from the contractual obligations under the contract so far as it pertains to the unexecuted part of the work by giving 10 days prior notice in writing to the **CTO/City Engineer Thane Smart City Limited** within 30 days of the expiry of the said period of 90 days of such intention requiring the **CTO/City Engineer Thane Smart City Limited** to record the final measurement of the work already done and to pay the final bill. Upon giving such a notice the contractor shall be deemed to have been discharged from his obligations to complete the remaining unexecuted work under this contract. On receipt of such notice the City Engineer shall proceed to complete the measurement and make such payments as finally due to the contractor within the period of 90 days from receipt of such notice in respect of the work already done by the contractor, such payment shall not in any manner prejudice the right of the contractor to any further compensation under the remaining provision of this clause.

3) Where the **CTO/City Engineer Thane Smart City Limited** requires the contractor to suspend the work-for the period in excess of 30 days at any time or 60 days in aggregate, the contractor shall be entitled to apply to the **CTO/City Engineer Thane Smart City Limited** within 30 days of the resumption of the work after such suspension of payment of compensation to the extent of pecuniary loss suffered by him in respect of working machinery remaining idle on site or on account of his having had to pay the salary or wages of labour engaged by him during the said period of suspension provided always that contractor shall not be entitled to any claim in respect of any such working machinery, salary or wages whatsoever occasioned by unsatisfactory work or any other default on his part. The decision of the **CTO/City Engineer Thane Smart City Limited** in this regard shall be final and conclusive against the contractor.

4) In the event of :

i) Any total stoppage of work on notice from the **CTO/City Engineer Thane Smart City Limited** under sub clause (1) in that behalf.

ii) Withdrawal by the contractor from the contractual obligations to complete the remaining unexecuted work under sub clause(2) on account of continued suspension of work for a period exceeding (90) days.

iii) Curtailment in the quantity of item or items originally tendered on account of any alterations omissions or substitution as in the specifications, drawings, designs or instructions as mention abovewhere such curtailment exceeds 25% in quantity and the value of the quantity curtailed beyond 25% at the rates for items specified if the tender is more than Rs.5,00/-

It shall be open to the contractor within (90) days from the service of (i) the notice of stoppage of work or (ii) the notice of withdrawal from the contractual obligations under the contract on account of the continued suspension of the work or (iii) notice under clause 4 above resulting in such curtailment to produce to the **CTO/City Engineer Thane Smart City Limited** satisfactory documentary evidence that he had purchased or agreed to purchase material to use in the contracted work, before receipt by him of the notice of the stoppage, suspension or curtailment and require the **TSCL, Thane** to take over on payment of such material at the rates determined by the **CTO/City Engineer Thane Smart City Limited**, provided however such rates shall in no case exceeds the rates at which the same where acquired by the contractor. The **TSCL, Thane** shall thereafter take over the material so offered provided the quantities offered are not in excess of the requirements of the unexecuted work as specified in the accepted tender and are of quality and specifications approved by the **CTO/City Engineer Thane Smart City Limited**.

## **6 CERTIFICATION OF SUBSTANTIAL COMPLETION OF WORKS:**

On completion and taking over of works or a part of work exclusively stipulated in the contract documents, all in accordance with the requirements of the contract agreement and further Subject to the condition that the completed works or items of work, as the case may be (in case of phase completion), the **CTO/City Engineer Thane Smart City Limited** will issue a substantial completion certificate for whole or part of the works as the case may be on receiving written request from the contractor. The substantial completion is defined as stage of the work when it has been completed and made ready for functional use, although some minor points or insignificant items of work still remain to be completed, however, thses minor points and insignificant items should not have any bearing on the functionality of the item. Provided always that the said substantial completion certificate being issued, prior to completion of whole of the works shall not be deemed to preempt requirement of reinstatement of any ground or surface, as may be necessary under contract provisions.

### **COMPLETION CERTIFICATE :**

The completion certificate shall be issued by the **CTO/City Engineer Thane Smart City Limited** after completion of all minor works mentioned in substantial completion of work.

**SECTION-4**  
**CONTRACT DATA**

### Contract Data

Items marked "N/A" do not apply in this Contract		Clause Reference With respect to Section - 3
1	The Employer is Name : Thane Smart City Limited, Thane Address : 2nd floor, Thane Municipal Corporation, Thane, Gen. Arunkumar Vaidya Marg, Panchpakhadi, Thane (West).	[Cl.1.1]
2	The Engineer is: <b>CTO/City Engineer Thane Smart City Limited</b> , Thane 3rd floor, Thane Municipal Corporation, Thane, Gen. Arunkumar Vaidya Marg, Panchpakhadi, Thane (West).	
3	The Dispute Review Expert is: Chief Executive Officer, Thane Smart City Limited * Name : Chief Executive Officer, Thane Smart City Limited *Address: 2nd floor, Thane Municipal Corporation, Thane, Gen. Arunkumar Vaidya Marg, Panchpakhadi, Thane (West).	[Cl.1.1]
4	The Defects Liability Period <b>12Months</b> from the date of Completion.	[Cl.1.1 & 35]
5	The Start Date shall be <b>7</b> days from the date of issue of the Work Order.	[Cl.1.1]
6	The Intended Completion Date for the whole of the Works is <b>24 Month excluding monsoon</b> period after start of work with the following milestones:	[Cl.1.1,17&28]
<b>Milestone dates:</b>		[Cl.2.2,& 49.1]
	<b>Physical Works to be completed</b>	<b>Period for mild stone</b>
i)	<b>Milestone 1 :33 % physical completion of total work</b>	8 (Eight) Months
ii)	<b>Milestone 2 : 66 % physical completion of total work</b>	8 (Eight) Months
iii)	<b>Milestone 3: 100 % physical completion of total work</b>	8 (Eight) Months
7	<b>Site Location: Construction of Nallas in Smart City ABD area of Thane City</b>	[Cl.1.1]
8	The name and identification number of the Contract is:- TENDER NOTICE NO :TMC/PRO/PWD/1331/2017-18 Date:10.01.2018	[Cl.1.1]
9	The work consist of ... <b>1.</b> The works shall, inter alia, include the following, as specified or as directed: (A) Nalla Works Site Clearance; setting out and layout; widening of existing nalla	[Cl.1.1]

	<p>waterway and construction of nalla wall in RCC M30 Grade concrete, construction/extension of cross drainage works, approaches and other related works for Nalla work etc. provision of suitable designed protective works, wing/ return walls etc. all aspects of quality assurance; clearing the site and handing over the work on completion ; rectification of the defects during the Defects Liability Period; submission of " As Built" drawings and other related documents; and other item of work as may be required to be carried out for completing the works in accordance with the drawings and provisions of the contract to ensure safety.</p> <p>(B) Other items</p> <p>Any other items as required to fulfill all contractual obligations as per the bid documents.</p>	
10	The following documents also form part of the Contract: Addendum issued under clause 9.2.4 pursuant to clause 10 if any	[ Cl. 2.3(9) ]
11	The law, which applies to the Contract, is the <b>law of Union of India.</b>	[ Cl. 3.1 ]
12	The language of the Contract documents is <b>English</b>	[ Cl. 3.1 ]
13	<del>Limit of subcontracting – 50 % of the Initial Contract Price (for specialized work only)</del>	[ Cl. 7.1 ]
14	The Schedule of Other Contractors –NIL	[ Cl. 8 ]
15	The Schedule of Key personnel - As per Annex-II to section I	[Cl. 9]
16	The minimum insurance cover for physical property, injury and death is Rs.5lakh per occurrence with the number of occurrences limited to four. After each occurrence, Contractor will pay additional premium necessary to make insurance valid for four occurrences always.	[Cl. 13]
17	Site investigation report – To be assessed by the contractor	[Cl. 14]
18	The site possession Dates shall be same day from issue of Notice to proceed with the work.	[Cl. 21]
19	<del>Fees and types of reimbursable expenses to be paid to the Dispute Review Board (To be inserted later)</del>	[Cl. 25]
20	Appointing Authority for the Dispute Review Expert-Chief Executive Officer, Thane Smart City Limited, Thane	[Cl. 26]
21	The period for submission of the programme for approval of Engineer shall be 21 days from the issue of letter of Acceptance	[Cl. 27.1]
22	The amount to be withheld for late submission of an update Programme shall be <b>Rs. ....</b>	[Cl. 27.3]
23	The following events shall also be Compensation Events:	[Cl. 44]
	*Substantially adverse ground conditions encountered during the course of execution of work not provided for in the bidding document –	
	i) *Removal of underground utilities detected subsequently	
	ii) *Significant change in classification of soil requiring additional mobilization by the contractor e.g. ordinary soil to rock excavation	
	iii) *Removal of unsuitable material like marsh, debris dumps etc. not caused by the contractor	
	iv) *Artesian conditions.	
	v) *Seepage, erosion, landslide	

	vi)	*River training requiring protection of permanent work	
	vii)	*Presence of historical, archaeological or religious structures, monuments interfering with the works	
	viii)	*Restriction of access to ground imposed by civil. Judicial, or military authority.	
		<b>(*Remove or add as applicable)</b>	
24		The currency of the Contract is <b>Indian Rupees</b>	[Cl. 46]
25		<p style="text-align: center;"><b>Price Adjustment</b></p> <p>Contract price shall be adjusted for increase or decrease in rates and price of labour, materials, fuels and lubricants excluding bitumen, cement and steel in accordance with the following principles and procedures and as per formula given in the contract data. The price variation clause to be included shall be read as follows: (a) The price adjustment shall apply for the work done from the start date given in the contract data upto end of the initial intended completion date or extensions granted by the Engineer and shall not apply to the work carried out beyond the stipulated time for reasons attributable to the contractor. (b) The price adjustment shall be determined during each month from the formula given in the contract data. (c) Following expressions and meanings are assigned to the work done during each month:</p> <p>R = Total value of work done during the month. It would include the amount of secured advance granted, if any, during the month, less the amount of secured advance recovered, if any during the month. It will exclude value for works executed under variations for which price adjustment will be worked separately based on the terms mutually agreed.</p> <p>To the extent that full compensation for any rise or fall in costs to the contractor is not covered by the provisions of this or other clauses in the contract, the unit rates and prices included in the contract shall be deemed to include amounts to cover the contingency of such other rise or fall in costs.</p> <p>(1) Labour Component  (2) Material Component  (3) Petrol, oil and Lubricants Component  (4) HYSO &amp; Mild Steel Component  (5) Cement Component</p> <p>Calculated as per the formula hereinafter appearing, shall be made Apart from these, no other adjustments shall be made to the contract price for any reasons whatsoever. Component percentage as given below are as of the total cost of work put to tender. Total of Labour, Material &amp; POL components shall be 100 and other components shall be as per actuals.</p> <p>(1) Labour Component –K1 <span style="float: right;">*( 26 %)</span></p>	

	<p>(2) Material Component –K2 * ( 72 %)</p> <p>(3) POL Component –K3 *( 2 %)</p> <p>(4) HYS D &amp; Mild Steel Component Actual</p> <p>(5) Cement Component Actual</p> <p><b>*Percentage of Labour, Material &amp; POL components shall be taken as per G.R.</b></p> <p><b>Note :- if Cement, Steel are supplied on schedule A and then respective component shall not be considered. Also if particular component is not relevant same shall be deleted.</b></p> <p><b>The star rates are given as below.</b></p> <ul style="list-style-type: none"> <li>• Cement :- Rs. 4200/- per M.T.</li> <li>• H.Y.S.D. /TMT Steel :- Rs. 33,425/- per M.T.</li> <li>• Structural Steel :- Rs. 34,834/- per M.T.</li> </ul>	
i)	<p><b>Adjustment for labour component</b></p> <p>Price adjustment for increase or decrease in the cost due to labour shall be paid in accordance with the following formula :</p> $VL = 0.85 \times P_1/100 \times R \times (L_I - L_0) / L_0$ <p>VL = increase or decrease in the cost of work during the month under consideration due to changes in rates for local labour.</p> <p>L<sub>0</sub> = the consumer price index for industrial workers for the State on 28 days preceding the date of opening of Bids as published by Labour Bureau, Ministry of Labour, Government of India.</p> <p>L<sub>I</sub> = The consumer price index for industrial workers for the State for the under consideration as published by Labour Bureau, Ministry of Labour, Government of India.</p> <p>P<sub>1</sub> = Percentage of labour component of the work. (i.e.26%)</p>	
ii)	<p><b>Adjustment of Other materials Component (Excluding bitumen, steel and cement)</b></p> <p>Price adjustment for increase or decrease in cost of local materials other than cement, steel, bitumen and POL procured by the contractor shall be paid in accordance with the following formula:</p> $V_m = 0.85 \times P_m / 100 \times R \times (M_I - M_0) / M_0$ <p>V<sub>m</sub> = Increase or decrease in the cost of work during the month under consideration due to changes in rates for local materials other than cement, steel, bitumen and POL.</p> <p>M<sub>I</sub> = The all India wholesale price index (all commodities) on 28 days preceding the date of opening of Bids, as published by the Ministry of Industrial Development, Government of India, New Delhi.</p> <p>M<sub>0</sub> = The all India wholesale price index (all commodities) for the month under consideration as published by Ministry of Industrial</p>	

	<p>Development, Government of India, New Delhi.</p> <p><math>P_m</math> = Percentage of local material component (other than cement, steel, bitumen and POL) of the work. (i.e.72%)</p>	
iii)	<p><b>Adjustment of POL (fuel and lubricant) component</b></p> <p>Price adjustment for increase or decrease in cost of POL (fuel and lubricant) shall be paid in accordance with the following formula:</p> $V_f = 0.85 \times P_2/100 \times R \times (F_1 - F_0)/F_0$ <p><math>V_f</math> = Increase or decrease in the cost of work during the month under consideration due to changes in rates for fuel and lubricants.</p> <p><math>F_0</math> = The official retail price of High Speed Diesel (HSD) at the existing consumer pumps of lac at nearest center on the day 28 days prior to the date of opening of Bids.</p> <p><math>F_1</math> = The official retail price of HSD at the existing consumer pumps of IOC at nearest center for the 15th day of month of the under consideration.</p> <p>Government Circular No.: <b>Sankirn-2017/C.R.121/Part II/Bldg.2</b> Page 7 of 7</p> <p><math>P_2</math> = Percentage of fuel and lubricants component of the work. ( i.e.2%)</p> <p>Note:For the application of this clause, the price of High Speed Diesel oil has been chosen to represent fuel and lubricants group.</p>	
	<p><b>II</b> Conditions referred to in para - I</p> <p>(i) The operation period of the contract shall mean the period commencing from the date of the work order issued to the Contractor and ending on the date when the time allowed for the work specified in the Memorandum under tender for works expires, taking into consideration the extension of time, if any for completion of the work granted by Engineer-in-charge under relevant clause of the conditions of contract in case other than those where such extension is necessitated on account of default of the Contractor. The decision of the Engineer-in-charge as regards the operative period of the contract shall be final and binding on the Contractor. Where compensation for liquidated damages is levied on the Contractor on account of delay in completion or inadequate progress under the relevant contract provisions the escalation amount for the balance work from the date of levy of such compensation shall be worked out by pegging the indices <math>C_i</math>, <math>I_1</math> and <math>P_1</math> to levels corresponding to the date from which such compensation is levied.</p> <p>(ii) This price variation clause shall be applicable to all contracts in B-1, B-2 and C forms but shall not apply for piece work.</p>	

	<p>(iii) Price variation shall be calculated in accordance with the formulas mentioned above, separately for labour, material and POL components.</p> <p>(iv) The price variation under this clause shall not be payable for the extra items required to be executed during the completion of the work and also on the excess quantities payable under the provisions of clause 38/37 of the contract form B-1/ B-2 respectively. since rates payable for the extra items or the extra quantities under clause 38/37 are to be fixed as per the current DSR or as mutually agreed subject to yearly revision till completion of such work. In other words, when the completion or execution of extra items as well as extra quantities under clause 38/37 of the contract form B-1/ B-2 extends beyond the operative date of the DSR. The rates payable for the same beyond that date shall be revised with reference to the next / current DSR, prevalent at the time, on year to year basis or revised in accordance with mutual agreement thereon as provided for in the contract whichever is less.</p> <p>a. This clause is operative both ways i.e. if the price variation in the said Wholesale Price Index (New Series) or price of HSD for <b>Thane</b> is on the plus side, payment on account of the price variation shall be allowed to the Contractor and if it is on negative side, the <b>TSCL</b> shall be entitled to recover the same from the Contractor and the amount shall be deductible from the Contractors bill for the respective period in which there are fluctuations.</p>	
26	The Proportion of payments retained (retention money) shall be 6 % from each bill subject to a maximum of 5 % of final contract price.	[Cl. 48]
27	A) Amount of liquidated damages for delay incompletion of works	<b>(I) for Whole of work</b> [Cl. 49]
		(1/2000)th of the initial contract price rounded off to the nearest thousand per day
		<b>(II) for sectional completion:</b>
		<b>Whatever specified in item 6 of contract data (1/200)th of initial contract price for section of work under</b> (i) <b>Milestone I:</b> rounded off to the nearest thousand per day i.e. 6,34,100/- (Rs Six Lakh Thirty Four Thousand One

			<p>Hundred Rupees Only)</p> <p><b>(ii) Milestone II:</b> rounded off to the nearest thousand per day i.e.Rs6,34,100/-( Rs Six Lakh Thirty Four Thousand One Hundred Rupees Only))</p> <p><b>(iii) Milestone II:</b> rounded off to the nearest thousand per day i.e. Rs 6,53,400/-( Six Lakh Fifty Three Thousand Four Hundred Rupees Only )</p>	
	B) Maximum limit of liquidated damages for delay incompleteness of works		10% ( Ten Percent) of Initial contract Price rounded off to the nearest thousand .i.e.Rs 3,84,31,000Three Crore Eighty Four lakh Thirty one Thousand Rupees only	
28	Nature of Advances		<del>Amount (Rs.)</del> <b>Conditions to be fulfilled</b>	
i	<del>*EQUIPMENT</del>	90% for new and 50% of depreciated value for old equipment. Total amount will be subject to a maximum of 5 % of the Contract Price.	After equipment is brought to site (provided the Engineer is satisfied that the equipment is required for performance of the contract) and on submission of unconditional bank Guarantee for amount of advance.	
ii	Secured advance for non-perishable materials brought to site	75% of Invoice Value	<p>a) The materials are in accordance with the specification for works.</p> <p>b) Such materials have been delivered to site, and are properly stored and protected against damage or deterioration to the satisfaction of the Engineer. The Contractor shall store the bulk material in measurable stacks.</p>	[Cl. 45]

		<p><del>e) The contractor's records of the requirements, orders, receipt and use of materials are kept in a form approved by the Engineer and such records shall be available for inspection by the Engineer.</del></p> <p><del>d) The contractor has submitted with his monthly statement the estimated value of the materials on site together with such documents as may be required by the Engineer for the purpose of valuation of the materials and providing evidence of ownership and payment thereof.</del></p> <p><del>e) Ownership such materials shall be deemed to vest in the Employer for which the contractor has submitted an Indemnity Bond in an acceptable format, and</del></p> <p><del>f) The quantities of materials are not excessive and shall be used within a reasonable time as determined by the Engineer.</del></p>	
29	<p><del>Repayment of Secured advance</del></p> <p><del>The advance shall be repaid from each monthly payments to the extent materials [for which advance was previously paid pursuant to Clause 51.4 of C.C.C.] have been incorporated into the works.</del></p>		[Cl. 51.4]
30	<p>The Securities shall be for the following minimum amounts equivalent as a percentage of the Contract Price:</p> <p>Performance Security for ( 2) percent of contract price plus Rs76,87,000 (to be decided after evaluation of the bid) as additional security in terms of ITB Clause 29.5</p> <p>The Standard form of Performance Security acceptable to the Employer shall be an <u>unconditional</u> Bank Guarantee of the type as presented in Section 8 of the Bidding Documents.</p>		[Cl. 52]
31	The Schedule of Operating and Maintenance Manuals .....N/A		[Cl. 58]
32	The date by which "as-built" drawings (in scale as directed) in 2 sets are required is within <b>28 days</b> of issue of certificate of completion of whole or section of the work, as the case may be.		[Cl. 58]
33	The amount to be withheld for failing to supply "as-built" drawings by the date required is <b>Rs. 1.00. Lakh.</b>		[Cl. 58]
34	The following events shall also be fundamental breach of contract: "The Contractor has contravened Sub-Clause 7.1 and Clause 9 of GCC."		[Cl. 59.2]

35	The Percentage to apply to the value of the work not completed representing the Employer's additional cost for completing the Works shall be 20 percent.	[Cl. 60]
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**SECTION 5**  
**TECHNICAL SPECIFICATIONS**

### ITEMWISE DETAILED SPECIFICATIONS

Name of work:-Construction of Nallas in Smart City ABD area of Thane City

It. No.	Sr.No.	SSR Item No.	Description of work	Additional Specification if any
1	513	15.03	Excavation for foundation ( <b>in marshy soil up to 3.00 meter depth</b> ) of structure as per drawing and technical specifications including setting out, construction of shoring , brushing, removal of stumps and other deleterious matter, dressing of side and bottom and back filling with approved material etc. complete. ( <b>in marshy soil up to 3.00 meter depth.</b> )	As directed by Engineer in charge.
2 (I)	714	21.02	<b>Excavation for foundation in earth, soil</b> of all types, sand, gravel and soft murum, including removing the excavated material up to a distance of 50 m. beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. ( <b>Lift upto 1.5 m.</b> )	Bd.A.1 Page No. 259
2 (II)	716	21.04	<b>Excavation for foundation in earth, soil</b> of all types, sand, gravel and soft murum, including removing the excavated material up to a distance of 50 m. beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. ( <b>Lift upto 1.5 to 3.00 m.</b> )	Bd.A.1 Page No. 259
3(I)	718	21.06	<b>Excavation for foundation in Hard murum</b> including removing the excavated material upto distance of 50 metres beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering	Bd.A.2 Page No. 259

			including shoring and strutting etc. complete. <b>(Lift upto 1.50 m)</b>	
3(II)	720	21.08	<b>Excavation for foundation in Hard murum</b> including removing the excavated material upto a distance of 50 metres beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. <b>(Lift from 1.5 to 3.0m.)</b>	Bd.A.2 Page No. 259
4(I)	726	21.14	<b>Excavation for foundation in Soft rock</b> and old cement or lime masonry foundations including removing the excavated material upto a distance of 50 metres beyond the building area and stacking as directed, including dewatering, preparing the bed for the foundation and necessary back filling with available earth/murum, ramming ,watering including shoring and strutting etc. complete. <b>(Lift from 0m To 1.5 m.)</b>	Bd.A.4 Page No. 259
4(II)	728	21.16	<b>Excavation for foundation in Soft rock</b> and old cement or lime masonry foundations including removing the excavated material upto a distance of 50 metres beyond the building area and stacking as directed, including dewatering, preparing the bed for the foundation and necessary back filling with available earth/murum, ramming ,watering including shoring and strutting etc. complete. <b>(Lift from 1.5m To 3.0 m.)</b>	Bd.A.4 Page No. 259
5(I)	1734	46.29	<b>Dismantling the R.C.C. Work</b> 1:2:4 and sorting out the materials such as steel etc. as directed and stacking them within the specified lead as directed etc. complete.	As directed by Engineer in charge.

5(II)	1717	46.12	<b>Removing lime or lean cement concrete</b> including stacking the spoils as directed with all leads, lifts etc, complete.	As directed by Engineer in charge.
5(III)	1716	46.11	Dismantling Stone Masonry in lime or cement mortar including stacking the materials as directed with all leads, lifts etc.	As directed by Engineer in charge.
6	406	12.23	<b>Dewatering on BHP basis</b> by using water pump including diversion of stream, providing cofferdams, earthen bunds etc. as may be necessary for foundation and other parts of the works and pumping out water during and after excavation as may be required by using <b>5.0 to 9.0 BHP pump</b> etc. complete. (prior approval of Superintending Engineer will be necessary)	BR 4 Page No 104.105
7	750	21.38	<b>Providing dry/ trap/ granite/ quartzite/ gneiss rubble stone soling 15 cm to 20 cm thick</b> including hand packing and compacting etc. complete.	Bd.A. 12 Page No. 264
8	835	24.08	Providing and laying Cast in situ/ <b>Ready Mix cement concrete in M15 of trap/ granite/quartzite/gneiss</b> metal for bed blocks, foundation blocks and such other items including bailing out water, plywood/steel formwork, laying/ pumping, compacting, roughening them if	Bd.E.4 Page No. 289 and B-7, Page No.38

			special finish is to be provided, finishing uneven and honeycombed surface and curing etc. complete. The Cement Mortar 1:3 plaster is considered for rendering uneven and honeycombed surface only. Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc. (Wooden centering will not be allowed.), with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With natural sand/V.S.I. quality Artificial Sand	
9	958	26.33	<b>Providing and fixing in position TMT - FE - 500 bar reinforcement</b> of various diameters for R.C.C. pile caps, footings, foundations, slabs, beams columns, canopies, staircase, newels, chajjas, lintels pardis, copings, fins, arches etc. as per detailed designs, drawings and schedules. including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required complete.	Bd.F.17, Page No. 306
10	680	17.34	<b>Providing and laying in situ / ready mix M-30</b> controlled reinforced cement concrete of trap metal for <b>Raft slab including "V" haunches</b> , formwork, scaffolding, compaction by vibrating, finishing curing etc. complete. concrete batch mix plant / pan mixer with Natural / VSI standard Artificial Sand) etc. complete. (excluding reinforcement). a) RCC Grade with reversible drum type mixer/ concrete batch mix plant (pan mixer) .	MORT&H (5th Rev.) 1700, 2304
11	470	14.44	<b>Providing and laying in situ / ready mix M30 RCC</b> of trap/ granite/ quartzite/ gneiss metal for <b>RCC work of ballast walls</b> , kerbs and box returns including scaffolding, compaction, formwork finishing and curing etc. complete. (excluding reinforcement, with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant / pan mixer with Natural / VSI standard Artificial Sand)	BR.50 Page No. 143 and B. 7, Page No.38

12	438	12.69	<b>Providing weep holes</b> in brick masonry /plain /reinforced concrete abutment, wing wall / return wall with 100mm diameter AC pipe extending through the full width of the structure with slope of 1V: 20H towards drawing face as per drawings and technical specifications etc. complete.	MORT&H -2700 and 2200
13	459	14.17	<b>Providing and laying in situ / ready mix M30 controlled cement concrete</b> of trap/ granite/ quartzite/ gneiss metal for <b>RCC work in solid/ deck slab</b> etc. including ramming, vibrating, curing, formwork, centering and finishing in cement plaster excluding reinforcement etc. complete. (with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant / pan mixer and Natural / VSI standard Artificial Sand) i) Height up to 5 m, normal rate. ii) Depth 5 to 10 m, add 30 percent extra. iii) Depth 10 to 15 m, add 40 percent extra. iv) Depth 15 to 20 m, add 60 percent extra. v) Depth 20 m and above, add 100 percent extra.	BR.38(a) Page No. 135 and B. 7, Page No.38
14	816	23.01	<b>Providing and fabricating structural steel work in rolled sections like joists, channels, angles, tees etc.</b> as per detailed design and drawings or as directed including cutting, fabricating, hoisting, erecting, fixing in position making riveted / bolted /welded connections without connecting plates, braces etc. and including one coat of anticorrosive paint and over it two coats of oil painting of approved quality and shade etc. complete.	Bd.C.2 Page No. 275
15	441	12.72	<b>Providing and laying of filter media</b> with granular materials/ stone crushed aggregates satisfying the requirements laid down in clause 2504.2.2 of MoRTH specifications to a thickness of not less than 600 mm with smaller size towards the soil and bigger size towards the wall and	MORT and H 2200 &- 710.1.4 of IRC 78

			provided over the entire surface behind abutment, wing wall and return wall to the full height compacted to a firm condition as per drawing and technical specifications etc. complete.	
16(I)	1484	41.10	Providing and fixing on walls/ ceiling/ floors, <b>15 mm dia.</b> heavy grade having embossed as <b>ISI Mark galvanized iron pipes</b> weight of 1.48 Kg/metre with necessary fittings. remaking good the demolished portion and applying primer of anti-corrosive oil paint 2 coats Including necessary scaffolding and removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5 Page No. 551
16(II)	1485	41.11	Providing and fixing on walls/ ceiling/ floors <b>20 mm dia.</b> heavy grade having embossed as ISI Mark <b>galvanized iron pipes</b> of 1.93 kg/meter with necessary fitting remaking good the demolished portion and applying primer of anti-corrosive oil paint, 2 coats Including necessary scaffolding and removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5 Page No. 551c
16(III)	1486	41.12	Providing and fixing on walls/ ceiling/ floors <b>25 mm dia.</b> heavy grade having embossed as ISI Mark <b>galvanized iron pipes</b> of 1.93 kg/meter with necessary fitting remaking good the demolished portion and applying primer of anti-corrosive oil paint, 2 coats Including necessary scaffolding and removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	Bd.V.5 Page No. 551c
17	361	Statement C	<b>Transportation</b> of excavated materials like silt, earth, murum, building rubbish, concrete blocks etc. complete	As directed by Engineer in charge.

			10KM	
18(I)	1557	42.03	<b>Providing and laying 100 mm dia salt glazed stoneware pipe</b> including fittings such as bends, tees, single junction, double junctions laying, jointing (including excavation and refilling the trenches) complete.	Bd.V.39, Page No. 573
18(II)	1558	42.04	<b>Providing and laying for 150 mm dia salt glazed stoneware pipe</b> including fittings Such as bends, tees, single junction, double junctions laying, jointing (including excavation and refilling the trenches) complete.	Bd.V.39, Page No. 573
19(I)	366	11.08	<b>Providing and laying cement concrete</b> pipe of IS 458:2003 <b>NP-2 class of 450mm diameter</b> in proper line, level and slope including providing and fixing collars in cement mortar 1:2 and curing etc. complete.	CD.7 Page. No. 162
19(II)	367	11.09	<b>Providing and laying cement concrete</b> pipe of IS 458:2003 <b>NP-2 class of 600mm diameter</b> in proper line, level and slope including providing and fixing collars in cement mortar 1:2 and curing etc. complete.	CD.7 Page. No. 162
20	108	2.31	Compacting the hard murum side widths including laying in layers on each side with power roller including artificial watering etc. complete.	MORTH 408

21	105	2.28	<b>Providing earth work in embankment</b> with approved materials obtained from <b>departmental land</b> or other sources upto lead of 50m. including all lifts, laying in layers of 20cm. to 30cm. thickness breaking clods, dressing to the required lines, curves, grades and section, watering and compaction with vibratory roller with V-Sat attachment to achieve not less than 97 % of standard proctor density etc. complete	MORTH 305
22	117	3.01	Construction of granular sub-base by providing close graded Material, mixing in a mechanical mix plant at OMC, carriage of mixed Material to work site, spreading in uniform layers with motor grader / Paver on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per clause 401 -- Plant Mix Method and Grading - II Material	MORTH 401
23(l)	134	3.18	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing to proper grade and camber, applying and brooming requisite type of screening/ binding Materials to fill up the interstices of coarse aggregate, watering and compacting ?with Intelligent Compactor with compaction analyzer and V-Sat attachment.to the required density. Grading-I ----(Using Screening Type A (13.2 mm) Aggregate)	MORTH 404

23(II)	135	3.19	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing to proper grade and camber, applying and brooming requisite type of screening/ binding Materials to fill up the interstices of coarse aggregate, watering and compacting ?with Intelligent Compactor with compaction analyzer and V-Sat attachment.to the required density. Grading II (Using Screening Type B (11.2 mm) Aggregate)	MORTH 404
24(I)	148	3.32	Providing and applying tack coat on the prepared surface heating by flames in Boiler and spraying bitumen with sprayer on Granular surface treated with primer @ 2.75 kg/10 sqm with VG-30 bulk Bitumen	MORTH 503
24(II)	146	3.30	Providing and applying tack coat on the prepared surface heating by flames in Boiler and spraying bitumen with sprayer on B.T. surface 2.5 kg/10 sqm with VG-30 bulk Bitumen	MORTH 503
25	159	3.43	BITUMINOUS MACADAM:--Providing and laying bituminous macadam using crushed aggregate of Grading 2, premixed with bituminous binder, transported at site with VTS, laid over a previously prepared surface ,finished to the required grade ,level, alignment, and rolling to achieve the desired density for  50/75 mm compacted thickness with -- Using drum mix type hot mix plant with SCADA having complying essential features of Hot mix plant as per IRC-27-2009 specified	MORTH 504

			conditions and attachments such as electronic load sensor based belt conveyers, automatic synchronization of bitumen and aggregate fedder, built in dust controller system and PLC for Drum Mix plant, Sensor paver and Vibratory roller excluding prime/Tack coat etc. complete --Bitumen VG-30 grade 3.40%	
26	161	3.45	DENSE BITUMINOUS MACADAM: Proving and laying dense bituminous macadam using crushed aggregates of grading 2, premixed with bituminous binder VG-30 Bitumen @ 4.50 per cent by weight of total mix and filler, transported to site with VTS , laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired density for 50/75 mm compacted thickness .USING 80 TPH Batch mix type hot mix plant with SCADA, Sensor Paver, Intelligent Compactor with compaction analyzer and V-Sat attachment with Stone Dust filler.	MORTH 505
27	166	3.50	BITUMINOUS CONCRETE:--Providing and laying bituminous concrete using crushed aggregate of grading 1, premixed with bituminous binder @5.40% by weight of total mix and filler, transported at site with VTS, laid over a previously prepared surface, finished to the required grade ,level, alignment, and rolling to achieve the desired density for 50mm compacted thickness with drum mix plant with SCADA, Sensor paver and Vibratory roller excluding prime/Tack coat etc. complete -- Bitumen VG-30 grade with stone dust filler	MORTH 507

**SECTION 6**  
**FORM OF BID**

**FORM OF BID**

**Description of the Works:**.....

**To,**  
.....

**Address:** .....

1. We offer to execute the Works described above and remedy any defects therein in conformity with the conditions of Contract, specification, drawings, Bill of Quantities and Addenda for the sum(s) of  
(.....)
2. We undertake, if our Bid is accepted, to commence the Works as soon as is reason-ably possible after the receipt of the Engineer's notice to commence, and to complete the whole of the Works comprised in the Contract within the time stated in the document.
3. We agree to abide by this Bid for the period of 120 days from the date fixed for receiving the same, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
4. Unless and until a formal Agreement is prepared and executed this Bid, together with your written acceptance thereof, shall constitute a binding contract between us.
5. We understand that you are not bound to accept the lowest or any tender you may receive.
6. We accept the appointment of Chief Executive Officer, Thane Smart City Limited, as the Dispute Review Expert.

(OR)

~~We do not accept the appointment of Shri. .... as the Dispute Review Expert and propose instead that Shri. .... be appointed as Dispute Review Expert, whose BIO DATA is attached.~~

Dated this .....day of ..... 20.....

Signature \_\_\_\_\_ in the capacity of \_\_\_\_\_ duly authorised sign

bids for and on behalf of .....

(in block capitals or typed)

Address

.....

Witness

.....

Address

.....

Occupation

.....

**# Note**-The bidder will submit this form online without his financial offer. The bidder shall fill the rates online in the BOQ sheet provided in the e-tender portal only.

**SECTION 7**  
**BILL OF QUANTITIES**

## **BILL OF QUANTITIES**

### **Preamble**

- 1) The Bill of Quantities shall be read in conjunction with the Instructions to Bidders, Conditions of Contract, Technical Specifications and Drawings.
- 2) The quantities given in the Bill of Quantities are estimated and provisional, and are given to provide a common basis for bidding. The basis of payment will be the actual quantities of work ordered and carried out, as measured by the Contractor and verified by the Engineer and valued at the rates and prices tendered in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Engineer may fix within the terms of the Contract.
- 3) Basic Rate in figures to be entered in price bid by the bidder (including all taxes but excluding GST).
- 4) The rates and prices shall be quoted entirely in Indian Currency.
- 5) A rate or price shall be entered against each item in the Bill of Quantities, whether quantities are stated or not. The cost of Items against which the Contractor has failed to enter a rate or price shall be deemed to be covered by other rates and prices entered in the Bill of Quantities.
- 6) The whole cost of complying with the provisions of the Contract shall be included in the items provided in the priced Bill of Quantities, and where no Items are provided the cost shall be deemed to be distributed among the rates and prices entered for the related Items of Work.
- 7) General directions and descriptions of work and materials are not necessarily repeated or summarized in the Bill of Quantities. References to the relevant sections of the contract documentation shall be made before entering rates or prices against each item in the Bill of Quantities.
- 8) The method of measurement of completed work for payment shall be in accordance with the specification for Road and Bridge Works published by the Ministry of Surface Transport (edition).
- 9) Errors will be corrected by the Employer for any arithmetic errors pursuant to Clause 29 of the Instructions to Bidders.
- 10) Rock is defined as all materials which, in the opinion of the Engineer, require blasting' or the use of metal wedges and sledgehammers, or the use of compressed air drilling for its removal, and which cannot be extracted by ripping with a tractor of at least 150 kw with a single rear mounted heavy duty ripper.

**Note: The bidder shall fill the rates online in the BOQ sheet provided in the e-tender portal only**

## SCHEDULE "B"

### BILL OF QUANTITIES

Name of work:-Construction of Nallas in Smart City ABD area of Thane City

It. No.	Description of Work	Total Qty	Rate		Unit	Amount
			In Figure	In Word		
1	Excavation for foundation ( <b>in marshy soil up to 3.00 meter depth</b> ) of structure as per drawing and technical specifications including setting out, construction of shoring , brushing, removal of stumps and other deleterious matter, dressing of side and bottom and back filling with approved material etc. complete. ( <b>in marshy soil up to 3.00 meter depth.</b> )	21,840.810			cu.m.	
2 (I)	<b>Excavation for foundation in earth, soil</b> of all types, sand, gravel and soft murum, including removing the excavated material up to a distance of 50 m. beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. ( <b>Lift upto 1.5 m.</b> )	32,929.641			cu.m.	
2 (II)	<b>Excavation for foundation in earth, soil</b> of all types, sand, gravel and soft murum, including removing the excavated material up to a distance of 50 m. beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. ( <b>Lift upto 1.5 to 3.00 m.</b> )	10098.792			cu.m.	
3(I)	<b>Excavation for foundation in Hard murum</b> including removing the excavated material upto distance of 50 metres beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. ( <b>Lift upto 1.50 m</b> )	4211.249			cu.m.	

3(I)	<b>Excavation for foundation in Hard murum</b> including removing the excavated material upto a distance of 50 metres beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. <b>(Lift from 1.5 to 3.0m.)</b>	22311.783			cu.m.	
4(I)	<b>Excavation for foundation in Soft rock</b> and old cement or lime masonry foundations including removing the excavated material upto a distance of 50 metres beyond the building area and stacking as directed, including dewatering, preparing the bed for the foundation and necessary back filling with available earth/murum, ramming ,watering including shoring and strutting etc. complete. <b>(Lift from 0m To 1.5 m.)</b>	2518.275			cu.m.	
4(II)	<b>Excavation for foundation in Soft rock</b> and old cement or lime masonry foundations including removing the excavated material upto a distance of 50 metres beyond the building area and stacking as directed, including dewatering, preparing the bed for the foundation and necessary back filling with available earth/murum, ramming ,watering including shoring and strutting etc. complete. <b>(Lift from 1.5m To 3.0 m.)</b>	10354.633			cu.m.	
5(I)	<b>Dismantling the R.C.C. Work</b> 1:2:4 and sorting out the materials such as steel etc. as directed and stacking them within the specified lead as directed etc. complete.	6593.325			cu.m.	
5(II)	<b>Removing lime or lean cement concrete</b> including stacking the spoils as directed with all leads, lifts etc, complete.	1258.68			cu.m.	
5(III)	Dismantling Stone Masonry in lime or cement mortar including stacking the materials as directed with all leads, lifts etc.	7564.5			cu.m.	
6	<b>Dewatering on BHP basis</b> by using water pump including diversion of stream, providing cofferdams, earthen bunds etc. as may be necessary for foundation and other parts of the works and pumping out water during and after excavation as may be required by using <b>5.0 to 9.0 BHP pump</b> etc. complete. (prior approval of Superintending Engineer	65840			Hours	

	will be necessary)					
7	Providing dry/ trap/ granite/ quartzite/ gneiss rubble stone soling 15 cm to 20 cm thick including hand packing and compacting etc. complete.	7847.077			cu.m.	
8	Providing and laying Cast in situ/ <b>Ready Mix cement concrete in M15 of trap/ granite/quartzite/gneiss</b> metal for bed blocks, foundation blocks and such other items including bailing out water, plywood/steel formwork, laying/ pumping, compacting, roughening them if special finish is to be provided, finishing uneven and honeycombed surface and curing etc. complete. The Cement Mortar 1:3 plaster is considered for rendering uneven and honeycombed surface only. Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc. (Wooden centering will not be allowed.), with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With natural sand/V.S.I. quality Artificial Sand	3923.505			cu.m.	
9	<b>Providing and fixing in positionTMT - FE - 500 bar reinforcement</b> of various diameters for R.C.C. pile caps, footings, foundations, slabs, beams columns, canopies, staircase, newels, chajjas, lintels pardis, copings, fins, arches etc. as per detailed designs, drawings and schedules. including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required complete.	2274.782			MT	
10	<b>Providing and laying in situ / ready mix M-30</b> controlled reinforced cement concrete of trap metal for <b>Raft slab including "V" haunches</b> , formwork, scaffolding, compaction by vibrating, finishing curing etc. complete. concrete batch mix plant / pan mixer with Natural / VSI standard Artificial Sand) etc. complete. (excluding reinforcement). a) RCC Grade with reversible drum type mixer/ concrete batch mix plant (pan mixer) .	12898.08			cu.m.	

11	<b>Providing and laying in situ / ready mix M30 RCC</b> of trap/ granite/ quartzite/ gneiss metal for <b>RCC work of ballast walls</b> , kerbs and box returns including scaffolding, compaction, formwork finishing and curing etc. complete. (excluding reinforcement, with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant / pan mixer with Natural / VSI standard Artificial Sand)	12928.43			cu.m.	
12	<b>Providing weep holes</b> in brick masonry /plain /reinforced concrete abutment, wing wall / return wall with 100mm diameter AC pipe extending through the full width of the structure with slope of 1V: 20H towards drawing face as per drawings and technical specifications etc. complete.	4678.35			Rmt	
13	<b>Providing and laying in situ / ready mix M30 controlled cement concrete</b> of trap/ granite/ quartzite/ gneiss metal for <b>RCC work in solid/ deck slab</b> etc. including ramming, vibrating, curing, formwork, centering and finishing in cement plaster excluding reinforcement etc. complete. (with fully automatic micro processor based PLC with SCADA enabled concrete batch mix plant / pan mixer and Natural / VSI standard Artificial Sand) i) Height up to 5 m, normal rate. ii) Depth 5 to 10 m, add 30 percent extra. iii) Depth 10 to 15 m, add 40 percent extra. iv) Depth 15 to 20 m, add 60 percent extra. v) Depth 20 m and above, add 100 percent extra.	1040.7			cu.m	
14	<b>Providing and fabricating structural steel work in rolled sections like joists, channels, angles, tees etc.</b> as per detailed design and drawings or as directed including cutting, fabricating, hoisting, erecting, fixing in position making riveted / bolted /welded connections without connecting plates, braces etc. and including one coat of anticorrosive paint and over it two coats of oil painting of approved quality and shade etc. complete.	38.07			MT	

15	<b>Providing and laying of filter media</b> with granular materials/ stone crushed aggregates satisfying the requirements laid down in clause 2504.2.2 of MoRTH specifications to a thickness of not less than 600 mm with smaller size towards the soil and bigger size towards the wall and provided over the entire surface behind abutment, wing wall and return wall to the full height compacted to a firm condition as per drawing and technical specifications etc. complete.	8133.12			cu.m	
16(I)	Providing and fixing on walls/ ceiling/ floors, <b>15 mm dia.</b> heavy grade having embossed as <b>ISI Mark galvanized iron pipes</b> weight of 1.48 Kg/metre with necessary fittings. remaking good the demolished portion and applying primer of anti-corrosive oil paint 2 coats Including necessary scaffolding and removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	626			Rm	
16(II)	Providing and fixing on walls/ ceiling/ floors <b>20 mm dia.</b> heavy grade having embossed as ISI Mark <b>galvanized iron pipes</b> of 1.93 kg/meter with necessary fitting remaking good the demolished portion and applying primer of anti-corrosive oil paint, 2 coats Including necessary scaffolding and removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	660			Rm	
16(III)	Providing and fixing on walls/ ceiling/ floors <b>25 mm dia.</b> heavy grade having embossed as ISI Mark <b>galvanized iron pipes</b> of 1.93 kg/meter with necessary fitting remaking good the demolished portion and applying primer of anti-corrosive oil paint, 2 coats Including necessary scaffolding and removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	648			Rm	
17	<b>Transportation</b> of excavated materials like silt, earth, murum, building rubbish, concrete blocks etc. complete 10 Km	84246.3812			cu.m.	
18(I)	<b>Providing and laying 100 mm dia salt glazed stoneware pipe</b> including fittings such as bends, tees, single junction, double junctions laying, jointing (including excavation and	341			Rm	

	refilling the trenches) complete.					
18(II)	<b>Providing and laying for 150 mm dia salt glazed stoneware pipe</b> including fittings Such as bends, tees, single junction, double junctions laying, jointing (including excavation and refilling the trenches) complete.	430			Rm	
19(I)	<b>Providing and laying cement concrete</b> pipe of IS 458:2003 <b>NP-2 class of 450mm diameter</b> in proper line, level and slope including providing and fixing collars in cement mortar 1:2 and curing etc. complete.	233			Rm	
19(II)	<b>Providing and laying cement concrete</b> pipe of IS 458:2003 <b>NP-2 class of 600mm diameter</b> in proper line, level and slope including providing and fixing collars in cement mortar 1:2 and curing etc. complete.	175			Rm	
20	Compacting the hard murum side widths including laying in layers on each side with power roller including artificial watering etc. complete.	2050			Sq.m	
21	<b>Providing earth work in embankment</b> with approved materials obtained from <b>departmental land</b> or other sources upto lead of 50m. including all lifts, laying in layers of 20cm. to 30cm. thickness breaking clods, dressing to the required lines, curves, grades and section, watering and compaction with vibratory roller with V-Sat attachment to achieve not less than 97 % of standard proctor density etc. complete	615			cu.m.	
22	Construction of granular sub-base by providing close graded Material, mixing in a mechanical mix plant at OMC, carriage of mixed Material to work site, spreading in uniform layers with motor grader / Paver on prepared surface and compacting with vibratory power roller to achieve the desired density, complete	461.07			cu.m.	

	as per clause 401 -- Plant Mix Method and Grading - II Material					
23(I)	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing to proper grade and camber, applying and brooming requisite type of screening/ binding Materials to fill up the interstices of coarse aggregate, watering and compacting ?with Intelligent Compactor with compaction analyzer and V-Sat attachment.to the required density. Grading-I ---- (Using Screening Type A (13.2 mm) Aggregate)	307.5			cu.m.	
23(II)	Providing, laying, spreading and compacting stone aggregates of specific sizes to water bound macadam specification including spreading in uniform thickness, hand packing to proper grade and camber, applying and brooming requisite type of screening/ binding Materials to fill up the interstices of coarse aggregate, watering and compacting ?with Intelligent Compactor with compaction analyzer and V-Sat attachment.to the required density. Grading II (Using Screening Type B (11.2 mm) Aggregate)	307.5			cu.m.	
24(I)	Providing and applying tack coat on the prepared surface heating by flames in Boiler and spraying bitumen with sprayer on Granular surface treated with primer @ 2.75 kg/10 sqm with VG-30 bulk Bitumen	4100			Sq.m	
24(II)	Providing and applying tack coat on the prepared surface heating by flames in Boiler and spraying bitumen with sprayer on B.T. surface 2.5 kg/10 sqm with	2050			Sq.m	

	VG-30 bulk Bitumen					
25	<p>BITUMINOUS MACADAM:--Providing and laying bituminous macadam using crushed aggregate of Grading 2, premixed with bituminous binder, transported at site with VTS, laid over a previously prepared surface ,finished to the required grade,level, alignment, and rolling to achieve the desired density for</p> <p>50/75 mm compacted thickness with -- Using drum mix type hot mix plant with SCADA having complying essential features of Hot mix plant as per IRC-27-2009 specified conditions and attachments such as electronic load sensor based belt conveyers, automatic synchronization of bitumen and aggregate fedder, built in dust controller system and PLC for Drum Mix plant, Sensor paver and Vibratory roller excluding prime/Tack coat etc.complete --Bitumen VG-30 grade 3.40%</p>	153.57			cu.m.	
26	<p>DENSE BITUMINOUS MACADAM: Proving and laying dense bituminous macadam using crushed aggregates of grading 2, premixed with bituminous binder VG-30 Bitumen @ 4.50 per cent by weight of total mix and filler, transported to site with VTS , laid over a previously prepared surface, finished to the required grade, level, alignment, and rolling to achieve the desired density for 50/75 mm compacted thickness .USING 80 TPH Batch mix type hot mix plant with SCADA, Sensor Paver, Intelligent Compactor with compaction analyzer and V-Sat attachment with Stone Dust filler.</p>	102.50			cu.m	

27	<p>BITUMINOUS CONCRETE:--Providing and laying bituminous concrete using crushed aggregate of grading 1, premixed with bituminous binder @5.40% by weight of total mix and filler, transported at site with VTS, laid over a previously prepared surface, finished to the required grade ,level, alignment, and rolling to achieve the desired density for 50mm compacted thickness with drum mix plant with SCADA, Sensor paver and Vibratory roller excluding prime/Tack coat etc. complete -- Bitumen VG-30 grade with stone dust filler</p>	82.00			cu.m.	
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**SECTION – 8**  
**SECURITIES AND OTHER FORMS**

**BID SECURITY (BANK GUARANTEE)**

**(To be executed on stamp paper of appropriate value)**

WHEREAS, \_\_\_\_\_ [Name of bidder] (hereinafter called "the Bidder") has submitted his Bid dated \_\_\_\_\_ (date) for the construction of \_\_\_\_\_ [name of Contract hereinafter called "the Bid"]

KNOW ALL PEOPLE by these presents that We \_\_\_\_\_ [name of Bank] of \_\_\_\_\_ [ name of Country] having our registered office at \_\_\_\_\_ (hereinafter called "the Bank") are bound unto \_\_\_\_\_ [name of Employer] (hereinafter called "the Employer") in the sum of \_\_\_\_\_ \* for which payment well and truly to be made to the said Employer the Bank itself, his successors and assigns by these presents.

SEALED with the Common Seal of the Said Bank this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_

THE CONDITIONS of this obligation are:

- 2. If after Bid opening the Bidder withdraws his bid during the period of Bid validity specified in the Form of bid.

OR

- 3. If the Bidder having been notified to the acceptance of his bid by the Employer during the period of bid validity :
  - (a) Fails or refuses to execute the Form of Agreement in accordance with Instructions to Bidders, if required; or
  - (b) fails or refuses to furnish the performance Security, in accordance with the Instructions to Bidders ; or
  - (c) does not accept the correction of the Bid Price pursuant to Clause 27

We undertake to pay to the Employer up to the above amount upon receipt of his first written demand, without the Employer having to substantiate his demand, provided that in his demand the Employer will note that the amount claimed by him is due to him owing to the occurrence of one or any of the three conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force up to and including the date -12/02/2018 \*\* days after the deadline for submission of bids as such deadline is stated in the Instructions to Bidders or as it may be extended by the Employer, notice of which extensions(s) to the Bank is hereby waived. Any demand in respect of this guarantee should reach the Bank not later than the above date.

DATE \_\_\_\_\_ SIGNATURE \_\_\_\_\_

WITNESS \_\_\_\_\_ SEAL \_\_\_\_\_

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[Signature, name and address]

\* The Bidder should insert the amount of the guarantee in words and figures denominated in Indian Rupees. This figure should be the same as shown in Clause 16.1 of the Instructions to Bidders.

\*\* 45 days after the end of the validity period of the bid Date should be inserted by the Employer before the Bidding documents are issued.

**PERFORMANCE BANK GUARANTEE**

**(To be executed on stamp paper of appropriate value)**

To,

\_\_\_\_\_ [name of Employer]  
\_\_\_\_\_ [address of Employer]  
\_\_\_\_\_

WHEREAS \_\_\_\_\_ [name and address of Contractor](hereafter called "The Contractor") has undertaken, in pursuance of Contract No. \_\_\_\_\_ dated \_\_\_\_\_ to execute \_\_\_\_\_ [name of Contract and brief description of Works] (hereinafter called "the Contractor")

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee.

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you on behalf of the Contractor, up to a total of \_\_\_\_\_ [amount of guarantee]\* \_\_\_\_\_(in words), such sums being payable in the types and proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of \_\_\_\_\_ [amount of guarantee] as aforesaid without your needing to prove or to show ground or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed there under or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid 28 days from the date of expiry of the Defect Liability Period.

Signature and Seal of the Guarantor \_\_\_\_\_

Name of Bank \_\_\_\_\_

Address \_\_\_\_\_

Date \_\_\_\_\_

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\* An Amount shall be inserted by the Guarantor, representing the percentage the contract price specified in the Contract including additional security for unbalanced Bids, if any and denominated in Indian Rupees.

**Letter of Acceptance**

(Letterhead paper of the Employer)

To,

\_\_\_\_\_ [name and address of the Contractor]

\_\_\_\_\_  
\_\_\_\_\_

Dear Sirs,

This is to notify you that your online bid dated \_\_\_\_\_ for execution of the \_\_\_\_\_ (name of the contract and identification number, as given in the Instructions to Bidders) for the Contract Price of Rupees \_\_\_\_\_ ( \_\_\_\_\_ ) (amount in words and figures), as corrected and modified in accordance with the Instructions to Bidders<sup>1</sup> is hereby accepted by our agency.

We accept / do not accept that \_\_\_\_\_ be appointed as the Adjudicator. You are hereby requested to furnish Performance Security, in the form detailed in Para 34.1 of ITB for an amount equivalent to Rs. \_\_\_\_\_ within 07 days of the receipt of the letter of acceptance valid up to 28 days from the date of expiry of defects Liability Period i.e. upto \_\_\_\_\_ and sign the contract, failing which action as stated in Para 34.2 of ITB will be taken.

Yours faithfully,

Authorised Signature  
Name and title of Signatory  
Name of Agency

<sup>1</sup> Delete "Corrected and" or "and modified" if only one of these actions applies. Delete as corrected and modified in accordance with the Instructions to Bidders, if corrections or modifications have not been affected.

<sup>1</sup> To be used only if the contractor disagrees in his Bid with the Adjudicator proposed by the Employer in the " Instructions to Bidders".

**Issue of Notice to proceed with the work**

(Letter head of the Employer)

\_\_\_\_\_ (Date)

To,

\_\_\_\_\_ [name and address of the Contractor]

\_\_\_\_\_

\_\_\_\_\_

Dear Sirs,

Pursuant to your furnishing the requisite security as stipulated in ITB Clause 34.1 and signing of the Contract for the work of.....

Bid Price of Rs. \_\_\_\_\_ .

You are hereby instructed to proceed with the execution of the said works in accordance with the documents.

Yours faithfully,

(Signature, name and title of Signatory  
Authorized to sign on behalf of Employer)

**AGREEMENT FORM**  
**Agreement**  
**(To be executed on stamp paper of appropriate value)**

This agreement, made the \_\_\_\_\_ day of \_\_\_\_\_ between \_\_\_\_\_ (name and address of the Employer) [hereinafter called "the Employer] and \_\_\_\_\_ (name and address of contractor) hereinafter called "the Contractor" of the other part.

Whereas the employer is desirous that the Contractor execute \_\_\_\_\_ (name and identification number of Contractor) (hereinafter called "the Works") and the Employer has accepted the Bid by the Contractor for the execution and completion of such Works and the remedying of any defects therein, at a cost of Rs \_\_\_\_\_

**NOW THIS AGREEMENT WITNESSTH as follows:**

- (1) In this Agreement, words and expression shall have the same meanings as are respectively assigned to them in the conditions of contract hereinafter referred to and they shall be deemed to form and be read and construed as part of this Agreement.
- (2) In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to all aspects with the provisions of the contract.
- (3) The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying the defects wherein Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.
- (4) The following documents shall be deemed to form and be ready construed as part of this agreement viz.
  - i) Letter of Acceptance
  - ii) Notice to proceed with the works
  - iii) Contractor's Bid
  - iv) Condition of contract : General and Special
  - v) Contract Date
  - vi) Additional condition
  - vii) Drawings
  - viii) Bill of Quantities and
  - ix) Any other documents listed in the Contract Data as forming part of the Contract.

In witnessed whereof the parties there to have caused this Agreement to be executed the day and year first before written.

The Common Seal of \_\_\_\_\_ was hereunto affixed in the presence of :

Signed, Sealed and Delivered by the said \_\_\_\_\_

in the presence of :

Binding Signature of Employer \_\_\_\_\_

Binding Signature of Contractor \_\_\_\_\_

**UNDERTAKING**

**(on letter head of bidder)**

I, the undersigned do hereby undertake that our firm M/s. \_\_\_\_\_ agree to abide by this bid for a period \_\_\_\_\_ days for the date fixed for receiving the same and it shall be binding on us and may be accepted at any time before the expiration of that period.

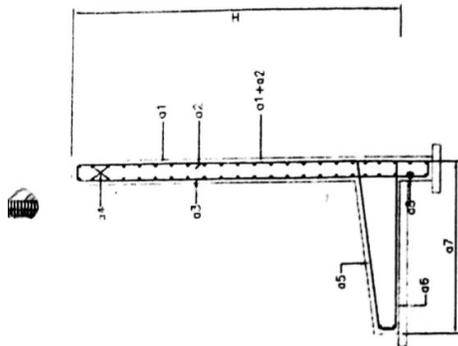
\_\_\_\_\_  
(Signed by an Authorized Officer of the Firm)

\_\_\_\_\_  
Title of Officer

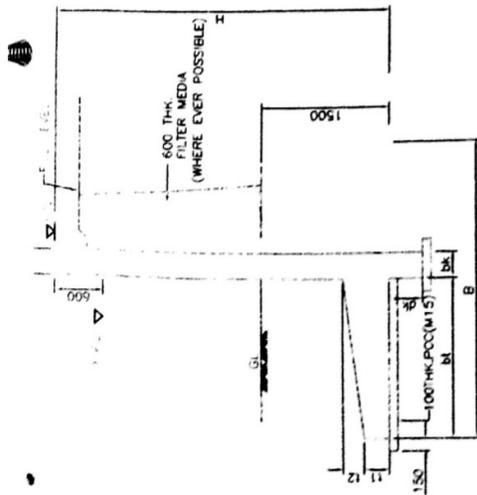
\_\_\_\_\_  
Name of Firm

\_\_\_\_\_  
DATE

**SECTION 9**  
**DRAWINGS**



REINFORCEMENT DETAILS



TYPICAL SECTION OF RETAINING WALL WITHOUT HEEL PROJECTION

(SCALE 1:50)

**DIMENSION DETAILS FOR RETAINING WALL**

H(m)	B(mm)	b1(mm)	b2(mm)	t1(mm)	t2(mm)	bk(mm)	dk(mm)
3.0	2600	2300	300	600	130	300	300
4.0	3400	3050	300	600	170	300	350
5.0	4300	3800	300	600	210	300	500
5.5	4650	4200	300	600	230	300	500

**REINFORCEMENT DETAILS FOR RETAINING WALL**

H(m)	o1	o2	o3	o4	o5	o6	o7	o8	hc(m)
3.0	12 $\phi$ 200 C/C	12 $\phi$ 200 C/C	10 $\phi$ 200 C/C	10 $\phi$ 200 C/C	12 $\phi$ 200 C/C	10 $\phi$ 200 C/C	12 $\phi$ 200 C/C	10 $\phi$ 200 C/C	1.0
4.0	16 $\phi$ 200 C/C	16 $\phi$ 200 C/C	10 $\phi$ 200 C/C	10 $\phi$ 200 C/C	12 $\phi$ 200 C/C	12 $\phi$ 200 C/C	12 $\phi$ 200 C/C	10 $\phi$ 200 C/C	1.8
5.0	20 $\phi$ 200 C/C	20 $\phi$ 200 C/C	10 $\phi$ 150 C/C	10 $\phi$ 150 C/C	12 $\phi$ 200 C/C	20 $\phi$ 200 C/C	12 $\phi$ 150 C/C	10 $\phi$ 150 C/C	2.1
5.5	20 $\phi$ 200 C/C	20 $\phi$ 200 C/C	10 $\phi$ 150 C/C	10 $\phi$ 150 C/C	12 $\phi$ 200 C/C	20 $\phi$ 200 C/C	12 $\phi$ 150 C/C	10 $\phi$ 150 C/C	2.5

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
2. NO DIMENSIONS SHALL BE SCALE FROM DRAWING.
3. MINIMUM CONCRETE COVER TO ANY REINFORCEMENT SHALL BE 50 MM.
4. FOR GROUND LEVEL & FORMATION LEVEL REFER RELEVANT DRAWINGS.
5. GRADE OF CONCRETE FOR RETAINING WALL IS M30 & FOR LEVELLING COURSE IS M15.
6. ALL REINFORCEMENT SHALL BE 11.5 D BARS OF GRADE Fe 415 CONFORMING TO IS 1786 (LATEST). ANTI CORROSIVE TREATMENT TO REINFORCEMENT SHALL BE GIVEN AS PER CONTRACT CONDITION.
7. ALL EXPOSED SURFACES IN CONTACT WITH SOIL/WATER SHALL BE PAINTED WITH TWO COATS OF EPOXY PAINT AS PER CONTRACT CONDITION.
8. SPACING OF EXPANSION JOINT (20mm MIN) SHALL NOT BE MORE THAN 25 METRE ALONG THE LENGTH OF WALL.
9. THE RETAINING WALL HAS BEEN DESIGNED FOR SAFE BEARING CAPACITY OF 50% AS 15 T/m<sup>2</sup>. THIS SHOULD BE ENQUIRED AT SITE.
10. 600 THK FILTER MEDIA SHALL BE PROVIDED BEHIND THE RETAINING WALL.
11. HFL CONSIDERED IS 600mm BELOW TOP OF STEM.
12. WEEP HOLES ARE REQUIRED.

NO.	DATE	DESCRIPTION	BY	CHK.	APP.
REVISION					

CLIENT: THANE MUNICIPAL CORPORATION

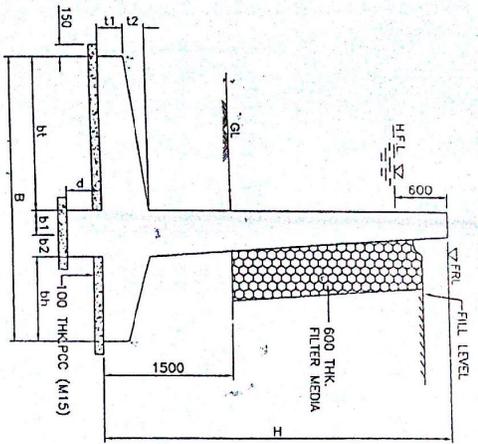
PROJECT:

THANE STORM WATER DRAINAGE

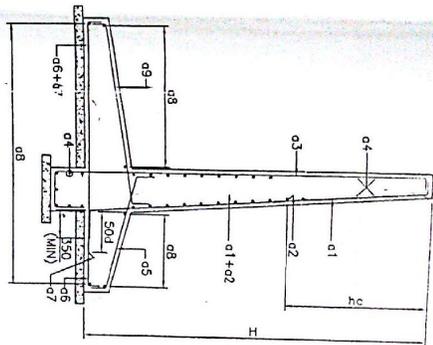
CONSULTING ENGINEERING SERVICES (I) LTD  
NEW DELHI  
INDIA

DETAILS OF RETAINING WALL  
(WITH SHEAR KEY)  
(3.0 TO 5.5 M. HEIGHT)

NO.	DATE	DESCRIPTION	BY	CHK.	APP.
REVISION					



TYPICAL SECTION OF  
RETAINING WALL  
(SCALE 1:50)



TYPICAL SECTION OF  
RETAINING WALL  
(SCALE 1:50)

DIMENSION DETAILS FOR RETAINING WALL

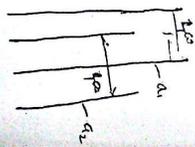
H(m)	B(mm)	bt(mm)	bh(mm)	b1(mm)	b2(mm)	t1(mm)	t2(mm)	d (mm)
3.0	2850	1500	1000	300	50	300	50	400
4.0	3400	1850	1000	300	250	300	250	500
5.0	4100	2500	1000	300	300	300	300	500
5.5	4500	2850	1000	300	350	300	350	500

REINFORCEMENT DETAILS FOR RETAINING WALL

H(m)	a1	a2	a3	a4	a5	a6	a7	a8	a9	hc(m)
3.0	167@200 C/C	-	107@200 C/C	107@200 C/C	107@200 C/C	107@200 C/C	167@200 C/C	107@200 C/C	107@200 C/C	-
4.0	167@200 C/C	107@200 C/C	107@200 C/C	107@200 C/C	107@200 C/C	122@200 C/C	167@200 C/C	107@200 C/C	107@200 C/C	2.5
5.0	167@200 C/C	167@200 C/C	107@150 C/C	107@150 C/C	127@200 C/C	207@200 C/C	207@200 C/C	107@150 C/C	107@200 C/C	2.3
5.5	167@200 C/C	207@200 C/C	107@150 C/C	107@150 C/C	122@200 C/C	207@200 C/C	257@200 C/C	107@150 C/C	107@200 C/C	2.2

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
2. NO DIMENSIONS SHALL BE SCALED FROM THIS DRAWING.
3. MINIMUM CONCRETE COVER TO ANY REINFORCEMENT SHALL BE 50 MM.
4. FOR GROUND LEVEL & FORMATION LEVEL REFER RELEVANT DRAWINGS.
5. GRADE OF CONCRETE FOR RETAINING WALL IS M30 & FOR LEVELLING COURSE IS M15.
6. ALL REINFORCEMENT SHALL BE HYSD BARS OF GRADE Fe 415 CONFORMING TO IS 1786 (LATEST), ANTI CORROSIVE TREATMENT TO REINFORCEMENT SHALL BE GIVEN AS PER CONTRACT CONDITION.
7. ALL EXPOSED SURFACES IN CONTACT WITH SOIL/WATER SHALL BE PAINTED WITH TWO COATS OF EPOXY PAINT AS PER CONTRACT CONDITION.
8. SPACING OF EXPANSION JOINT (20mm MIN) SHALL NOT BE MORE THAN 25 METRE ALONG THE LENGTH OF WALL.
9. THE RETAINING WALL HAS BEEN DESIGNED FOR SAFE SEISMIC CAPACITY OF SOIL AS 13 T/m<sup>2</sup>. THIS SHOULD BE ENSURED AT SITE.
10. 600 THICK FILTER MEDIA SHALL BE PROVIDED BEHIND THE RETAINING WALL.
11. HFL CONSIDERED IS 600mm BELOW TOP OF STEM.



NO.	DATE	DESCRIPTION	DEALT	CHK	APP.

CLIENT: **THANE MUNICIPAL CORPORATION**

PROJECT: **THANE STORMWATER DRAINAGE**

CONSULTING ENGINEERING SERVICES (P) LTD  
NEW DELHI

DETAILS OF RETAINING WALL  
(WITH SHEAR KEY)  
(3.0 TO 5.5 M. HEIGHT)

DRWG NO.	2004/37/2/SR/KK/CO1	DATE	04-10-2005
DESIGNER	REVISION NO.	DESIGNED	APPROVED
D. NAJARG	V. RAJAWAR	P. S. MAHAR	S. V. DED





**SECTION 10**  
**DOCUMENTS TO BE FURNISHED BY BIDDER**  
**(Attached)**