

PIMPRI CHINCHWAD NEW TOWN DEVELOPMENT AUTHORITY
(PCNTDA)

NAME OF WORK : Construction of underground water tank in PCNTDA Administrative Building premises.



Period of Sale of Bidding Document : From ---/--/ 2020 To --/--/2020 Up to 17.45Hrs.

Time and Date of Pre-Bid Conference : Date --/--/2020 Time 15.00 Hrs

Last Date and Time for Receipt of Bids : --/--/2020 Up To 17.30 Hrs

*Time and Date of Opening Technical Bids : --/--/2020 At 15.00 Hrs

*Time and Date of Opening Financial Bids : Will be communicated later

Place of Opening of Bids : Office of PCNTDA

Officer Inviting Bids : The Chief Executive Officer, PCNTDA.

INVITATION FOR BID (IFB)

PIMPRI CHINCHWAD NEW TOWN DEVELOPMENT

AUTHORITY AKURDI, PUNE 411 0444



Tender Notice No. :-.....

The Chief Executive Officer, PCNTDA, Pune invites online bids from eligible bidders/contractors who fulfill the conditions in the respective tender document for the construction of works detailed below. The bidders may submit bids for any or all of the following works.

Sr. No	Name of Work	Type of Tender	Cost Put to Tender (Rs.) without GST	Bid Security (EMD) (Rs.) e-payment gateway only	Time Limit in Months	Cost of Bid document (Rs.) e-payment gateway only (Non Refundable)
1	Construction of underground water tank in PCNTDA Administrative Building premises.	B-1 (Percentage rate Tender)	11,81,045/-	11,900/-	3 Months	590/- (with GST)

The applicant bidders shall submit the appropriate documents along with their completed bids to demonstrate the qualification of their company to participate in bid process.

- Achieved a maximum annual financial turnover during last Three years (in all Classes of Civil Engineering construction work only) for Rs. 8.86 Lakh in any one year. In support of this, attested copy of Annual Audit Report & turn over certificate certified by the Chartered Accountant should be produced.
- Satisfactorily completed (from start to finish) during the last five years as a prime contractor of at least one similar work for Government/Semi Govt Bodies / Private Entities etc. of value not less than for Rs. 8.86 Lakh is not more than one contract of 2019-20 price level.

Financial turnover and cost of completed works of previous years shall be given weight age of 10% per year based on Rupee value to bring them to 2019-20 price level. Similar works means RCC building construction work.

(c) Quantity executed in any one year (during last three years) the following minimum quantities of work (Approximately 30% of the tendered quantity)

DELETED

1. Joint Venture/ Consortium not permitted.

The detailed tender notice and the bid documents are available on www.mahatenders.gov.in. For interested bidders who are not registered with this e-tendering portal shall get themselves registered on www.mahatenders.gov.in. 24 X 7 technical support is available to bidders on toll free number 1800 3070 2232.

The bid document will be available on the website from --/--/2020 to --/--/2021 upto 17.30 Hrs. The Pre bid conference of bidders is convened on --/--/2020 at 15.00 hrs in PCNTDA office. The other details will be available on website during the period of Bid submission process.

Last date and time for submission of Bids is --/--/2020 up to 17.45hrs and the technical bids will be opened on --/--/2021 at 15.00hrs in the Conference Hall, 7th Floor, PCNTDA Building near Akurdi Railway Station, Pune 411 044.

Right to reject any or all the Bids is reserved by the competent authority and also reserves the right to hold or withdraw from or cancel the process at any stage up to the final selection.

The interested bidders shall note that after publication of this tender notice, for these works, any further information of bid process including the corrigendum, CSC/CSD will be available on website only.

Date:---/---/----

Sd/-

The Chief Executive Officer

Pimpri-Chinchwad New Town Development

Authority ,Pune 411 044

SECTION-1

INSTRUCTION TO BIDDERS (ITB)

Section II: Instructions to Bidders

Clause	A. General	Clause	D. Submission of Bids
1	Scope of Bid	19	Sealing and Marking of Bids
2	Source of Funds	20	Deadline for Submission of Bids
3	Eligible Bidders	21	Late Bids
4	Qualification of the Bidder	22	Modification & Withdrawal of Bids
5	One Bid per Bidder		E. Bid Opening and Evaluation
6	Cost of Bidding	23	Bid Opening
7	Site Visit	24	Process to be Confidential
	B. Bidding Documents and Evaluation	25	Clarification of Financial Bids
8	Content of Bidding Documents	26	Examination of bids and Determination of Responsiveness
9	Clarification of Bidding Documents	27	Correction of Errors
10	Amendment of Bidding Documents	28	Deleted
	C. Preparation of Bids	29	Evaluation and Comparison of Financial Bids
11	Language of Bid	30	Deleted
12	Documents Comprising the Bid		F. Award of Contract
13	Bid Prices	31	Award Criteria
14	Currencies of Bid and Payment	32	Employer's Right to Accept any Bid and to Reject any or all Bids 16
15	Bid Validity	33	Notification of Award and Signing of Agreement
16	Bid Security	34	Performance Security
17	Alternative Proposals by Bidders	35	Advances Payment and Security
18	Format and Signing of Bid	36	Dispute Review Expert
		37	Corrupt or Fraudulent Practices

Table of Clauses

A. General

1. Scope of Bid

The Employer (as defined in the Appendix to ITB) invites e - bids for construction of works (As defined in these documents and 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 date specified in the Contract.

1.3 Throughout these bidding documents, the terms “bid” and “tender” and their derivatives (bidder / tenderer, bid / tender, bidding / tendering, etc.) are synonymous.

2. Source of Funds

2.1 The expenditure on this project will be met from budget provision made by PCNTDA.

3. Eligible Bidders

3.1 This Invitation for Bids is open to all bidders.

3.2 All bidders shall provide in Section 2, Forms of Bid and Qualification Information, a statement that the Bidder is neither associated, nor has been associated, directly or indirectly, with the Consultant or any other entity that has prepared the design, specifications, 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 or supervision of the works, and any of its affiliates, 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 preliminary description of the proposed work method and schedule including drawings and charts, is necessary. The proposed methodology should include programme of construction backed with equipment planning and deployment duly supported with broad calculations and quality assurance procedures proposed to be adopted justifying their capability of execution and completion of work as per technical specifications within stipulated period of completion.

4.2 Deleted

4.3 The Employer has proposed to post qualify the bidders, hence all bidders shall include the following information and documents with their bids in Section 2:

- (a) copies of original documents defining the constitution or legal status, place of registration, and principal place of business; written power of attorney of the signatory of the Bid to commit the Bidder;
- (b) Total monetary value of civil construction works performed for each of the last five years;
- (c) Experience in work so for 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 (Not more than 3 months old).

- (h) Undertaking that the bidder will be able to invest minimum cash upto 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 sub-contractor in the relevant field should be annexed); and
- (l) The proposed methodology and programme 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.

4.4 Bids from joint venture are not permitted.

4.5 A Eligibility for Individual Bidder and Bidding Consortium:

To qualify for award of the Contract, each bidder should have in the last three years

(a) Achieved a maximum annual financial turnover during last three years (in all Classes of Civil Engineering construction work only) for Rs. 8.86 lakhs in any one year. In support of this, attested copy of Annual Audit Report & turn over certificate certified by the Chartered Accountant should be produced.

(b) Satisfactorily completed (from start to finish) during the last three years as a Prime contractor of at least one similar work for Government Department or undertaking or local self-governing bodies like Municipal Corporation , PWD, etc. of value not less than for Rs. 8.86 lakhs is not more than one contract of 2018-19 price level.

Financial turnover and cost of completed works of previous years shall be Given weightage of 10% per year based on Rupee value to bring them to 2019-20 price level. Similar works means RCC building construction work, compound wall, retaining wall etc.

(c) Quantity executed in any one year (during last five years) the following Minimum quantities of work (Approximately 30% of the Tendered quantity) DELETED

4.5 B Each bidder should further demonstrate.

(a) Each bidder should

- i. An affidavit on a Stamp Paper, duly attested from the Notary, that the information furnished with the bid documents is correct in all respects; and failure to submit the document as specified shall make the bid non-responsive.

(b) Each bidder must demonstrate:

- i. Evidence of availability (either owned or leased or rented) of items of construction equipment as stated in the Appendix to ITB.
- ii. Availability for this work of technical personnel as stated in the Appendix to ITB

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 4.3(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.

(c) Liquid assets and/or availability of credit facilities of no less than amount indicated in Appendix to ITB.

4.5 C To qualify for a package of contract 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 contract.

4.6 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 4.5(A) above. The employer permits subcontracting for electrification works, and external water supply & sanitary works. However they should be approved by PCNTDA.

4.7 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 = Minimum value of civil engineering works executed in any one 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. In this case N=1.75

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 next 1.5 years.

Note -1) 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 counter signed by the Engineer in charge, not below the rank of an Executive Engineer or equivalent. The assessed available bid capacity calculations shall be certified by the Chartered Accountant.

2) Deleted

4.8 Even though the bidders meet the above qualifying criteria. They are subject to be disqualified if they have

-Made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements; and/or

- Record of poor performance such as abandoning the works not properly completing the contract, inordinate delay since completion, litigation history, or financial failures etc; and/or

-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 or consortium shall submit only one bid for each package. A bidder who submits or participates in more than one Bid in any package (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 or 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 addendum issued in accordance with Clause 10:

Section	Particulars	CSD Volume No.
	Invitation for bids	I
1	Instructions to Bidders (ITB) & Appendix to ITB	
2	Qualification, Information, and other forms	
3	Conditions of Contract & Special Conditions of Contract	
4	Contract Data	
5	Securities and Other Forms Implementation Manual	
6	Technical Specifications & Additional Specifications	II
7	Form of bid	
8	Bill of Quantities	
9	Drawings	III
10	Documents to be furnished by bidder	IV

8.2 The Bid document is available on the web site www.mahatenders.gov.in. In this case the bidder will have to pay the cost of bid document as stated in Bid document and the payment shall be made by net banking payment gateway system. The bidder shall use the Digital Registration (identification) Key to obtain permission to make such payment.

8.3 The bidder is expected to examine carefully all instructions, conditions of contract, contract data, forms, terms and specifications, bill of quantities, forms 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 cable ("cable" includes facsimile) at the Employer's address indicated in the Notice Inviting Tenders. The Employer will respond to any request for clarification received not later than pre bid conference. Copies of the Employer's response will be uploaded on website, including a description of the inquiry, but without identifying its source.

9.2 Pre-bid meeting DELETED

10. Amendment of Bidding Documents

10.1 Before the deadline for submission of bids, the Employer may modify the bidding documents by uploading addenda.

10.2 Any addendum thus uploaded shall be part of the bidding documents.

- 10.3 To give prospective bidders reasonable time in which to take an addendum into account in preparing their bids, the Employer shall extend, as necessary, the deadline for submission of bids, in accordance with Clause 20.2.

C. PREPARATION OF BIDS

11. Language of Bid

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

12. Documents Comprising the Bid

12.1 The e-Bid submitted by the Bidder shall be in two separate parts: Part I This shall be named Technical Bid and shall comprise of:

(The tender shall be uploaded in two separate parts viz: (1) Technical Bid and (2) Financial Bid as stated in the bid document. The procedure for e-bidding shall be explained in the pre- bid meeting or can be clarified from the consultants to the work)

a) TECHNICAL BID (Shall be submitted by online only)

The technical bid shall be uploaded as per the procedure with the following documents:

- i) Earnest Money Deposit by net banking system (Bid security) as explained above. No exemption is permitted.
- ii) Documents for Eligibility Criteria as stated in the bid document.
- iii) Copy of audited balance sheet and Bid Capacity duly certified by C.A. for F.Y.2017-18, F.Y.2018-19, F.Y.2019-20, And certificate, undertakings and affidavits as specified in the bid document.
- iv) A list of works in hand and tendered for.
- v) List of machinery and plants immediately available with the Tenderer for use on this work and list of machinery proposed to be utilized on this work, but not immediately available and the manner in which it is proposed to be procured. The condition, cost and location of machinery shall be indicated.(Contractor shall submit document in support of ownership of machinery.)
- vi) Details of Technical personnel on the rolls of the tenderer giving details of experience and qualification of each of them and details of technical personnel to be appointed for this project along with bio-data duly signed by the person to be appointed.
- vii) Work plans prepared with help of computer software viz. MS-Projects / Primavera, indicating the methodology planning with resources logistics and work plan with indicative milestone shall be submitted duly signed by the Tenderer.
He should indicate requirement of machinery and manpower in work plan. A bid uploaded without work plan in the form of bar chart indicating milestone etc. would be considered as invalid and nonresponsive. The detailed work programmed will be finalized and approved by Employer after award of work. Contractor shall suitably modify the programmed as directed by Engineer.
- viii) Deleted
- ix) Litigation History if any.
- x) Subcontractors PQ documents DELETED
- xi) Evidence of access to financial resources along with name, address, telephone

number fax number of the bidders banker along with name of contact person from the bank.

- xiii) For bid documents downloaded from website, the payment should be made by gateway system.

Note: 1. All uploaded documents shall be in PDF format.

2. The bidder shall in no case upload any document related to the financial bid in the technical bid format. The violation will result in disqualification of the bidder from the bidding process.

3. The bidders shall not upload the bid document in scanned PDF or any other format as the technical bid

Part II. It shall be named Financial Bid and shall comprise of: FINANCIAL BID
(Shall be submitted by online only)

The bidder should upload his financial offer in digital format as e-tendering by using the digital registration key. The Contractor shall quote for the work as per details given in the main tender and also based on the details of conditions, stipulation made by the department and as per bill of quantity, specification and corrigendum / addendum issued before last date of receipt of tender document. The tender / offer shall be unconditional. Conditional offer will be rejected summarily as non-responsive.

12.2 Each part shall be separately considered.

12.3 Deleted.

13. Bid Prices

13.1 The Tenderer should quote his offer duly signed in terms of percentage of estimated rates at the appropriate place of tender documents to be submitted only in Envelope No.2 He should not quote his offer anywhere directly or indirectly in Envelope No. 1. The contractor shall quote for the work as per details given in the main tender and also based on the detailed set of conditions issued / Additional stipulations made by the authority, His tender shall be unconditional.

13.2 Deleted.

13.3 All duties, taxes (except GST), royalties 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. The estimated cost put to tender does not include GST applicable to Government Contract. GST tax regime being new transformation in direct taxes system; it is likely that the prevailing tax rate percentage may undergo changes during contract period. The contractor will be paid for the GST at prevailing percentage as applicable based on Government of India notifications (applicable to Government contracts) over and above the amount payable as per the accepted contract price on bill to bill basis.

13.4 The rates and prices quoted by the bidder shall be fixed for the duration of the Contract and shall not be subject to adjustment on any account

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 payments shall be made in Indian Rupees.

15. Bid Validity

15.1 Bids shall remain valid for a period of 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 discrepancy in bid validity period between that given in the undertaking pursuant to Clause 12.1 (v) and 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. The bidders may consider this request to extend the bid validity and however in case the bidder does not extend the bid validity, his bid security will be returned by the Employer. A bidder agreeing to the request will not be required or permitted to modify his bid.

15.3 Deleted.

15.4 Deleted.

16. Earnest Money / Bid Security

16.1 The Bidder shall furnish, as part of the Bid, Earnest Money/Bid security, in the amount as specified in the Appendix to ITB

16.2 The Earnest Money shall be paid by net banking payment gateway system by using digital registration key as stated in Appendix to ITB.

16.3 Any bid not accompanied by an acceptable Earnest Money, shall be rejected by the Employer as non-responsive.

16.4 The Bid Security of unsuccessful bidders will be returned within 30 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.

16.6 The Bid Security / Earnest Money will be forfeited:

- a) if the Bidder withdraws the Bid after its submission 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; and/or
 - II. Furnish the required Performance Security.

16.7 Additional Performance Security:

Demand Draft/BG for Additional Performance Security Deposit for Quoting Offer More than 1% below the tender cost.

Selected Lowest bidder (L1) has to submit the hard copy of Performance Security in the form of Demand Draft of required amount as per condition given in Performance Security to the office of the Chief Executive Officer, PCNTDA within 8 (Eight) days from the date of opening of financial bid

The Performance Security shall be made as per following calculation.

(i) If the tenderer quotes his offer 1% to 10% below the cost put to tender, he shall submit the Demand Draft of the amount equal to 1% of cost put to tender. Demand Draft of Additional Performance security shall be drawn directly from the account of Bidder / Bidding Firm.

(ii) If the Bidder intends to quote his offer more than 10 % upto 15 % below the estimated cost put to Bid then he should submit Additional Performance security 1 % for every percent after 10 % below percentage in addition to the 1% mentioned above in clause A for quoting below offer.

(eg. If Bidder quotes his offer 14.6% below the estimated cost put to bid, then he should submit $14.6 - 10 = 4.6 \% + 1\% = 5.6 \%$ amount of the cost put to bid as a total Additional Performance Security.)

For The Purpose of calculation of amount of Additional performance Security, the below Percentage (%) of Bidder shall be considered only upto two decimal points (Rounded upto two decimal points).

(iii) If the Bidder intends to quote his offer more than 15 % below the estimated cost put to Bid then he should submit Additional Performance security 2 % for every percent after 15 % below percentage in addition to the clause I & II mentioned above for quoting below offer, Demand Draft of Additional Performance security shall be drawn directly from the account of Bidder / Bidding Firm.

(eg. If Bidder quotes his offer 16.6% below the estimated cost put to bid, then he should submit $16.6 - 15 = 1.6 \% * 2 = 3.2 \% + 1\% + 5\% = 9.2 \%$ amount of the cost put to bid as a total Additional Performance Security.)

Note:-

- 1) If the Additional Performance Security of Demand Draft amount below Rs.1000/- then Demand Draft should be at least for Rs. 1000/-
- 2) Submit the Demand Draft of the cumulative amount which should be rounded upto two decimal points.
- 3) The date of submission of hard copy shall not be extended at any cost and the tender will be rejected if Additional Performance Security is not be submitted within 8 days from the date of financial opening
- 4) If the first lowest bidder fails to submit Additional Performance Security Deposit in stipulated time i.e. 8 days from the opening of financial bid then L-2 bidder will be communicated in writing and negotiated if he agrees to do the work at the same rate lower than the offer of L-1 bidder his tender will be accepted.
- 5) Such Demand Draft shall be strictly issued only by the Nationalized Bank or Scheduled Bank in favour of the Chief Executive Officer, PCNTDA. Valid For three Months
- 6) The Demand Draft should bear the MICR and IFSC Code Number of the issuing bank.
- 7) If it is found that the Demand Draft as above submitted by the bidder is False / Forged then the Earnest Money submitted by such bidder shall be forfeited. And such bidders will not be permitted in future to bid for any works published by PCNTDA for open bidding.

8) The work order to the successful contractor shall be issued only after the encashment of his Demand draft by the concerned Executive Engineer.

17. Deleted.

18. Format and Signing of Bid

18.1 The Bidder shall upload one set of the bid comprising of the documents as described in Clause 12.

18.2 Deleted

18.3 Deleted.

D. SUBMISSION OF BIDS

19. Sealing and Marking of Bids

19.1 Deleted

19.2 Deleted

19.3 Deleted.

19.4 Deleted

20. Deadline for Submission of Bids

20.1 Complete Bids (including Technical and Financial) must be received by the Employer uploaded on the website as specified in the Appendix to ITB not later than the date and time indicated in the Appendix to ITB. In the event of the specified date for the submission of bids being declared a holiday for the Employer, the Bids will be received up to the specified time on the next working day.

20.2 The Employer may extend the deadline for submission of bids by issuing an amendment in accordance with Clause 10, in which case all rights and obligations of the Employer and the bidders previously subject to the original deadline will then be subject to the new deadline.

21. Late Bids

21.1 Any Bid received by the Employer after the deadline prescribed in Clause 20 will be returned unopened to the Bidder.

22. Modification and Withdrawal of Bids - Deleted

E. Bid Opening and Evaluation

23. Bid Opening

Bid opening shall be carried out in two stages. Firstly, 'Technical Bid' of all the bids received (except those received late) shall be opened on the date and time mentioned in the Appendix to ITB. 'Financial Bid' of those bidders whose technical bid has been determined to be substantially responsive shall be opened on a subsequent date, which will be notified to such bidders.

23.1 The Employer will open the envelope marked the "Technical Bid" of all the bids received (except those received late), including modifications of Technical Bid made pursuant to Clause 22 in the presence of the bidders/bidders' representatives who choose to attend at the time, date and place specified in the Appendix to ITB. In the event of the specified date for the submission of bids 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 Deleted

- 23.3 In all other cases, the amount of Earnest Money, forms and validity shall be announced. Thereafter, the Employer at the opening as the Employer may consider appropriate, will announce the bidders' names and such other details.
- 23.4 The Employer will prepare minutes of the Bid opening, including the information disclosed to those present in accordance with Clause 23.1.
- 23.5 Within three or four days after the opening of the technical bids their evaluation will be taken up with respect to bid security, qualification information and other information furnished in Part I of the bid in pursuant to clause 12.1 and a list will be drawn up of the responsive bids whose financial bids are eligible for consideration.
- 23.6 The Employer shall inform the bidders, whose technical bid is found responsive, of the date, time and place of opening of the financial bids. The bidders so informed, or their representative, may attend the meeting of opening of financial bids.
- 23.7 At the time of the opening of the 'Financial Bid', the names of the bidders whose bids were found responsive in accordance with clause 23.5 will be announced. The financial bids of only these bidders will be opened. The responsive bidders' names, the Bid prices, the total amount of each bid, any discount/rebate and such other details as the Employer may consider appropriate will be announced by the Employer at the time of bid opening. Any Bid price, which is not read out and recorded, will not be taken into account in Bid Evaluation.
- 23.8 Deleted
- 23.9 The Employer shall prepare the minutes of the opening of the Financial Bids including the information disclosed to those present in accordance with sub clause 23.6
24. Process to be Confidential
- 24.1 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 attempt 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 Bids and Contacting the Employer
- 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 attempt by the bidder to influence the Employer's bid evaluation, bid comparison or contract award decision may result in the rejection of bidder's 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 Clauses 3 and 4; (b) has been properly signed; (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 Bids”, 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 nonconforming 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 figures and that in words, the words will govern; and
- b) where there is a discrepancy between the rate and the line item total resulting from multiplying the rate by the quantity, the 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 for the correction of errors and 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 shall be forfeited in accordance with Sub-Clause 16.6(b).

- 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’.

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 Clause 26.

29.2 In evaluating the bids, the Employer will determine for each Bid the evaluated Bid price by adjusting the Bid price after

- a) Making any correction for errors pursuant to Clause 27; or
- b) Making an appropriate adjustment 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/Employer'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 33 be increased and an additional performance security may be obtained 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 is unrealistically priced low and which cannot be substantiated satisfactorily by the bidder may be rejected as non-responsive.

30. Price Preference

30.1 There will be no price preference to any bidder.

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, provided that such Bidder has been determined to be (a) eligible in accordance with the provisions of Clause 3, and (b) qualified in accordance with the provisions of Clause 4; and
- II. To be within the available bid capacity adjusted to account to 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. The contract will in such cases be awarded to the next lowest bidder at lowest evaluated bid price.

32. Employer's Right to accept any Bid and to reject any or all Bids

32.1 Notwithstanding Clause 30, 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 Part I General Conditions of Contract called the "Letter of Acceptance") will state the sum that the Employer will pay to the Contractor in consideration of the execution, completion and

maintenance of the Works, and of routine maintenance of roads and utilities 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 the successful Bidder after the performance security is furnished.

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

34.1 Within 10 (ten) days after receipt of the Letter of Acceptance, the successful Bidder shall deliver to the Employer a Performance Security of Two percent (2%) of the Contract Price, for the period of 30 days after the expiry of defect liability period of 24 months plus additional security for unbalanced Bids in accordance with Clause 33.4 of ITB and Clause 52 Part I General Conditions of Contract and sign the contract.

34.2 The performance security shall be either in the form of a Bank Guarantee of entire amount or Demand Draft of 2% of contract price, in the name of the Employer, from a Nationalised or Scheduled Bank payable in PCMC area as defined in Appendix to ITB

34.3 Failure of the successful bidder to comply with the requirement of sub-clause 34.1 shall constitute sufficient ground for cancellation of the award and forfeiture of the bid security.

35. Advances

35.1 Mobilisation & Machinery Advance: Deleted.

35.2 Secured Advance - Deleted

36. Dispute Review Expert - Deleted.

37. Corrupt or Fraudulent Practices

37.1 The Employer will reject a proposal for award if it determines that the Bidder recommended for award 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. The Employer requires the bidders/Contractors to strictly observe the laws against fraud and corruption enforced in India, namely, Prevention of Corruption Act, 1988.

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
Instructions to Bidders - Clause Reference

Name of the Employer: The Chief Executive Officer, PCNTDA [Cl. 1.1]

Name of work: Construction of underground water tank in PCNTDA Administrative Building premises.

.General Description of the Project

INTRODUCTION:-

At present there are many offices i.e. PMRDA, Tahsil office, Company of Registrator office, Bank of Baroda etc are working with 100 % strength in this building. From last year PCMC is providing water supply alternate day. Because of this underground water tank capacity is needed to be increased. So estimate is prepared for the same with capacity of 1,00,000 Liters.

PROJECT DETAILS:

Project Name:- Construction of underground water tank in PCNTDA Administrative Building premises.

Site Address **SDC, sector 28 of PCNTDA**, Nigdi, Pimpri-Chinchwad, Maharashtra,

**Construction of
underground water tank**

1. Excavation in soil, hard murum, rock etc.
2. C.C. M-15 for foundation.
3. RCC M-30 for raft, pardi and slab.
4. Providing steel ladder, Man hole, plumbing as necessary.

The quality assurance shall be as per quality assurance plan prepared by engineer-in-charge. Curing, sampling & testing of steel and concrete shall be as per IS 1786 & IS 456-2000. The acceptance criteria, inspection and testing of RCC work and structure shall be as per IS 456-2000 requirements.

Note : It is mandatory for successful bidder to carryout soil investigation as suggested by Engineer in charge and the results thus obtained shall be the basis for design of entire building structure

PROVISIONS

UNDER GROUND WATER

TANK :

I) Excavation for foundation in all type of strata.

II) Cement concrete of M-15 grade for bed concrete.

III) RCC M-30 for Raft, Pardi, slab.

IV) Waterproofing using Polydee-MC for base coat, applying primer coat of TP-40 and applying Polydee-11 compound antibacterial food grade coating.

V) Ductile iron Man Hole Covers

VI) Brick Masonry Inspection chamber of 60 X 45 cm.

VII) CPVC pipe 40 mm dia with ferule connection, ladder.

RATE ANALYSIS:

Page 20 of 114

As per PWD SSR applicable for the year 2020-21.

2. Last 3 Years

2017-18
2018-19
2019-20

3. This Annual financial turn over amount is as stated in NIT [Cl.4.5A(a)]

4. Value of work is as stated in NIT [Cl.4.5 A(b)]
[Cl.4.5 A(c)]

5. Quantities of work executed -

DELETED

6. The cost of electric work is Rs. 1,03,504.00 [Cl. 4.6]

7. The cost of water supply / sanitary works is Rs.1,27,798 /- [Cl.4.6]

8. Liquid assets and / or availability of credit facilities is as stated [Cl.4.6]

In NIT

9. Price level of the financial year 2019-20 [GCC 47]

10. The pre-bid meeting was conducted at PCNTDA main office Cl.9.2.1]

DELETED

11. The technical bid will be opened as stated in NIT

12. Address of the Employer The Chief Executive Officer,

PCNTDA Main Office Building, near Akurdi Railway station, Pune 044.

13. Identification : Bid for “Construction of underground water tank in PCNTDA Administrative Building premises.”

14. The bid should be uploaded by 17.30 hrs on --/--/2020 [Cl.20.1 (a)]

15. The bid will be opened at 17.30 hrs on --/--/2020[Cl.23.1]

16. Performance Security in the form of BG / DD/ FDR. [34.1]

17. Deleted [Cl.36.1]

18. Escalation factors (for the cost of works executed and financial

19. Figure to a common base value for works completed)

Year Before	Multiply Factor
One	1.1
Two	1.21
Three	1.33 Page 21 of 114

20. List of Key Plant & Equipment to be deployed on Contract Work [Reference Cl. 4.5 (B) (a)]

SL	Type of Equipment	Maximum age as on date of submission of bid	Quantity (Nos.)
1	Reversible drum mix plant/ Batch mix, capacity- Not less than 10 cum/ hr	15 years	1 no
2	Needle Vibrator	15 years	1 nos.

NOTE:-

For machinery beyond the age of 10 years certificate of fitness by SE Mechanical/ACE Mechanical PWD every 1 years is necessary and shall be submitted along tender documents.

Reversible Drum Type Mixer/ Concrete Batch Mix Plant (PanMixer), ----- then -----.

Tendered shall furnish details of Ownership./Proof of Hire along with Owners Document

Age of machinery shall be as stated in Appendix to ITB.

Machinery as mentioned above required for the work shall be brought to site immediately by the Contractor as intimated by Engineer in charge and shall give successful trial run otherwise Performance Security and Additional Performance Security will be forfeited.

Note: The proof of the above equipment's shall be uploaded in technical submission.

21. List of Key Personnel to be deployed on Contract Work (for each project separately) [Reference Cl. 4.5 (B) (b)]

S.N	Personnel	Qualification	Experience	Nos.
1	Junior Engineers /Site Supervisors	B.E. Civil / D.C.E	3 years of experience in Building Construction	1

Note: The information of personnel shall be uploaded in technical submission.

1. Bidder shall submit the name and C.V.s of above Personnel in envelope no 1. If CV doesn't fulfill the requirement of qualification mentioned above, Envelope 2 shall not be opened.

2. If Bidder fails to upload C.V.s of Key Personnel, then Bidder shall be given 24hrs time to submit the same, failing which his envelope No 2 will not be opened.

Note: 1) The financial turn over credentials duly certified by the CA and technical experience duly

certified by Executive Engineer or equivalent or in case of private works by concerned

architect shall be uploaded in technical submission.

2) The Financial Eligibility is Average Annual Turnover in last three financial years and Technical eligibility means the value of work carried out in seven financial years.

The amount and validity period of the performance guarantee is:

Amount: 2 % of the contract price.

Validity Period: (A) Performance security shall be valid until a date 30 days after the expiry of Defect Liability Period of 24 months. The performance guarantee shall be either in the form of a Bank Guarantee or Demand Draft, in the name of the Employer as stated in bid document, from following banks would be accepted.

- a) Any Indian Nationalised Bank
- b) Any Scheduled Commercial Bank approved by RBI having a net worth of not less than Rs. 500 crores as per the latest Annual Report of the Bank.
.In the case of a Foreign Bank (issued by a branch in India), the net worth in respect of the Indian operations shall only be taken into account.

(B) The acceptance of the guarantees shall also be subject to the following conditions:-

- a. The capital adequacy of the Bank shall not be less than the latest norms prescribed by RBI.
- b. The bank guarantee issued by a non-scheduled Cooperative Bank shall not be accepted

APPENDIX - I

(Format of affidavit to be given on Rs. 500 Non-Judicial Stamp Paper)

AFFIDAVIT

I, Age..... years,
address

(Authorised signatory to sign the contract), hereby submit, vide this affidavit in truth, that I am the owner of the contracting firm/ authority signatory and I am submitting the documents in envelope no.1 for the purpose of scrutiny of the (Name of the work). I hereby agree to the conditions mentioned below:-

1. I am liable for action under Indian Penal Code for submission of any false / fraudulent paper / information submitted in envelope No.1.
2. I am liable for action under Indian Penal Code if during contract period and defect liability period, any false information, false bill of purchases supporting proof of purchase, proof of testing submitted by my staff, subletting company or by myself, I will be liable for action under Indian Penal Code.
3. I am liable for action under Indian Penal Code if any papers are found false /fraudulent during contract period and even after the completion of contract (finalisation of final bill).

Signature of Authorised person
Applicant/Contractor Name
Address.....

Place :-

Date :-

E-mail.....
Mobile No

Website.....

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 and for each member of consortium.
 - 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 construction work performed year wise in the last three years (in Rs. Million)
 - 1.3)
 - 1.3.1. Work performed as prime contractor will be considered, provided further that all other qualification criteria are satisfied (in the same name) on works of a similar nature over the last seven years.

Project Name	Name of the Employer	Description of Work	Contract No.	Value of Contract (Rs. Cr.)	Date of Issue of Work Order	Stipulated date of completion	Actual Date of Completion	Remarks Explaining delay of work & work Completion

- Attach certificate(s) as stated in ITB.
- Immediately preceding the financial year in which bids are received. Attach certificate 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.

A) Existing commitments and on-going works

Description Of works	Place & State	Contract No.	Name & Address of Employer	Value of Contract in Cr.	Stipulated Period of Completion	Value of works remaining to be completed	Anticipated date of completion

- Attach certificate(s) as stated in ITB.
- Immediately preceding the financial year in which bids are received.

B) Works for which bids already submitted:

Description Of works	Place & State	Name & Address of Employer	Estimated value of work in Cr.	Stipulated Period of completion	Date when Decision is expected	Remarks, if any

- 1.5) Availability of key items of Contractor's Equipment essential for carrying out the Works [Ref. Clause 4.5(B)(a)]. The Bidder should list all the information requested below. Refer also to Sub Clause 4.3 (d) of the Instructions to Bidders.

Item of Equipment	Requirement		Availability proposals			Remarks (form whom to be purchased)
	No.	Capacity	Owned/Leased To be procured	Nos./Capacity	Age / Condition	

- 1.6) Qualifications and experience of key personnel required for administration and execution of the Contract [Ref. Clause 4.5(B)(b)]. Attach biographical data. Refer also to Sub Clause 4.3(e) 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

- 1.7) Proposed sub-contracts and firms involved. [Refer ITB Clause 4.3 (k)]
 1.8) Financial reports for the last five years: balance sheets, profit and loss statements, auditors' reports (in case of companies/corporation), etc. List them below and attach copies.
 1.9) Evidence of access to financial resources to meet the qualification requirements: cash in hand, lines of credit. etc. List them below and attach copies of support documents.
 1.10) Name, address, and telephone, telex, and fax numbers of the Bidders' bankers who may provide references if contacted by the Employer.
 1.11) Information on litigation history in which the Bidder is involved.

Other Party(ies)	Employer	Cause of Dispute	Amount involved	Remarks showing Present Status

- 1.12) Statement of compliance under the requirements of Sub Clause 3.2 of the instructions Bidders. (Name of Architect/Consultant engaged for project preparation -Landmark Design Group)
 1.13) Proposed work method and schedule. The Bidder should attach descriptions, drawings and charts as necessary to comply with the requirements of the Bidding documents. [Refer ITB Clause 4.1 &4.3 (I)]
 1.14) Programme
 1.15) Quality Assurance Programmed

2. Deleted

3. Additional Information from Bidder

3.1 Bidders should provide any additional information required to fulfil the requirements of;

- i) Affidavit
- ii) Undertaking
- iii) Declaration by bidder.
- iv) Articles of Agreement in case of Hired Machinery required for this work.
- v) Demand Draft / Bank Guarantee of Additional Performance Security Deposit. (If Applicable)

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

AFFIDAVIT

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 MIs ---- have abandoned any work on National Highways in India / PWD nor any contract awarded to us for such works have been rescinded, during last five years prior to the date of this bid.
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, certify that I am going to use the technology approved by the employer as stated appendix to ITB.

(Signed by an Authorised Officer of the Firm)

Title of Officer

Name of Firm

DATE

UNDERTAKING

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

(Signed by an Authorized Officer of the Firm)

Title of Officer

Name of Firm

Section - 3

Conditions of Contract

Table of Clauses

A. General	35. Correction of Defects
1. Definitions	36. Uncorrected Defects
2. Interpretation	D. Cost Control
3. Language and Law	37. Bill of Quantities
4. Engineer's Decisions	38. Change in Quantities
5. Delegation	39. Variations
6. Communications	40. Payments for Variations
7. Subcontracting	41. Cash Flow Forecasts
8. Other Contractors	42. Payment Certificates
9. Personnel	43. Payments
10. Employer's and Contractor's Risks	44. Compensation Events
11. Employer's Risks	45. Tax
12. Contractor's Risks	46. Currencies
13. Insurance	47. Price Adjustments
14. Site Investigation Reports	48. Retention
15. Queries about the Contract Data	49. Liquidated Damages
16. Contractor to Construct the Works & do maintenance	50. Bonus
17. The Works to Be Completed by the Intended Completion Date	51. Advance Payments
18. Approval by the Engineer	52. Securities
19. Safety	53. Deleted
20. Discoveries	54. Cost of Repairs
21. Possession of the Site	E. Finishing the Contract
22. Access to the Site	55. Completion
23. Instructions	56. Taking Over
24. Dispute Redressal System	57. Final Account
25. Procedure for disputes	58. Operating and Maintenance Manual
26. Replacement of dispute & Review Expert	59. Termination
B. Time Control	60. Payment upon Termination
27. Programme	61. Property
28. Extension of the Intended Completion Date	62. Release from Performance
29. Deleted	F. Special Conditions of Contract
30. Delays Ordered by the Engineer	57. Labour
31. Management Meetings	58. Compliance with Labour Regulations
32. Early Warning	59. Drawings and Photographs of the Works
C. Quality Control	60. The Apprenticeship Act, 1961
33. Identifying Defects	
34. Tests	

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 Dispute Review Expert) - Deleted.

Bill of Quantities means the pre 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 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 and Satisfactory Performance Certificate is the certificate issued by Engineer, after the Defect Liability Period has ended and upon correction of Defects by the Contractor.

The Defects Liability Period is 24 months calculated from the Completion Date.

Drawings include calculations and other information provided or approved by the Engineer for the execution of the Contract.

The Employer / Owner / Department / Client is the party as defined in the Contract Data, who employs the Contractor to carry out the Works. The Employer may delegate any or all functions to a person or body nominated by him for specified functions.

The Engineer is the person named in the Contract Data (or any other competent person appointed by the Employer and notified to the Contractor, to act in replacement of the Engineer) who is responsible for supervising the execution of the Works and administering the Contract.

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 after the approval from Employer.

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

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

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

Site Investigation Reports are those that were included in the bidding documents and are factual interpretative reports about the surface and subsurface 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 Sub-Contractor 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 that are needed for construction or installation of the Works.

A Variation is an instruction given by the Engineer after the approval from Employer, which varies the Works.

The Works are what the Contract requires the Contractor to construct, install, maintain, 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 these Conditions of Contract.

- 2.2 If sectional completion is specified in the Contract Data, references in the Conditions of Contract to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).
- 2.3 The documents forming the Contract shall be interpreted in the following order of priority:
- (1) Agreement,
 - (2) Letter of Acceptance, Notice to Proceed with the Work,
 - (3) Contractor's Bid,
 - (4) Contract Data,
 - (5) Conditions of Contract including Special Conditions of Contract and ITB& Appendix to ITB
 - (6) Specifications,
 - (7) Bill of Quantities
 - (8) Drawings, 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 Contract Data. However the correspondence by employer may be in local language. The court for the disputes shall be the District Court, Pune.

4 Engineer's Decisions

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

5. Delegation

- 5.1 The Engineer, duly informing the Employer, may delegate any of his duties and responsibilities to other people except to the Adjudicator, after notifying the Contractor, and may cancel any delegation after notifying the Contractor.

6. Communications

- 6.1 Communications between parties that are referred to in the Conditions shall be effective only when in writing. A notice shall be effective only when it is delivered.

7. Subcontracting

- 7.1 The Contractor may subcontract any portion of work, up to a limit and manner specified in the document, with the approval of the Engineer but Engineer may not assign the Contract without the approval of the Employer in writing. Subcontracting shall not alter the Contractor's obligations. The contractor or his identical sub-contractor should possess required valid electrical license for executing the building electrification works and should have sufficient experience for the work and should be approved by PCNTDA. The contractor or his identical sub-contractor should possess required valid license for executing the water supply/ sanitary engineering work and should have sufficient experience for the work and should be approved by PCNTDA.

8. Other Contractors

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

9. Personnel

9.1 The Contractor shall employ the technical personnel named in the Contract Data or other technical persons approved by the Engineer. The Engineer will approve any proposed replacement of technical personnel only if their relevant qualifications and abilities are substantially equal to or better than those of the personnel stated in the Contract Data. If the personnel stated in the contract data are not deployed on site by the contractor, it will treat as a breach of contract and action will be taken as per clause 53.

9.2 If the Engineer asks the Contractor to remove a person who is a member of the Contractor's staff or work force, stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the Works in the Contract.

10. Employer's and Contractor's Risks

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

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 the Employer's country, 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), natural calamities 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

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

13. Insurance

13.1 The Contractor at his cost shall provide, in the joint names of the Employer and the Contractor, insurance cover from the Start Date to the completion of defect liability period for the following 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 to property (except the Works, Plant, Materials, and Equipment) in connection with the Contract; and
- d) Personal injury or death.

13.2 Insurance 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 Indian Rupees to rectify the loss or damage incurred. The Insurance policies shall be obtained from "The Director of Insurance" (Govt. of Maharashtra) MHADA BHAVAN, Bandra East, Mumbai.

13.3 If the Contractor does not provide any of the policies and certificates required, the Employer may effect 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 debt due.

13.4 Alterations to the terms of insurance shall not be made without the approval of the Engineer and Employer.

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

14. Site Investigation Reports

14.1 The Contractor, in preparing the Bid, may not rely on any Site Investigation Reports if any referred to in the Contract Data, supplemented by any other information available to him, before submitting the bid.. The most responsive bidder will have to conduct soil investigation (As directed by Engineer in Charge) and prepare structural design based on this investigation only.

15. Queries about the Contract Data

15.1 The Project Co-ordinator will clarify queries on the Contract Data.

16. Contractor to Construct the Works

16.1 The Contractor shall construct, and install and maintain the Works in accordance with the Specifications 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 Programme 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 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.

18.6 The employer will offer land parcel against undertaking for construction of temporary structures like stock yard, labour camp, laboratory and site office etc. The contractor shall give undertaking that he will remove all the temporary structures on completion of the project or at the time of termination and bring the land parcel to original status and handover the same to the employer. The contractor shall erect fencing for this land parcel. The employer will not charge any deposit and rent against this land parcel.

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 shall be the property of the Employer. The Contractor shall notify the Engineer of such discoveries and carry out the Engineer's instructions for dealing with them.

21. Possession of the Site

21.1 The Employer shall give complete possession / partial possessions of the Site to the Contractor from the date of signing of agreement.

22. Access to the Site

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

The Employer

The Engineer

23. Instructions

23.1 The Contractor shall carry out all instructions of the Engineer, 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

Dispute resolution will be as per Cl. 25 below.

25. Procedure for Disputes

25.1 All disputes and differences of any kind whatever arising out of or in connection with the contract or the carrying out of the work (whether during progress of the works or after their completion and whether before or after the determination, abandonment or breach of the contract) shall be referred to the Engineer. If the Contractor within 21 days of reference is not satisfied with the decision or non-decision by Engineer, he should refer such dispute as stated below.

The Contractor in writing shall refer the dispute along with the decision / non-decision of the Engineer to the Apex committee headed by the Chairman PCNTDA , CEO and Technical Member Appointed by PCNTDA.

25.2 The decision of the apex committee is final and binding on the contractor and the Engineer.

25.3 The provision of arbitration is not permitted in this contract.

26 Replacement of Dispute Review Expert - Deleted

B Time Control

27. Programme

27.1 The Engineer shall issue the indent of work in stages specifying the time limit for the same as and when required. 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 forecasts, using software programmes like MS Project / Primavera.

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 Works, including any changes to the sequence of the activities.

27.3 The Contractor shall submit to the Engineer for approval an updated Programme at intervals. 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 shall show the effect of Variations and Compensation Events.

28. Extension of the Indented Completion Date

28.1 The Engineer shall extend the Indented Completion Date only after the approval of Employer if a Compensation Event occurs or a 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 Works, which would cause the Contractor to incur additional cost.

28.2 The Engineer shall decide whether and by how much time to extend the Indented Completion Date within 21 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 cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Indented Completion Date.

28.3 Dispute review expert under clause 24.1 - Deleted.

29. Deleted

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. Delay/delays totalling more than 30 days will require prior written approval of the Employer.
31. Management Meetings
- 31.1 The Engineer may require the Contractor to attend a management meeting. The business of a management meeting shall be to review the plans for the Works.
- 31.2 The Engineer shall record the business of management meetings and provide copies of the record to those attending the meeting. The responsibility of the parties for actions to be taken shall be decided by the Engineer either at the management meeting or after the management meeting and stated in writing to all those who attended the meeting.
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
- 34.1 The contractor shall be solely responsible for :
- a. Carrying out the mandatory tests prescribed in the specification of Ministry of Shipping, Road Transport and Highways, State PWD, MJP and
 - b. For the correctness of the test results, whether preformed in his laboratory or elsewhere.
- 34.2 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.
35. Correction of Defects noticed in the during the Defect Liability and maintenance Period..

- 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

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

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. 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 for the work executed, with application of above / below % accepted by the employer to decide initial contract price.

38. Changes in the Quantities

- 38.1 If the final quantity of the work-done differs from the quantity in the Bill of Quantities for the particular item by more than 25 percent provided the change exceeds 10 % of initial Contract Price, the Engineer shall adjust the rate to allow for the change.
 - 38.1.1 The Engineer shall not adjust rates from changes in quantities without the prior approval of the Employer
 - 38.1.2 If requested by the Engineer, the Contractor shall provide the Engineer with a detailed cost breakdown of the Bill of Quantities.
- 38.2 The Engineer shall not adjust rates from changes in quantities if thereby the Initial Contract Price is exceeded by more than 20 per cent, except with the Prior approval of the Employer
- 38.3 If requested by the Engineer, the Contractor shall provide the Engineer with a detailed cost breakdown of the Bill of Quantities.

39. Variations

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

40. Payments for Variations

- 40.1 If rates for Variation items are specified in the Bill of Quantities, the Contractor shall carry out such work at the same rate. This shall apply for Variations only up to the limit prescribed in the Clause 38. If the Variation exceeds this limit, the rate shall be derived under the provisions of clause 40.2 and 40.3 for quantities (higher) exceeding the deviation limit.
- 40.2 If the rates for Variation are not specified in the Bill of Quantities, the Engineer shall derive the rate from similar items in the Bill of Quantities.
- 40.3 If the rate for Variation item cannot be determined in the manner specified in Clause 40.1 or 40.2, In the absence of similar rates in Bill of Quantities the rate shall be as per the then prevailing schedule of rates of the district public works division / Maharashtra Jeevan Pradhikaran/ MSEDCL with application of above / below % accepted for this contract.. The decision of the Employer on the rate so determined shall be final and binding on the Contractor.
If the rates are not available in above referred schedule of rates, the rate analysis shall be submitted by the contractor based on market prices. If the Contractor's quotation is unreasonable, the Engineer may order the Variation and make a change to the Contract Price which shall be based on Engineer's own forecast of the effects of the Variation on the Contractor's costs.
- 40.4 If the Engineer decides that the urgency of varying the work would prevent a quotation being given and considered without delaying the work, no quotation shall be given and the Variation shall be treated as a Compensation Event.
- 40.5 The Contractor shall not be entitled to additional payment for costs which could have been avoided by giving early warning.
41. Cash Flow Forecasts
- 41.1 When the Programme is updated, the Contractor shall 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 value of the work executed less the cumulative amount certified previously supported with detailed measurement of the items of work executed.
- 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.
- 42.3 The value of work executed shall be determined, based on measurements 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 also include the valuation of Variations and Compensation Events.
- 42.6 The Engineer / Employer 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.
- 42.7 The Contractor shall supply the Engineer with a detailed account of the total amount that the Contractor considers payable under the Contract after 12 months of completion but before the end of the Defects Liability Period. The Engineer shall 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.

43. Payments

- 43.1 Payments shall be adjusted for deductions for advance payments, security deposit, other recoveries in terms of the Contract and taxes at source, as applicable under the law. The Engineer will scrutinize the bill and after due verification certify the bill for the payment. The Employer may get the work verified, through some designated officer's equivalent to the rank of Junior Engineer, Deputy Engineer & Executive Engineer. Such designated officers shall verify the work to the extent of 10%, 10% and 5% before recommending the bill for payment. The Employer shall pay the Contractor the amounts Engineer had certified within 28 days of the date of each certificate.
- 43.2 The Employer will appoint an officer and notify to the contractor, who shall make the payment certified by the Engineer.
- 43.3 Items of the Works for which no rate or price has been entered in the Bill of Quantities, will not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.

44. Compensation Events

- 44.1 The following shall be Compensation Events unless they are caused by the Contractor:
- a) The Engineer orders a delay or delays exceeding a total of 90 days.
 - b) The effects on the Contractor of any of the Employer's Risks.
- 44.2 If a Compensation Event would prevent the Works being completed before the Indented Completion Date, the Indented Completion Date shall be extended. The Engineer shall decide whether and by how much the Indented Completion Date shall be extended after the approval of Employer.
- Deleted

45. Tax

All duties, taxes (except GST), royalties 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. The estimated cost put to tender does not include GST applicable to Government Contract. GST tax regime being new transformation in direct taxes system; it is likely that the prevailing tax rate percentage may undergo changes during contract period. The contractor will be paid for the GST at prevailing percentage as applicable based on Government of India notifications (applicable to Government contracts) over and above the amount payable as per the accepted contract price on bill to bill basis.

46. Currencies

All payments will be made in Indian Rupees.

47. Price Adjustment :-Deleted.

48. Retention

- 48.1. The Employer shall retain from each payment due to the Contract or the proportion stated in the Contract Data until Completion of the whole of the Works.
- 48.2. On Completion of the whole of the Work shall the total amount retained is repaid to the Contractor and when the Defects Liability Period has passed and the Engineer has certified that all Defects notified by the Engineer to the Contractor before the end of this period have been corrected.
- 48.3. On completion of the whole works, the contract or 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. The Contractor shall be paid interest on the overpayment calculated from the date of payment to the date of repayment at the rates specified in Sub Clause 43.1.
- 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. Bonus - Deleted
51. Advance Payment including Secured Advance - As stated in ITB Clause no. 35.2 .
52. Securities
- 52.1 The Performance Security equal to 2% (Two percent)[(and additional security for unbalanced bids)]of the contract price and 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 the form given in the Contract Data and by a scheduled commercial bank. The Performance Security shall be valid until a date 28 days from the date of expiry of Defect Liability Period and the additional security for unbalanced bids shall be valid until a date 28 days from the date of issue of the certificate of completion. The performance security also can be paid by demand draft/BG.
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 Liability Period shall be remedied by the Contractor at their 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 Works is completed.

56. Taking Over

56.1 The Contractor shall maintain the site and work for a period of one year after completion. He shall handover the individual floor to the end user/customer during this period as per instruction of the Employer. The Employer will take over the site after completion of maintenance period of 12 months or as per agreement between the contracting Parties depending upon the situation.

57. Final Account

57.1 The Contractor shall supply the Engineer with a detailed account of the total amount that the Contractor considers payable under the Contract after 24 months of completion but before the end of the Defects Liability Period. The Engineer shall 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 AS built drawings and maintenance manuals are to be prepared by contractor final bills on or before the dates informed by Engineer. The Engineer shall modify the maintenance manuals if required and approve within 15 days of such submission by contractor.

58.2 If the Contractor does not supply the Drawings and/or manuals by the dates stated in the by the Engineer, or they do not receive the Engineer's approval within given time frame, the Engineer shall withhold the amount stated in the Contract Data from payments due to the Contractor. In such event Engineer may prepare drawings / maintenance manuals which are binding on the contractor at his risk and cost and Engineer shall recover the amount stated in the contract data from payments due to the contractor.

59. Termination

59.1 The Employer may terminate the Contract if the Contractor 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 28 days when no stoppage of work is shown on the current Programme and the stoppage has not been authorized by the Engineer;
- b) the Contractor is declared as bankrupt or goes into liquidation other than for approved reconstruction or amalgamation;

- c) the Engineer/Employer 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;
- d) the Contractor does not maintain a Security, which is required;
- e) the Contractor has delayed the completion of the Works by the number of days for which the maximum amount of liquidated damages can be paid, as defined in clause 49;
- f) the Contractor fails to provide insurance cover as required under clause 13;
- g) if the Contractor, in the judgement of the Employer, has engaged in the corrupt or fraudulent practice in competing for or in executing the Contract. For the purpose of this clause, "corrupt practise" 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 Employer and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid process at artificial non-competitive levels and to deprive the Employer of the benefits of free and open competition.
- h) if the Contractor has not completed at least thirty percent of the value of Work required to be completed after half of the completion period has elapsed;
- i) if the Contractor fails to set up a field laboratory with the prescribed equipment, within the period specified in the Contract Data; and
- j) any other fundamental breaches as specified in the Contract Data.
- k) The contractor misuses the land parcel offered by the employer.

59.3 Deleted

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

61. Property

61.1 All Materials on the Site, Plant, Equipment, Temporary Works, and Works shall be deemed to be the property of the Employer for use for completing balance work if the Contract is terminated because of the Contractor's default.

62. Release from Performance

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

F. Special Conditions of Contract

1. LABOUR :

The successful tender will be required to produce to the satisfaction of the specified concerned authority, valid and concurrent license issued in his favor under the provisions of the Contract Labor (Regular and Abolition) Act, 1970, before starting the work. Failure to do so, acceptance of the tender shall be liable to be withdrawn and security deposit forfeited.

The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labor, 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 labor 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 labor enactments and rules made there under, regulations, notifications and bye laws of the State or Central Government or local authority and any other labor law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labor law in future either by the State or the Central Government or the local authority. Salient features of some of the major labor 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 or 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.F. 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.F. 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 Labor (Regulation & Abolition) Act 1970:- The Act provides for certain welfare measures to be provided by the Contractor to contract labor 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 license from the designated Officer. The Act is applicable to the establishments or Contractor of Principal Employer if they employ 20 or more contract labor.
- 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 a 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 Labor (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 Labor 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 employs 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 a registration certificate from the Registering Officer appointed by the Government.
- p) Factories Act 1948 :- The Act lays down the procedure for approval at 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.

4. Drawings and Photographs of the Works

The contractor shall do photography/video photography of the site firstly before the start of the work, secondly mid-way in the execution of different stages of work and lastly after the completion of the work. No separate payment will be made to the contractor for this. The Contractor shall not disclose details of Drawings furnished to him and works on which he is engaged without the prior approval of the Engineer in writing. No photograph of the works or any part thereof or plant employed thereon, except those permitted under clause 59.1, shall be taken or permitted by the Contractor to be taken by any of his employees or any employees of his sub-Contractors without the prior approval of the Engineer in writing. No photographs/ Video photography shall be published or otherwise circulated without the approval of the Engineer in writing.

5. The Apprentices Act 1961

The Contractor shall duly comply with the provisions of the Apprentices Act 1961 (III of 1961), the rules made there under and the orders that may be issued from time to time under the said Act and the said Rules and on his failure or neglect to do so he shall be subject to all liabilities and penalties provided by the said Act and said Rules.

SITE HSE PLAN

(Health, Safety and Environmental Plan)

1.0 INTRODUCTION

1.1 SCOPE AND APPLICABILITY his document defines the Health, Safety and Environmental management system requirements of BIDDER Limited during the execution stage of project at construction sites. These requirements are applicable to all active sites managed by BIDDER.

Requirements defined in the manual are applicable to all personnel of BIDDER and their sub-contractors working on the project. In case any work is to be carried out within or affected area of existing facility of client, the norms as specified by the Owner / Project Management Consultant (PMC) shall prevail and supersede these requirements.

PURPOSE

The purpose of this manual is to ensure that all persons concerned with the project carry out the effective management of occupational health and safety in all activities in order that people, plant and the environment are not exposed to any undue risks / impacts.

ADMINISTRATION

The Site In charge & team are responsible for the communication and enforcement of the requirements defined in the site HSE Manual.

2.0 Duties and responsibilities

2.1 Responsibilities of all personnel working at site (Including persons working on Behalf of BIDDER and other person directly associated with our business, visiting the work place)

All personnel working at site have responsibility to work safely, prevent pollution and comply with BIDDER policies, plans and procedure. They shall comply with the requirements of BIDDER - HSE management System.

They shall take reasonable care of their own health, safety and ensure that their actions do not adversely affect the safety of co-workers, plant and property.

Site In-charge

Main Responsibilities of Site In-charge shall be:-

- Providing inputs for updating site HSE Manual for site specific requirements
- Coordinate, the site HSE activities, and effective implementation of Site HSE Manual
- Authorize disciplinary actions, as required.
- Be informed / participate in incident analysis.
- Co-ordinate with the Corporate Office.

Site HSE In charge:

The HSE function at the site may be headed by Site HSE in charge. Main Responsibilities of Site HSE In charge shall be:-

- Site HSE in charge reports to site in charge and shall assist site management to effectively implement the requirements of Site HSE Manual.
- Liaison with Owner and Sub-contractors representatives on HSE matters on behalf of site in charge.
- Co-ordinate with subcontractors for implementation of requirements of this manual
- Ascertain HSE awareness of all personnel on site.
- Ensure compliance and in case of violations initiate disciplinary action, as required.
- Verify and maintain the statistical data submitted by subcontractors.
- In case of any accident / incident, conduct analysis and suggest corrective measures as required.
- In case of Major/Fatal accidents organise investigation by HSE in charge of other site
- Investigation for Minor incidents will be done by respective HSE In charge onlyThe Site HSE In charge is in charge of all general aspects of site HSE. In particular role and responsibilities of Site HSE in charge during various phases of site activities shall be:-

At start of works:

- Conducting periodic inspection of equipment in general and, in particularly for equipment required by regulations and/or Owner standards.
- Checking suitability of Personal protective equipment (PPE) for intended use.
- Review and provide inputs on Hazard Identification and Risk Assessment (HIRA) and Environmental aspects for the site for updating Site HSE Manual.

During the execution of the works:

- Performing periodic inspections to ensure compliance with BIDDER's HSE standards and requirements.
- Participate as an observer in construction meetings in order to be able to forestall any new risks/ aspects.
- Organise periodic meetings with Sub-contractor's representatives, once in a six months to discuss typical problems and particularly important aspects of HSE.
- Taking particular care whenever subcontractor is to undertake a new type of work that may involve special risks. Such special risks, if any, should always be well communicated and special procedures shall be instituted.
- Organize Daily tool box talks by site supervisor & weekly by HSE Incharge.
- Maintain copies of all necessary work permits in order to ensure compliance with their conditions and regulations.
- Safety committees review meetings shall be organized once in three months for project sites smaller than Rs. 100 crores and once in a month for project sites more than Rs. 100 Crores. End of works:

- Drawing up an HSE statistical overview of the entire construction period.

Main Responsibilities of Sub-contractor

- Subcontractors shall be responsible for the HSE of their own activity, personnel and property on site assigned for their scope of work. They shall also be responsible for compliance with all applicable local statutes, rules, regulations and BIDDER's HSE Requirements, as defined in this manual.
- Subcontractors should ensure that the requirements are read, understood and implemented throughout the duration of the Contract.
- Site organization should have competent safety officer(s) depending up on the number of workers to be generally deployed by the subcontractor.

Welfare of construction workers

Drinking Water Arrangement

- Sufficient supply of Portable water shall be maintained at site. The portable of drinking water shall be checked periodically, specifically in case of change of source.
- Water storage tanks shall be inspected / cleaned at least once in a month.
- Nearby area shall be kept clean and drained.
- Water quality shall be tested for portability at least once in six months, if it is not packaged drinking water.

Toilets

- Sufficient number of latrines and urinals shall be provided.
- Latrines shall be under cover and so partitioned off as to secure privacy, and shall have a proper door and fastenings
- I. Where both male and female construction workers are employed, outside each block of latrines or urinals a notice containing indicating therein "For Men Only" or "For Women Only", as the case may be shall be displayed. The notice shall also be displayed in local vernacular language
- II. Such notice shall also bear the figure of a man or of a woman, as the case may be.
- Latrines and Urinals shall be adequately lighted and shall be maintained in a clean and sanitary condition at all times.
- Latrines and Urinals other than those connected with a flush sewage system shall comply with the requirements of the local public health authorities
- Water shall be provided by means of a tap or otherwise, so as to be conveniently accessible in or near every latrine and urinal.

Canteens

- In every place wherein not less than two hundred and fifty construction workers are ordinarily employed, the employer shall provide an adequate canteen in the manner as specified in the Building Workers Rules for the use of construction workers.
- The canteen shall consist of a dining hall with furniture sufficient to accommodate construction workers using such canteen, a kitchen, a store room, a pantry and washing places separately for construction workers and for utensils.
- The canteen shall be sufficiently lighted at all times when any person has access to it.
- The floor of canteen shall be made of smooth and impervious material and inside walls of canteen shall be lime-washed or colour-washed at least once in every six months and that the inside walls of the kitchen of such canteen shall be lime washed once in every three months.
- The precincts of the canteen shall be maintained in a clean and sanitary condition.
- Waste water from canteen shall be carried away in suitable covered drains and shall not be allowed to accumulate in the surroundings of such canteen.
- Suitable arrangements shall be made for the collection and disposal of garbage from such canteen.
- Building of the canteen shall be situated at the distance not less than 15 metres from any latrine or urinal or any source of dust.

Workers Rest Shelter

- Separate rest shelter shall be maintained for male and female workers. Rest shelters shall be kept clean.

First Aid

- Sufficient number of first aid boxes shall be provided and maintained for providing first-aid to the workers. Stretcher shall also be made available at site. Every first-aid box shall be distinctly marked “First Aid” and shall be equipped with the articles as specified below:

• Paracetamol /crocin	10 tabs
• Bandage clothe	2 rolls
• Bandage cotton	2 rolls
• Bentadine solution	1 bottle
• Cotton ear buds	20 nos
• Soframycin / Silverex	1 tube
• Moov Ointment	1 tube
• Gentamycin	1 tube
• Band-aid	5 nos
• Scissors	1 no

First Aid boxes shall be kept in the charge of a person trained in first-aid and shall be readily available during working hours. For the purpose, sufficient number of personnel shall be trained on First aid.

The first aid boxes shall be checked every month for the contents and “Use before Date”, and shall be topped up as required. Record of checking of first aid boxes shall be maintained.

3.0 SITE HSE Requirements

Following are the minimum requirements, but not limited to, with regards to HSE for various aspects at Construction site.

Site Office Safety

Office equipment and furniture shall be provided and maintained in safe working order. Awareness of all the personnel working in these temporary facilities with regards to following arrangements / requirements should be ensured:-

Fire

- All personnel shall be familiar with evacuation procedures, escape routes and safety exits.

Electrical:

- No office electrical equipment shall be used in faulty or unsafe conditions.
- Only a qualified person shall repair faulty electrical equipment.
- Leads on equipment shall not be routed in such way that they may cause a tripping hazard across walkways, corridors or open spaces.
- “Please switch off power when not in use” note shall be displayed at all locations.

Furnishings and Fittings:

- Safety shall be the prime consideration when arranging furniture and fittings in any office space.
- No furniture shall block or restrict movements in walkways, corridors, or other escape routes.

Flammable Material and Solvents:

- All flammable liquids (such as toners for photocopiers) shall be handled and stored with care. Only a minimum quantity for ready use shall be stored. They should be stored in the shade and away from any source of heat, potential ignition or naked flame.

First Aid Box:

- At least one First-aid box (with specified contents) shall be available and kept conspicuously identified at the office. List of First-aiders shall be maintained at the office.
- HSE In charge shall be immediately notified for any personnel injury.

Drinking Water

- Sufficient supply of Potable water shall be maintained. Potable of drinking water shall be checked periodically, specifically in case of change of source. Pot ability test for drinking water is not in applicable in case of Mineral water /ROPS systems / Aqua guard Purification system.

Exits

- Every office building shall be provided with exits sufficient to permit the prompt escape of occupants in case of emergency.
- Exits and the access and egress from exits shall be maintained so that they are unobstructed and are accessible at all times. Exits shall be identified conspicuously.
- All exits shall discharge directly to an open space that gives safe access to a public way.

3.2 Control of Visitors

Concerned BIDDER officer shall ensure that the visitors at work place are made aware of relevant HSE requirements.

The following shall be ensured:

- The visitor shall be briefed on the safety norms pertinent to the visitor's work.
- The visitor shall be informed of the requirement of use of PPEs depending on the nature of work and work location to be visited.
- The visitor shall be informed of "No Smoking" Requirement.
- Requisite PPEs shall be provided to the visitor. The visitor shall ensure that the same are used properly.
- Safe route from the office to site shall be shown to the visitor. The visitor shall be strictly advised not to loiter around the site.
- Smoking zones shall be identified

3.3 Vehicle Movement

Following shall be ensured:-

- Only Licensed drivers shall drive the vehicle.
- Speed limits shall be clearly displayed. Speed limits shall be observed strictly.
- Vehicles shall be parked at the designated parking place.
- No vehicle shall be parked under LT / HT power lines.
- Vehicles shall not block emergency evacuation road, escape path, access road for fire tenders / rescue vehicles etc.
- No worker shall take rest / sleep under any vehicle.

3.4 Storage of Flammable Liquid

Flammable liquid at project site may include Diesel, Lubricating Oil, and Construction chemicals etc. The following measures shall be taken:

- Flammable liquid containers shall be stored on concreted floor. Dyke wall around the storage tank / drum shall be provided to prevent loss of containment.
- Electrical connection in the flammable liquid store shall not be provided.
- In the case of storage in tanks, the capacity of the tank shall be conspicuously marked on the tank.
- Smoking, fire near the storage area shall be prohibited. Caution board to the effect shall be displayed.
- Foam type fire extinguishers and Sand buckets shall be provided near the storage area.
- No receptacle containing flammable liquid shall be repaired unless thoroughly cleaned and freed from the liquid.
- Decanting of flammable liquid from the drums shall be carried out using hand pumps.

Type of Extinguisher	Type of Fire			
	General paper, wood, carbonaceous material	Inflammable Liquids - HSD, Kerosene etc	Inflammable Gases, Acetylene, LPG etc.	Electrical motor, Cable, Switchgear installation.
Soda Acid	Yes			
Chemical Foam		Yes		
Dry Chemical Powder (DCP)		Yes	Yes	Yes
Carbon dioxide (CO ₂)		Yes	Yes	Yes

Guide for Selection of Fire Extinguishers

3.5 Storage of Gas Cylinders

The following measures shall be taken:

- Gas cylinders shall be stored in areas away from direct sunlight.
- The LPG, Oxygen and Dissolved Acetylene cylinders shall be stored in upright position; each cylinder shall be chained individually.
- Cylinder valve shall be protected using metal cap.
- Electrical connection in the gas cylinder storage area shall not be provided.
- Smoking, fire near the storage area shall be prohibited. Caution board to the effect shall be displayed.
- Oil and lubricants shall not be used on valves or other fittings of cylinders.
- Foam type fire extinguishers and Sand buckets shall be provided near the storage area.
- Trolleys shall be used for moving cylinders.

3.6 Fire Safety Management

Fire Safety Management efforts shall include, but not be limited to, the following:

- Ensuring that storage of flammable liquid complies with the requirements defined in the Site HSE Manual.
- Ensuring that storage of gas cylinders complies with the requirements defined in the Site HSE Manual.
- Welding and cutting equipment shall be maintained in good order and shall be checked periodically.
- Work areas shall be kept clean and free of combustible waste and scrap materials.
- Smoking / fire shall be prohibited throughout the flammable premises.
- Suitable and sufficient firefighting equipment (including fire extinguisher) shall be maintained near all those locations having potential for fire.
- The firefighting equipment shall be inspected and refilled in accordance with manufacturers' recommendations.
- The list of firefighting equipment, along with their location, type, capacity and inspection / refilling date shall be maintained.
- Access to firefighting equipment shall be unobstructed.

- Personnel working at the site shall be trained on safe working practices in relation to fire prevention and protection.

3.7 Work Permit System

Work Permit System shall be implemented to prevent HSE Incident during the course of the activity.

Applicability of work permit shall be governed by the type of construction site, and shall be discussed and agreed with the client. Normally, the following Work Permits may apply:

- Working at height
- Confined space entry
- Electrical Installation
- Radiography

3.8 Construction Equipment

Acceptance / inspection of construction equipment prior to deployment at site

Inspection of following construction equipment shall be carried out prior to their deployment at the site by the concerned Engineer / Safety Office.

- Welding machines
- Gas Cutting set
- Cranes / Hydra
- Earth Moving Machinery
- Lifting tools and tackles
- D G Sets

Concerned Site Engineer & Safety Officer shall inspect the equipment as per the prescribed checklist. Record of checking shall be maintained.

Periodic Inspection of Construction equipment

- Periodic inspection of equipment shall be carried out at least once in a quarter and record shall be maintained.
- Additionally, for lifting equipment, inspection shall be carried out prior to use in critical activity, e.g. heavy lift.

3.9 Hand, Air, and Electrical Tools

- Tools shall be used only for their intended purpose.
- Employees shall report damaged and defective tools to their supervisor or return them to the tool room for proper tagging and repair.
- Damaged or defective tools shall be taken out of service, tagged “Do Not Operate” and stored in a controlled area until appropriate repairs have been made.
- Tools shall not be altered in any way and shall be operated in accordance with manufacturers’ specifications.
- Tools, such as saws and grinders, shall have guards in place during their operation.
- Persons who operate earth compactors, rollers, chisel impact hammers, and other such tools shall wear appropriate protective footwear.
- Tools shall not be abused and shall be kept in good operating condition.
- Tools shall be inspected prior to each use for defects such as cracked handles, damaged cutting edges, splitting or cracked parts, and broken adjusting components. Damaged tools shall not be used.
- All electrically powered tools shall have double insulation or connection to earth (ground).

- The pressure of compressed air used for component cleaning purposes must be low pressure to prevent dust and debris from creating hazards. Compressed air shall not be used for cleaning or blowing dust from any part of the body or clothing.
- Airline hoses for tools and other equipment will be secured together using anti whip lines to prevent uncontrolled whipping in the event hose couplings become separated while under pressure.
- Temporary construction outlets used for 230 V tools shall be protected by an assured connection-to-earth- system.
- Portable grinders shall be provided with hood type guards with side enclosures that cover the spindle and at least 50% of the wheel. All wheels shall be inspected regularly for signs of fracture.
- Bench grinders shall be equipped with deflector shields and side-cover guards. Tool rests shall have a maximum clearance of 3mm between the wheel and grinding stone.
- Air supply lines shall be protected from damage, inspected regularly, and maintained in good condition.
- Hoses and hose connections used for connecting compressed air shall be designed for the planned pressure and service.

3.10 Electrical Safety

- All electrical connections shall be done by an electrician with valid license.
- One licensed electrician shall be made available at site round the clock to attend to the normal / emergency jobs.
- All switch boards / welding machines shall be kept in well ventilated and covered shed. The shed shall be elevated to avoid water logging. No flammable material shall be used for construction of the shed. Similarly flammable materials shall not be stored in and around.
- Earth Leakage Circuit Breakers (ELCB) shall be used on all temporary electrical connections.
- Industrial type extension boards and plug sockets shall be used.
- The temporary cables used shall be free from cuts, damaged insulation, kinks or improperly insulated joints.
- All power supply cables shall be laid properly and neatly so that they don't cause hindrance to persons working and no physical damage also takes place to the cables during various construction activities.
- Proper grounding shall be ensured for all switch boards and equipment including portable ones prior to taking into service.
- Electricians shall be provided with approved tools and personal protective equipment such as rubber gloves mats etc.

3.11 Scaffolds and Platforms

- All scaffolding shall be of sound construction. A competent person must inspect each scaffold.
- All scaffolding and platforms shall be equipped with toe boards, mid-rails, top rails; and access ladders.
- Personnel who are conversant with and competent to perform this work shall erect scaffolding and platform.
- Scaffolding and platform shall be removed according to construction requirements and when work has been completed.

- Where a scaffold / platform is erected in an area where the construction activities may pose hazards to pedestrians or vehicular traffic nearby from the falling of objects, wire nets or screening nets shall be used to envelope such scaffold / platform.

3.12 Ladders

- All ladders used at the project site shall be of sound construction. Ladders shall be inspected prior to each use, and a quarterly inspection will be conducted by a competent person.
- Ladders with broken or missing rungs, broken or split side rails, or otherwise damaged, shall not be used and shall be removed from the project.
- All portable ladders shall be equipped with non-skid safety feet and shall be placed on a stable base. The access areas at the top and bottom of ladders in use shall be kept clear of obstructions.
- The side rails shall extend above the landing. When this is not practical, grab rails shall be installed. All ladders in use shall be tied, blocked, or otherwise secured to prevent an accidental displacement.
- Tripod ladders (ladders with three legs) are prohibited on the project. All folding ladders shall have four supporting rails or legs.
- Only non-metallic, wooden, approved ladders shall be used during electrical operations where employees may come into contact with electrical circuits or systems.

3.13 Excavation

- All excavation work shall be planned and the method of excavation and the type of support work required shall be decided, in consultation with Construction Manager, considering the following:
 - Stability of the ground
 - Excavation will not affect adjoining building, structures etc
 - Presence of underground pipes, cables etc
- Sites of excavation shall be thoroughly inspected:
 - Daily, prior to each shift and after interruption in work of more than one day
 - After every blasting operation
 - After an unexpected fall of ground
 - After heavy rains
- Safe angle of repose shall be maintained while excavating trenches exceeding 1.5 meters. Slope shall, usually be not less than 45°. Suitable bench of 0.5 metre width shall be provided at every 1.5 meters depth of excavation in all type of soil except for hard rock. In case benching is not possible, proper shoring and strutting shall be provided to prevent cave-in or slides.
- Barricading of 1 metre height (with red and white band) shall be provided for excavations beyond 1.5 metres depth. Two entries /exits shall be provided for such excavation.
- Excavated earth shall not be placed within 1 meter of the edge of the trench or depth of the trench, whichever is greater.
- Vehicles shall not be allowed to operate too close to the excavated area. At least 2 meters distance shall be maintained from the edge of excavation. No load, plant or equipment shall be placed or moved near the edge of any excavation where it is likely to cause its collapse and thereby endanger any person unless precautions such as the provision of shoring or piling are taken to prevent the slides.
- During rains, the soil becomes loose. Additional precautions shall be taken to prevent collapse of side wall.

- Necessary precautions shall be taken for underground utility lines such as cables, sewers, pipelines etc. Position of buried utilities shall be located by referring to plant drawings, if available. Necessary clearances from the concerned authorities shall be obtained before commencement of the excavation job.
- In case of mechanized excavation, precaution shall be taken to not to allow anybody to come within one metre of extreme reach of the mechanized excavator. The excavator shall be operated by a well trained experienced operator. While not in operation, the excavator shall be kept on firm ground with excavator shovel resting on the ground. Wheels of excavator shall be suitably jammed to prevent any accidental movement of the excavator.
- Water shall be pumped out, if any accumulates in the trench. Necessary precautions shall be taken to prevent entry of surface water in trenches.
- In case of excavation in the vicinity of any existing building / structure, approval shall be obtained on the excavation method from Construction Manager.

3.14 Reinforcement Work

- Workers carrying out reinforcement work shall use proper personal protective equipment, such as Safety Helmet, Safety Shoe and Gloves.
- Hand shall not be placed below the rods for checking clear distance. Measuring device shall be used for the purpose.
- Loose clothes shall not be worn while checking the rods.
- To carry out welding / cutting of rods, safety procedures / precautions as mentioned in Section “Cutting & Welding” shall be followed.
- For supplying of rods at height, proper staging and / or bundling shall be provided.
- For short distance carrying of materials on shoulders, suitable pads shall be used.
- While transporting rods by trucks / trailers, the rods shall not protrude in front of or by the sides of driver’s cabin. In case such protrusion can’t be avoided behind the deck, then it should not extend 1/3rd of deck length or 1.5 meters whichever is less and shall be tied with red flags / lights.

3.15 Concreting Work

- Stability of shuttering work shall be checked before starting concreting work.
- Concreting area shall be barricaded, if pouring at height / depth.
- Vibrator hoses, pumping concrete accessories shall be kept in healthy condition.
- Pipelines in concrete pumping system shall not be attached to temporary structures such as scaffolds and formwork support as the forces and movement may affect their integrity.
- Safety cages / guards around moving motors / parts of concrete mixers shall be in place.
- Concrete mixers shall be provided with hoppers.
- Concrete mixers shall be inspected for their condition at start of work.
- Concrete mixers shall be maintained well so as not to generate excessive noise.
- Earthing of electrical mixers, vibrators etc shall be done and verified.
- Personal protective equipment such as gloves, safety shoe, gum boots and safety helmet shall be used while dealing with concrete, and nose mask shall be used while dealing with cement.
- Cleaning of rotating drums of concrete mixer shall be done from outside. Lockout devices shall be provided where workers need to enter.

- Adequate lighting arrangement shall be ensured for carrying out concrete work during night.
- During pouring, shuttering and its supports shall be continuously watched for defects.

3.16 Welding & Gas Cutting

- Dry Chemical Powder (DCP) type fire extinguisher shall be ready for instant use in any location where welding is being performed.
- Screens, shields, fire blanket or other safeguards shall be provided for the protection of personnel, equipment and materials exposed to sparks, slag, falling objects, or the direct rays of the arc, and molten slag or sparks.
- Welders shall wear approved eye and head protection. Persons assisting the welder shall also wear protective glasses.
- Electric welding equipment, including cable, shall meet the requirements of the National Electrical Code. Welding practices shall comply with applicable regulations.
- Approved and well-maintained apparatus, such as torches, manifolds, regulators or pressure reducing valves shall be used.
- Electric welding cable leads shall be hung in an elevated position wherever they could create a tripping hazard, and protected from damage by moving equipment or materials.
- Welding leads or cords that cross a pathway or roadway shall be protected from damage by underground burial or otherwise protected with wood, conduit or other such means.
- Welding lead with worn out or broken insulation shall be taken out of service or repaired by the concerned agency. Ground lead can be repaired with tape. Grounding shall be done within 18” of the work.
- Compressed gas cylinders shall be properly secured and stored in an upright position.
- All compressed gas cylinders shall be secured in place during use and storage. When not in the gas storage area, all cylinders shall be kept in a cylinder cart, and the cylinders chained.
- Cylinders shall be returned to the main storage area when they become empty.
- Cylinders shall be transported in an upright position. Cylinders shall not be hauled in equipment beds or truck beds on their side. Cylinders lifted from one elevation to another shall be lifted only in racks or containers designed for that purpose. Slings shall not be used to hoist cylinders.
- Compressed gas cylinders shall not be transported with gauge attached. The gauges shall be removed from cylinders and protective caps provided in place, during their transportation.
- Acetylene cylinder key for opening valve shall be kept on the valve stem, while cylinder is in use, so that the acetylene cylinder could be quickly turned off in case of emergency.
- Flash back arrestor shall be used to prevent back fire in acetylene / oxygen cylinder.
- The valves of compressed gas cylinders shall be completely closed when not in use.
- Lubricants shall not be used on oxygen line connections and copper fittings on acetylene lines.

3.17 Personal Protection Equipment

- Equipment complying with relevant IS standards and carrying ISI mark shall be used.
- Equipment that has been altered in any way shall not be worn.
- Equipment used shall be suitable for the purpose.

Recommended Matrix for PPE Usage

PPE / Category of Personnel	Helmet	Safety Shoe	Apron	Hand Gloves	Welding Gloves	Welding Screen	Goggles	Safety Belt / Full body Harness	Nose Mask	Ear Plug / Ear Muff
Engineer & Above	M	M	R	R	NA	NA	R	AA	AA	AA
Supervisors	M	M	R	AA	NA	AA	R	AA	AA	AA
Surveyor	M	M	R	NA	NA	NA	AA	NA	AA	AA
Welder	M	M	M	NA	M	M	NA	AA	AA	AA
Grinder	M	M	R	M	NA	NA	M	AA	AA	AA
Gas Cutter	M	M	M	M	NA	NA	M	AA	AA	AA
Helpers	M	M	R	M	NA	NA	AA	AA	AA	AA
Masons	M	M	R	AA	NA	NA	NA	AA	AA	AA
Riggers	M	M	R	M	NA	NA	NA	AA	AA	AA
Plant Operators	M	M	R	AA	NA	NA	AA	NA	AA	AA
Driver	M	M	R	NA	NA	NA	NA	Safety Belt	AA	AA
Painter	M	M	R	M	NA	NA	M	AA	M	AA
Shot blaster	M	M	R	M	NA	NA	M	NA	M	M

Legend:

M Mandatory

R Recommended

AA As Applicable

NA Not Applicable

3.18 Housekeeping

Housekeeping is an act of keeping the working environment cleared of all unnecessary waste and materials and in a clear and orderly status.

- Work areas, passageways, stairways, and all other areas shall be kept free of debris, equipment, and materials.
- Appropriate refuse containers shall be placed strategically and used for disposal of scrap materials and other debris.
- Liquids (such as paints, solvents, thinners, oils, and greases) and material or containers which have contained chemicals shall be disposed of in accordance with Procedure on hazardous waste management.
- Storage areas shall be kept clean and materials neatly stacked or placed. Materials shall be stored or placed in an orderly manner.
- Lunch or eating areas shall be kept clean and free of all food scraps, wrappers, cups, and other disposable items.
- All scrap timber, waste material, and rubbish shall be removed from the immediate work area as the work progresses.
- All solvent waste, oily rags, and flammable liquids shall be kept in fire-resistant containers until removed from the work site.
- Electric welding leads, cords, wires, electrical cables, hoses, and other temporary systems shall be kept off the walking surface in an elevated position.

Environmental & Waste Management Practices at site

4.1 Control of Air Pollution

4.1.1 Air pollution control during transportation of construction materials

- Vehicles with open load carrying area shall not be used for moving potentially dust producing materials. Vehicles shall have properly fitting side and tailboards.
- Materials having the potential to generate dust shall not be loaded to a level higher than the side and tailboards, and shall be carried in vehicles covered with cover lids.
- The haulage road at the construction site, if dusty shall be watered regularly.

4.1.2 Air pollution control during storage of construction materials

- Excavated materials shall be placed in the designated dumping / disposal area.
- The materials shall be placed in a manner that will minimize dust generation.
- Excavated materials shall be stabilized during summer season, each day, by watering at regular intervals.
- The heights from which materials are dropped shall be limited to 1.5 metres to limit fugitive dust emission.
- Water spray shall be used to prevent dust generation from piles of raw sand, aggregates and similar materials, during dry and windy weather.
- Cement shall not be stored in an open area; it shall always be stored in a covered shed.

4.1.3 Air pollution control during construction activities

- Water spray shall be used during the unloading and handling of raw sand, aggregates and similar materials, when dust is likely to be created.

- All motorized vehicles on kutchra roads on the site shall be allowed a maximum speed of 15 km / h.
- Concrete batching plant and crushing plant sites and ancillary areas shall be cleaned frequently and water shall be sprayed to minimize dust generation.
- Shot blasting and Spray painting shall be done, preferably in an enclosed area.
- Smoke generated from DG Sets shall be tested periodically for its quality (Suspended Particulate Matter, Oxides of Sulphur and Oxides of Nitrogen) and necessary corrective actions shall be taken based on the results of testing.

4.2 Control of Water Pollution Deleted

Control of Noise Pollution

- Stationary equipment shall be located so as to minimize impact of noise on the neighboring community.
- Equipment and plant shall not be kept idling, when not in use.
- Construction equipment shall be maintained / serviced regularly to control noise and vibration.
- High noise areas and equipment shall be notified as such and earmuffs / ear plugs shall be used by the personnel in such areas / near such equipment.

4.4 Waste Management

Construction Materials:

This includes concrete lumps, cement lumps, tested concrete cubes, broken asbestos sheets, soil, rock, fibre glass, broken bricks etc. These shall be collected from the site and used as land fill or transported to designated dumping site.

Paper, Plastics, Rubber and Glass: These shall be collected in the dustbins placed at various points at site / office. These shall be disposed off to the scrap dealer.

Metals:

Metal pieces and welding rod stubs etc shall be collected from site and segregated at source. These scraps shall be stored in the scrap yard and disposed off to the scrap dealer.

Waste Lubricating Oil:

Waste lubricating oils and oil filters shall be stored in closed containers. They shall be disposed off to the authorized recyclers.

Food Waste:

Food waste shall be collected in food waste containers with lid. They shall be disposed off to municipal collection bins or buried in designated areas for composting.

Waste Lead Acid Battery:

They shall be disposed to the authorized dealers of battery manufacturers.

Disposal of empty Paint containers:

Residual paint in the paint containers shall be kept at the minimum, by extracting the maximum paint by use of thinner. The empty paint container, thereafter, shall be disposed off suitably, in consultation with the Owner.

Electrical waste from site:

Electrical waste shall be stored at identified location and shall be disposed off to scrap dealer.

Domestic waste at site:

Domestic waste generated at the site shall be buried in deep pit specifically excavated for the purpose.

Accident / Incident Reporting & Investigation

Definitions

Incident:	An accident or near-miss
Accident:	An unintended incident which results in injury to persons and/or damage to property, the environment or a third party
Near-miss:	An unintended incident which, under different circumstances, could have become an accident
Lost Time Injury (LTI) /Lost Time Accident (LTA)	Injury / accident at work leading to unfitness for work and absence beyond the day of the accident
Reportable Injury	Injury / accident at work leading to unfitness for work and absence beyond 48 Hours from the time of accident.
Restricted work case (RWC)	Injury / accident at work that does not lead to absence after the day of the accident, because of alternative job assignment
Medical treatment case (MTC)	Injury /accident requiring treatment by a doctor, or nurse in consultation with a doctor, before the injured person resumes normal work
LTI- / LTA- Rate	Number of Lost Time Injuries / Accidents per million worked hours
TRI- / TRA- Rate	Total Recordable Injury / Accident Rate, sum of personnel injuries with and without lost time per million working hours (except first aid injuries)

Incident Reporting:

Occurrences which result in injury, ill health or property damage or which have potential for injury, ill health or property damage, shall be promptly reported to supervisor and the Regional Office and a written report completed.

Notice shall be sent of any accident on the construction site which either -

(a) cause loss of life; or

(b) disables a construction worker from working for a period of 48 (forty-eight) hours or more, immediately following the accident, shall forthwith be sent by telegram, telephone, fax or similar other means including special messenger, within four hours in case of fatal accidents and seventy-two hours, in case of other accidents involving construction worker, to :-

- (i) The Regional Labour Commissioner (Central), having jurisdiction in the area in which the establishment in which such accident or dangerous occurrence took place, is located. Such Regional Labour Commissioner (Central) shall be the authority appointed under Section 39 of the Act;
- (ii) board with which the construction worker involved in accident was registered as a Beneficiary;

Director General; and

The next of kin or other relative of the construction worker involved in the accident.

(2) Notice of any accident at a construction site which

(a) cause loss of life; or

(b) disables such construction worker from work for more than ten days following the accident, shall also be sent to -

- (i) The Officer in-charge of the nearest police station;
- (ii) The District Magistrate, or if the District Magistrate, by order, so desires, to the Sub-Divisional Magistrate.

(3) In the case of an accident causing injury to the worker, the injured worker shall be given first-aid and immediately thereafter, be transferred to a hospital or other place for medical treatment, as appropriate.

(4) Where any accident causing disablement subsequently results in death of a construction worker, notice in writing of such death shall be communicated to the authorities as mentioned in the rules within seventy-two hours of such death.

Dangerous Occurrences

The following classes of dangerous occurrences shall be reported to the Inspector having jurisdiction, whether or not any death or disablement is caused to a construction worker, in the manner prescribed in the Building Workers Rules:

- a) collapse or failure of lifting appliances or hoist or conveyors or other similar equipment for handling Building or construction material or breakage or failure of rope, chain or loose gears; overturning of cranes used in Building or other construction work; falling of objects from height;
- b) collapse or subsidence of soil, any wall, floor, gallery, roof or any other part of any structure, platform, staging, scaffolding or any means of access, including formwork;
- c) contract work; excavation, collapse of transmission;
- d) explosion of receiver or vessel used for storage, at a pressure greater than atmospheric pressure, of any gas or gases or any liquid or solid used as Building material;
- e) fire and explosion causing damage to any place on construction site where construction workers are employed;
- f) spillage or leakage of hazardous substances and damage to their container;
- g) collapse, capsizing, toppling or collision of transport equipment;
- h) Leakage or release of harmful toxic gases at the construction site.

In case of failure of a lifting appliance, loose gear, hoist or Building and other construction work, machinery and transport equipment at a construction site of a Building or other construction work, such appliances, gear, hoist, machinery or equipment and the site of such occurrence shall, as far as practicable, be kept undisturbed until inspected by the inspector having jurisdiction.

Every notice given shall be followed by a written report to the Inspector, authority under Section-39 of the Building Workers Act, the Board and the Director General in Form XIV under proper acknowledgement.

Procedure for enquiry into causes of accident or dangerous occurrence

1. (a) The enquiry shall be commenced as early as it may be and, in any case,, within fifteen days of the receipt of notice of accident or dangerous occurrence.

(b) The authority or enquiry officer, as the case may be, shall serve or cause to be served, notices in writing, informing the date, time and place of such enquiry to all persons entitled to appear in such enquiry and whose names and addresses are known to such authority or enquiry officer; and

I Notwithstanding the provision of clause (b) for the purpose of notifying other persons who may in any way be concerned or be interested in such enquiry, the authority or enquiry officer, as the case may be, may publish notice of such enquiry in one or more local newspapers, informing the date, time and place of such enquiry.

(2) The person entitled to appear at the enquiry may include,—

(a) an Inspector or any officer of the Government or an undertaking or public body, concerned with the enforcement or compliance of safety provisions of the Act and these rules in the concerned establishment;

(b) A trade union or workers association or an employers association;

I The worker involved in the accident or his legal heir or authorized representative;

(d) The owner of the premises in which the accident took place; and

(e) Any other person, at the discretion of the authority or the enquiry officer, as the case may be, who may be interested in or be concerned with the cause of an accident or may have knowledge about such cause or is likely to give material evidence or produce a relevant document in connection with such accident or dangerous occurrence.

(3) In case the entitled person referred to in sub-rule(2) is a body corporate, a company, or any other organization, .association, group of persons, such group may be represented through an authorized representative including a counsel or a solicitor.

(4) Subject to the provisions of sub-rule (5), the enquiry shall be held in public.

(5) In cases where,—

(a) the Government are of the opinion that the matter of the enquiry or any part of it are of such nature mat it would be against the interests of national security to hold the enquiry in public and directs the said authority or the enquiry officer, as the case may be, to hold the enquiry in camera; or

(b) on an application made by any party to the enquiry, the authority or the enquiry officer, as the case may be, referred to in sub-rule (1), if it or he is of the opinion that the holding of public enquiry will lead to disclosure of information relating to a trade secret, decides to hold the enquiry of such part of it is in camera, such enquiry shall not be held in public.

(6) Information disclosed by any person during the course of hearing or evidence in the cases covered under sub-rule (5) shall not be disclosed to any person except for the purpose of the enquiry.

(7) The person entitled to appear under sub-rule (2), called for evidence or representing in an enquiry shall be entitled to make an opening statement, give evidence, request the enquiry officer to call for specified document or evidence, cross examine other person or to the extent and at the stage permitted by the authority or enquiry officer holding the enquiry.

(8) Any evidence in an enquiry may be admitted at the discretion of the authority or enquiry officer during the enquiry, who may, also direct that documents to be tendered in evidence may be inspected by any person entitled or permitted to appear at such enquiry and that facilities be afforded to such person to take or obtain copies thereof.

(9) The authority or the enquiry officer holding an enquiry may authorize any person, being an officer of the Government, to assist such authority or enquiry officer where necessary, for the purpose of conducting the enquiry, and the officer so authorized may enter the premises of the concerned establishment during working hours, inspect the records, relevant to such enquiry, investigate and take such evidence as may be required to conduct such enquiry.

(10) The findings of the enquiry along with all evidence, in original, including statements of witnesses shall be forwarded to the authority specified under section 39 of the Act within five days of the completion of the enquiry, in case, where such enquiry was not conducted by such authority itself.

(11) A copy of the findings along with a brief statement of facts relating to an enquiry conducted under this rule shall be forwarded to the chief inspector of Building and other construction works and the Government, by the authority referred to in sub-rule (1) of rule 210.

6.0 Safety Committee

(1) Every establishment wherein 500 (five hundred) or more construction workers are ordinarily employed, there shall be a safety committee constituted by the employer which shall be represented by equal number of representatives of employer and the construction workers employed in such establishment. In no case the number of representatives of the employer shall exceed the representatives of the construction workers.

(2) The main functions of the safety committee, shall be,—

(a) To identify probable cases of accident and safe practice in Building or other construction work and to suggest remedial measures;

(b) To stimulate interest of employees and construction workers in safety by organizing safety weeks, safety competitions, talks and film shows on safety, preparing posters or taking similar other measures as and when required or as necessary;

(c) To go round the construction site with a view to check unsafe practices and defect unsafe conditions and to recommend remedial measures for their rectification including first aid, medical and welfare facilities;

(d) To look into the health hazards associated with handling different types of explosives, chemicals and other construction materials and to suggest remedial measures including use of proper personal protective equipment;

(e) To suggest measures for improving welfare amenities in the construction site and other miscellaneous aspects of safety, health and welfare in Building or other construction work; and

(f) To bring to the notice of the employer the hazards associated with the use, handling and maintenance of the equipment used during the course of the Building and other construction work.

(3) The minutes of the meeting shall be circulated to all concerned and shall be produced to the Inspector on demand for inspection.

(4) The decisions and recommendations of the safety committee shall be implemented by the employer within reasonable time limits.

6.1 HSE In charge

(1) In every establishment wherein 500 or more construction workers are ordinarily employed, the employer shall appoint safety officer, such safety officers may be assisted by suitable and adequate staff.

(2) Duties, qualifications and the conditions of service of safety officers appointed under sub-rule (I) shall be as provided in Schedule-VIII to the Building Workers Rules.

(3) Wherever the number of workers employed by single employer is less than five hundred, such employers may form a group and appoint a common safety officer for such group of employers, with prior permission of chief inspector of building and other construction works.

Toolbox Talks

The supervisors shall hold periodic toolbox talks. All workers are to attend the allocated toolbox talks. The attendees shall sign in on the attendance sheet, along with the subject of the talk.

Daily tool box shall be conducted by supervisors and weekly by Site HSE In-charge.

HSE Violation - Disciplinary Action

A HSE violation is a case of disregard for a HSE procedure, which caused or could have caused an incident.

HSE Officers shall immediately correct and report any such violations seen in the course of his duties in writing to BIDDER Site HSE Manager and Site In-charge.

These reports shall maintained giving details of the violation, work area, date and time, perpetrator, etc.

Disciplinary action will be considered for repeated offenders.

In the case of HSE violations, upon detecting the situation or upon verbal request from BIDDER, concerned sub-contractor shall immediately take necessary corrective action and provide a written report within 24 hours including root cause analysis and corrective actions taken to prevent reoccurrences.

HSE Inspection

Safety Officers shall conduct periodic site inspections. Any deviations observed shall be handled by the concerned immediately, with necessary corrective action. Where the situation exposes any individual, to injury or ill health, work shall be immediately suspended until the situation is rectified.

Site Office, Laboratory & Facility to Field Staff

The contractor shall provide a separate & independent site office of Semi permanent type structure with attached toilet & bathroom arrangement for consultants & EMPLOYER staff. The contractor shall setup laboratory for material testing, along with furniture & electric fittings as required, during the contract duration as specified. The space for the same shall be provided by EMPLOYER. Contractor shall maintain the structure during construction period inclusive of payment of electric & telephone (Landline) bills, security & daily upkeep of the premises. The designs and drawings shall be approved by Engineer-in-Charge. The area should be minimum 50 Sqm for site office of PMC etc.

During the entire contract duration, the contractor shall provide One new brand Tata Nexon or equivalent with diesel, driver & maintenance for a running of at least 3000 Kms per month with in a fortnight from the date of award of the contract for the field engineering staff of Employer, In case of failure to provide the vehicle, an amount of Rs. 2000/-(Rupees Two Thousand Only) per day per vehicle shall be recovered from the contractor's due payment. The cost of these facilities is incidental to work and deemed to be included in the offer given by contractor

(24) The contractor shall if and when required submit at his cost the samples of materials to be tested or analysis and if, so directed shall not make use of or incorporate in the work any materials represented by the samples until the required tests or analysis have been made and the materials, finally accepted by the Engineer-in-charge. Testing and / or analysis of all material shall be as per the frequency specified out of which minimum 10% (Ten Percent) of the total tests / analysis shall be got done from the laboratory designated by engineer in charge and the cost of such testing will be reimbursed to the contractor as stated in Volume II.

(iv) The contractor shall not be eligible for any claim or compensation either arising out of any delay in the work or due to any corrective measures required to be taken on account of & as a result of testing of the materials.

(v) The contractor or his authorised representative will be allowed to remain present in the departmental laboratory while testing samples furnished by him. However the results of all the tests carried out in the departmental laboratory in the presence or absence of the contractor or his authorised representative will be binding on the contractor.

(vi) Cost of routine day-to-day quality control testing charges for tests required as per specifications will be borne by contractor by sending the same to the concerned laboratories or by establishing laboratory at site. The cost required for inspection including conveyance of engineers shall be borne by the contractor, the cost of which is deemed to be included in the price bid. The 10% tests as per frequency decided by employer shall be conducted in NABL accredited laboratory / COEP / GPP.

However, the cost of testing of material as directed by Engineer-in-charge for approving a particular material as laid down in para 2.10 (i) to (vi) will have to be borne by the contractor. If in the opinion of the engineer/Engineer-In-Charge, any additional field or laboratory test is important for fulfilling engineering criteria / for determination of suitability and same is required to be conducted from in-house or outside laboratory, the cost of such test shall be borne by the contractor and deemed to have been included in the offer given by the contractor.

(M) Special Condition for Testing

- i. The testing of all materials shall be carried out by the Engineer, or his representative for which the contractor shall make all the necessary arrangements and bear the entire cost.
- ii. All tests as per frequency chart approved by Engineer in Charge and given in Clause 15.1 shall be carried out in approved Laboratories.
- iii. The tests which cannot be carried out both in field laboratory and approved laboratories shall be carried out 100% in the laboratories of Government Engineering College / Government Polytechnic / NABL Accredated lab at the entire cost of Contractor.

SECTION-4
CONTRACT DATA

Contract Data to General Conditions of Contract

Items marked "N/A" do not apply in this Contract		Clause Reference with respect to Section - 3	
1.	The Employer is Name : Chief Executive Officer, Address :Pimpri Chinchwad New Town Development Authority, Akurdi, Pune 411 044.		
2.	The Engineer is- Executive Engineer, PCNTDA		
	Authorised Representative- Deputy Engineer PCNTDA		
3.	The Dispute Review Expert appointed jointly by the employer and	Deleted	
4.	The Defects Liability Period is 24 (Twenty four) Months from the date of Completion.		
5.	The Start Date shall be 7days from the date of issue of the Work Order.		
6.	The Intended Completion Date for the whole of the Works is 3 Months (Three Months) including monsoon period after start of work with the following milestones:		
Milestone dates:			
	Physical Works to be completed	Period from the start date	
i)	Milestone 1 : 25% of Contract Amount Physical works with required work done amount to be completed.	1 Months	
ii)	Milestone 2 : 60% of Contract Amount Physical works with required work done amount to be completed.	2 Months	
iii)	Milestone 3 : 100% of Contract Amount Physical works with required work done amount to be completed.	3 months	
7.	Site Location-Sector 28, New Admin. Bldg of PCNTDA		
8.	The name and identification number of the Contract is:- Construction of Underground water tank in PCNTDA Administrative Building premises.		

9. Scope of Work:

Following provisions are made in the estimate.

- i) Excavation for foundation in earth, soil of all types, sand, gravel, hard murum and boulder, hard rock is proposed as per available strata.
- ii) Cement concrete in M15 of trap metal is proposed in foundation as levelling course.
- iii) RCC M-30 is proposed for Raft, RCC pardi, slab etc.
- iv) TMT - FE - 500 bar reinforcement of various diameters for R.C.C. work of columns, beams and RCC pardi.
- v) Waterproofing using Polydee-MC for base coat, applying primer coat of TP-40 and applying Polydee-11 compound antibacterial food grade coating.
- vi) Ductile iron Man Hole Covers
- vii) Brick Masonry Inspection chamber of 60 X 45 cm
- viii) CPVC pipe 40 mm dia with ferule connection, ladder.
- ix) Provision for submersible pumpset of 2.25 KW / 3 HP and required fittings etc complete.

10	The following documents also form part of the Contract :	
	“Post qualification documents furnished by the bidder as per section 2 and Technical specification (Vol III).”	
11	The law which applies to the Contract is the law of Union of India, Government of Maharashtra including Local Authorities	
12	The language of the Contract documents is English	
13	Limit of subcontracting As stated in the bid document	

14	The Schedule of Other Contractors	
15	The Schedule of Key Personnel As per Annex-II of Section I	
16	The minimum insurance cover for physical property, injury and death is Rs. 10 Lakhs per occurrence with the number of occurrences limited to ten. After each occurrence, contractor will pay additional premium necessary to make insurance valid for four occurrences always.	
17.	Site investigation report - Should be carried out by Contractor	
18	The Site Possession Dates shall be same day from issue of work order to proceed with the work .	
19	Fees and types of reimbursable expenses to be paid to the Dispute Review Board will be borne by the contractor	Deleted
20.	Appointing Authority for the Dispute Review Expert-Council, Indian Building Congress, New Delhi	Deleted
21.	The period for submission of the programme for approval of Engineer shall be 7days from the issue of letter of Acceptance	
22.	The period between programme updates shall be 7 days	
23.	The amount to be withheld for late submission of an update programme shall be Rs. 2.00 lakhs	
24.	The following events shall also be Compensation Events:	Deleted
25	The currency of the Contract is Indian Rupees	[Cl. 46]
26	The retention money is 2% of contract price in addition to performance security and will be recovered at 6% per R.A. Bill till the entire amount is recovered.	[Cl. 48]
27	The formula (e) for adjustment of prices are: DELETED	[Cl. 47]

The following conditions shall prevail:

- (i) The Operative 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 on which the time allowed for the completion of the works specified in the contract for works expires, taking in to consideration the extension of time, if any, for completion of the work granted by the approving authority under the 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 Employer as regards the operative period of the Contract shall be final and binding on the Contractor. Where any compensation for liquidated damages is levied on the contractor on account of delay in completion or inadequate progress under the relevant Contract provisions, the price adjustment

amount for the balance work from the date of levy of such compensation shall be worked out by freezing of prices of material (indices) to the month preceding the

- (ii)
- (iii)
- (iv)
- (v)

month from which such compensation is levied. However if in any month after liquidated damages are levied, the prices of material covered under star rates and indices and prices of POL component are lesser than those frizzed prices (indices) stated above then those lesser prices and indices etc will prevail during such months.

(ii) This Price Variation Clause shall be applicable to all contracts in B-1/B-2 and C form but shall not apply to piece works, The price variation shall be determined during each quarter as per formula given above clause.

(iii) 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 of items payable under the provision of Clause 38/37 of the contract from B1/B2 respectively. Since the rate payable for extra items or the extra quantities under Clause 38/37 are to be fixed as per the current SSR or as mutually agreed to yearly revision till completion of such work. In other words, when the completion/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 SSR then rates payable for the same beyond that date shall be revised with reference to the current SSR prevalent at that time on year to year basis or revised in accordance with mutual agreement thereon, as provided for in the contract, whichever is less.

(iv) This clause is operative both ways, i.e. if the Price Variation as calculated above is on the plus side, payment on account of the Price Variation shall be allowed to the Contractor and if it is on the negative side, the Employer shall be entitled to recover the same from the Contractor and the amount shall be deductible from any amounts due and payable under the contract. If there is no such amount which is due to the contractor, the said recovery will be treated as debts.

(v) To the extent that full compensation for any rise or fall in costs to the contractor is not entirely covered by the provisions of this or other clauses in the contract, the unit rate and the prices included in the contract shall be deemed to includes amounts to covered the contingency of such other actual rise or fall in costs.

Note: - A) When Basic rates of Bo, Co, and So for Bitumen, Cement, Steel respectively are adopted other than the rates adopted for working out value “P” then those rates shall be treated as revised Basic rate of Bo, Co, So and shall be communicated to the contractor at the time of issuing letter of intent and shall be binding on contractor.

B) The Price variation of Cement and Steel in star rates is not payable on RCC pipes and paver blocks.

28	Amount of liquidated damages for delay in completion of works Amount of liquidated damages for delay in completion of works	Page 75 of 114	(I) for each milestone Minimum amount of Rs. 10000/- per day up to 1/2000) th of the contract price rounded off to the nearest thousand per day. Maximum liquidated damage amount shall be limited to 10% of contract value. Once Liquidated Damage amount reaches 10% of contract amount, contract gets automatically terminated. Amount of Liquidated Damage recovered for non-achievement of intermediate milestone shall be refunded once the whole work is completed in stipulated time period/approved extended time period
29	Nature of Advances		

1	Secured advance for non-perishable materials brought to site		Deleted	
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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 (Two) percent of contract price plus Rs (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 unconditional Bank Guarantee of the type as presented in Section 8 of the Bidding Documents.</p>	[Cl.52]
31	<p>The Schedule of Operating and Maintenance Manuals -As stated in Bid Document The amount withheld for failing to provide O & M manual by the date which is 28 days of issue of certificate of completion of whole or section of the work, as the case may be is Rs. 5.00 Lakhs.</p>	[Cl. 58] Deleted
32	<p>The date by which “as-built’ drawings (in scale as directed) in 2 sets are required is within 28 days of issue of certificate of completion of whole or section of the work, as the case may be.</p>	[Cl. 58]
33	<p>The amount to be withheld for failing to supply “as-built” drawings by the date required is Rs. 0.50 Lakh.</p>	[Cl. 58]
34	<p>The following events shall also be fundamental breach of contract : “The Contractor has contravened Sub-Clause 7.1 and Clause 9 of GCC.”</p>	[Cl. 59.2]
35	<p>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.</p>	[Cl. 60]

SECTION 5

TECHNICAL SPECIFICATIONS

ENCLOSED IN VOLUME II

SECTION6

FORM OF BID

FORM OF BID

Description of the Works : BID

To
The Chief Executive Officer,
PCNTDA

Address:

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

(% above/ below the cost of the tender)

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.

We agree to abide by this Bid for the period of ----- 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.

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.

We understand that you are not bound to accept the lowest or any tender you may receive.

Dated this, ----- day of -----20 .

Signature ----- in the capacity of -----

duly authorized to sign bids for and on behalf of -----

(in block capitals or typed)

Address

Witness

Address

Occupation

SECTION 7

BILL OF QUANTITIES

Attached in Volume II

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 / PMC and verified by the Engineer and valued at the rates and prices tendered in the priced Bill of Quantities.
3. The rates and prices tendered in the prices Bill of Quantities shall, except in so far as it is otherwise provided under the Contract, include all constructional plant, labour, supervision, materials, erection, maintenance, insurance, profit, taxes except GST and duties, together with all general risks, liabilities and obligations set out or implied in the Contract.
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 stated in publications of Beauru of Indian Standard
9. Errors will be corrected by the Employer for any arithmetic errors pursuant to Clause 29 of the Instruction to Bidders.

BILL OF QUANTITIES - Enclosed in Volume - II

Sl. No.	Description of Item(with brief specification and reference to Book of specification)	Quantity Unit	Unit	Rate		Amount
				In Figures	In Words	

Note :

1. Item for which no rate or price has been entered in 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 (Refer: ITB Clause 13.2 and GCC Clause 43.3).
2. Where there is a discrepancy between the rate in figures and words, the rates in words will govern. [ITB Clause 27.1(a)].
3. Where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by quantity, the unit rate quoted shall govern [ITB Clause 27.1 (b)]

SECTION 8
SECURITIES AND OTHER
FORMS

FORM OF BANK GUARANTEE FOR PERFORMANCE SECURITY

To

The Chief Executive Officer,
PCNTDA.

WHEREAS..... (name and address of contractor) thereafter called "the contractor" has undertaken, in pursuance of Contract No. Dated to execute..... (name of Contract and brief description of Works) (hereinafter called "the contract").

AND WHEREAS it has been stipulated by you in the said contract that the Contractor shall furnish you with a Bank Guarantee by a Nationalized/Scheduled bank of India for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

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

NOW THEREOF we hereby affirm that we are the guarantor and responsible to you on behalf of the Contractor, up to a total of Rs..... (Amount of guarantee) (Rupees..... (in words), such sum 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 grounds 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 agree to abide the stipulations by RBI to honor the demand of the said DEBT.

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 until 28 days from the date of issue of the Defects Liability and Satisfactory Performance Certificate.

Signature and seal of the Guarantor.....

Name of the Bank

Address.....

Date.....

In the presence of

1.....

(Name of Occupation)

2.....

(Name of Occupation)

An amount shall be inserted by the Guarantor, representing the percentage of the Contract Price specified in the Contract including additional security for unbalance bids, if any and denominated in Indian Rupees.

Letter of Acceptance (Letterhead paper of the Employer)

To

Dear Sirs,

This is to notify you that your 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! is hereby accepted by our agency.

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 21 days of the receipt of this letter of acceptance valid up to 28 days from the date of expiry of defects Liability Period i.e. up to 24 months of virtual completion of work and sign the contract, failing which action as stated in Para 34.3 of ITB will be taken.

Yours faithfully,

Authorized Signature

Name and title of Signatory

Name of Agency

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.

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

To

Dear Sirs,

Pursuant to your furnishing the requisite security as stipulated in ITB Clause 34.1 and signing of the Contract for the construction of _____ at a Bid Price of Rs. _____

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

Yours faithfully,

(Signature, name and title of signatory authorized to sign on behalf of Employer)

FORM OF AGREEMENT

This agreement made the _____ day of _____ 2018 _____ between the _____ (hereinafter called "the Employer" of the one part and _____ (here in after called "the Contractor") of the other part.

AND WHEREAS the Employer invited bids from eligible bidders of the execution of certain works, viz. "xxxx."

AND WHEREAS pursuant to the bid submitted by the Contractor, vide _____ (here in after referred to as the "BID" or "ÖFFER") for the execution of works, the Employer by his letter of acceptance dated _____ accepted the offer submitted by the Contractor for the execution and completion of such works, to maintain the works and the remedying of any defects thereon, on terms and conditions in accordance with the documents listed in para 2 below.

AND WHEREAS the Contractor by a deed of undertaking dated _____ has agreed to abide by all the terms of the bid, including but not limited to the amount quoted for the execution of Contract, as stated in the bid, and also to comply with such terms and conditions as may be required from time to time.

AND WHEREAS pursuant to the bid submitted by the Contractor vide _____ (hereinafter referred to as the "the Offer"), the employer has by his letter of acceptance no. _____ - dated _____ -- accepted the offer submitted by the Contractor for the execution and completion of such works, to maintain the works and the remedying of any defects therein, on terms and conditions in accordance in the conditions of particular application and condition included hereinafter;

AND WHEREAS the contractor has agreed to undertake such works and has furnished a performance security pursuant to clause 33 of the instructions to bidders (Section-I).

NOW THIS AGREEMENT WITNESSETH as follows:

In this agreement works and expressions shall have the same meanings as are respectively assigned to them in the conditions of contract hereinafter referred to; the following documents shall be deemed to form and be read and constructed as part of this agreement viz.

- (a) Agreement,
- (b) Letter of Acceptance, Notice to Proceed with the Work,
- (c) Contractor's Bid,
- (d) Contract Data,

Conditions of Contract including Special Conditions of Contract

- (f) Specifications,
- (g) Bill of Quantities
- (h) Drawings, and

Any other document listed in the Contract Data.

The foregoing documents shall be constructed as complementary and mutually explanatory one with another. Should any ambiguities or discrepancy be noted then the order of precedence of these documents shall subject to the condition of particular applications be as listed above.

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 execute and complete the works and remedy any defects therein in conformity in all respect with the provisions of the contract.

the employer hereby covenants to pay the contractor in consideration of the execution and completion of the works and the remedying of defects therein the 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.

IN WITNESS WHEREOF the parties here 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:

Or

Signed, sealed and delivered by the said Employer through his Authorized Representative and the said Contractor through his Power of Attorney holder in the presence of:

Binding Signature of Employer _____

For and on behalf of The Employer

Binding Signature of Contractor _____

In the presence of

1. Name :
Address:

2. Name :
Address:

In the Presence of

1. Name:
Address:

2. Name:
Address:

In witness whereof the parties thereto 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

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

FORMAT OF COVERING LETTER

(Note: The covering letter is to be submitted by the Bidding Company or the Lead Consortium Member of a Bidding Consortium. To be provided on the Company letterhead)

Date :
Place

To
The Chief Executive Officer
Pimpri Chinchwad New Town Development Authority,
Pune- 411044

Ref: Construction of underground water tank in PCNTDA Administrative Building premises.

We here by confirm the following

The Bid is being submitted by---- (name of the Bidding Company/Lead Consortium Member in case of Bidding Consortium) who is the Bidding Company/the Lead Consortium Member. Of the Bidding Consortium comprising ----- (mention the names of the entities who are the consortium members),in accordance with the conditions stipulated in the bid document.(Incase of a Bidding Consortium)Our Bid includes the Letter(s)of Acceptance in the form at specified in the bid document, and the Joint Deed Agreement(as per the principles stated in the bid document)between, ----- (mention names of the entities that are the consortium-members),who are the consortium-member(s)as per the conditions stipulated in the bid document.

We have examined in detail and have understood the terms and conditions stipulated in the bid document issued by PCNTDA and in any subsequent communication sent by PCNTDA .We agree and undertake to a bid by all these terms and conditions. Our Bid is consistent with all the requirements of submission as stated in the bid document or in any of the subsequent communications from PCNTDA.

The information submitted in our Bid is complete, Is strictly as per the requirements as stipulated in the bid document, and is correct to the best of our knowledge and understanding. We would be solely responsible for any errors or omissions in our Bid.

We confirm that our Commercial Proposal does not contain any Conditions.

The Bidding Company / Bidding Consortium of which we are the Lead Consortium Member (Please strike out whichever is not applicable), satisfies the legal requirements and meets all the eligibility criteria laid down in the bid document.

We confirm that our Bidis valid for a period of 180days from the last date of submission of the Bid. For and on behalf of :

Signature (Authorized Representative and Signatory)
Name of the Person
Designation

DESCRIPTION OF BIDDER

Details of Bidding Company:

Name of the Bidding Company	
Address of the Registered/Head Office of the Bidding Company	
Contact Number and mailed of Authorized Representative:	
Certificate of Incorporation/Commencement Certificate(if any)	Submission of copy of the Certificate of Incorporation/Commencement Certificate (if any)

Company to be considered for Evaluation

For Financial Capability

Bidding Company OR The key person

--	--

SECTION 9
DRAWINGS
ENCLOSED IN
VOLUME III

INDEX

Sr. No.	Description
1	Tender for Works
2	Memorandum
3	Schedule B (Recap. Sheet)
4	Technical Specification and Additional Specification

TENDER FOR WORKS

I/We hereby tender for the execution, for Chief Executive words

Officer, PCNTDA (here-in-before and hereinafter referred to as Employer) of the work specified in such memorandum at _____ percent below/above the estimated rates entered in Schedule „B“ (Memorandum showing items of work to be carried out) and in accordance in all respects with the specifications, designs, drawings, and all the conditions and stipulations stated in Volume I, Volume II & Volume III.

Validity Period: (A) Performance security shall be valid until a date 30 days after the expiry of Defect Liability Period of 24 months.

The performance guarantee shall be either in the form of a Bank Guarantee or Demand Draft, in the name of the Employer as stated in bid document, from following banks would be accepted.

- a) Any Indian Nationalised Bank
- b) Any Scheduled Commercial Bank approved by RBI having a net worth of not less than Rs. 500 crores as per the latest Annual Report of the Bank. .In the case of a Foreign Bank (issued by a branch in India), the net worth in respect of the Indian operations shall only be taken into account.

(B) The acceptance of the guarantees shall also be subject to the following conditions:-

- a. The capital adequacy of the Bank shall not be less than the latest norms prescribed by RBI.
- b. The bank guarantee issued by a non-scheduled Cooperative Bank shall not be accepted

Signature of
the Contractor before
Submission of the Tender.

Address:

Dated the _____ day of

Signature of
the Witness to Contractor's
Signature.

Address:
(Occupation)

The above tender is hereby accepted by me for and on behalf of the Pimpri Chinchwad New Town Development Authority, Akurdi, Pune.

Dated _____ day of _____ 2020

The Chief Executive Officer,
PCNTDA, Pune (or his
duly authorized assistant)

“DECLARATION OF THE CONTRACTOR”

I/We hereby declare that I/We have made myself/ourselves thoroughly conversant with the local conditions regarding all materials and labour on which I/We have based my/our rates for this tender. The specifications and the leads in this work have been carefully studied and understood before submitting this tender.

I/We undertake to use only the best materials and work methodology approved by the Engineer or his duly authorized engineer during execution of the work and during defect period of 24 months after completion and to abide by the contract conditions, stipulations and maintenance manuals. I/We am/are fully responsible for quality of work and shall maintain the work in good order during defect liability period of 24 months after completion.

Signature of Contractor

DECLARATION FOR ROYALTY CHARGES

I/ We hereby agree to pay royalty charges of Rupees 141.34 /Cum (Rupees One Hundred Forty One&Paisa Thirty Four only per cubic meter) on minerals to be used to complete the work, like rubble, good earth and murrum etc. to the Revenue Department, Govt. of Maharashtra. My rates are exclusive of Royalty charges towards these items.

I / We will produce original receipts of such Royalty payments towards this work for verification from the Employer for reimbursement of royalty payment.

I/ We hereby to agree that I / We will not be reimbursed and royalty charges if I / We do not produce original Royalty receipts.

Employer reserves right to pay the necessary royalty charges to the appropriate Authorities in case I / We fail to produce original Royalty receipts as evidence.

Signature of Contractor

FINANCIAL OFFER SHEET							
Name of Project :- Construction of underground water tank in PCNTDA Administrative Building premises.							
Description	Estimated Cost		% Quoted		% Above OR Below	Quoted Total Amount	
	Rs. In Fig	Rs. In Words	Rs. In Fig	Rs. In Words		Rs. In Fig	Rs. In Words
A) Construction of underground water tank in PCNTDA Administrative Building premises	11,81,045/-	Rs. Eleven Lacs Eighty One Thousand Forty Five Only.					
B) Add for Royalty Charges (At fixed Rate)	1,774/-		NA			1,774/-	Rs One Thousand Seven Hundred Seventy Four Only
C) Add for QAQC & Testing Charges (At fixed Rates)	19,850/-	Rs Nineteen Thousand Eight Hundred Fifty Only	NA			19,850/-	Rs Nineteen Thousand Eight Hundred Fifty Only
Total Quoted Amount of Bid (A+B+C) in Fig (Rs.)							
Total Quoted Amount of Bid (A+B+C) in Words (Rs.) -							

Note:

1. The final quoted amount should be replicated on page no. 2 of Vol-II.
2. Where there is a discrepancy between the rate in figures and words, the rates in words will govern. [ITB Clause 27.1(a)].
3. Where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by quantity, the unit rate quoted shall govern [ITB Clause 27.1 (b)]
4. The rates quoted by the developer shall be excluding GST but including all other taxes prevailing from time to time. The GST applicable at prevailing rates will be paid in addition to contract value.
5. The Bidder will be reimbursed royalty amount towards natural sand , rubble and earth work (good earth and murum) only after production of original receipt showing payment made against these items for use in this work. Otherwise the same shall be directly paid to the Government by PCNTDA.
6. The Contractor will carry out tests as per frequency mentioned in the specifications and quality control manual. In the site laboratory set as per provisions of the agreement. However 10% of the tests shall be carried out by third party institute like PWD / COEP / GPP / NABL lab.. Charges of third party testing only will be reimbursed on submission of proof of payment. For remaining 90% tests no payment is admissible to the bidder to the bidder which he may perform in his own lab setup or from outside approved lab.

7. The Contractor shall carry out liaisoning work with PCMC, MSEB, Local bodies Gov. Maharashtra, Gov Of India and All authorities to get permission required for completion of the project including but not limited to water connection, drainage connection, permission regarding Electrification Lift, Solar, Fire fighting and all other required permission.
8. For Weight of scrap material of structural steel (like trusses,I section,Channel,Tubes etc) shall be calculated at actual.
9. For Item D and E, it includes all lead and lift.No claim on this account will be entered.The amount will be deducted from RA Bill.

Name of work :- Construction of underground water tank in PCNTDA Administrative Building premises

SCHEDULE -A

Schedule showing (approximately)the materials to be supplied from the Public Works Stores for work contracted to be executed and preliminary and Ancillary works and the Rates at which they are to be charged for.

Sr.No.	Particulars	Quantity	Unit	Rates at which the material will be charged to the contractor		Place of Delivery
				In Figure	In Words	
1	2	3	4	5	6	7
Nil						

**Deputy Engineer
Sub Division No. 5**

**Executive Engineer
Engineering Division B**

SCHEDULE - B

Sr. No.	Quantity Estimated but may be more	Item of Work	Estimated Rate		Unit Per	Amount according to estimated quantity
			In figures	In Words		
1	2	3	4	5	6	7
1	49.81	Excavation for foundation in earth, soil of all types, sand, gravel and soft murum, including removing the excavated material up to a distance of 50 metre 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. (Lift upto 1.5 metre) by Mechanical Means..	190.90	Rupees One Hundred Ninety and paise Ninety only.	One Cubic Metre	9508.72
2	49.81	Excavation for foundation in hard murum and boulders including removing the excavated material upto a distance of 50 metre, 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. (Lift from 1.5 metre to 3.0 metre) by Mechanical Means.	287.45	Two Hundred Eighty seven and paise Forty five only.	One Cubic Metre	14317.88
3	66.42	Excavation for foundation in Hard rock by chiselling, wedging, line drilling, etc. including trimming and levelling the bed, removing the excavated material upto a distance of 50 metres beyond the building area stacking as directed, dewatering and back filling with available earth/ murum watering, ramming etc. complete. (Lift upto 1.5 metre) by Mechanical Means.	1226.30	Rupees One Thousand Two Hundred Twenty six and paise Thirty only.	One Cubic Metre	81450.84
4	109.45	Conveying materials obtained from excavation beyond building area with all lift and lead of 5.0 km as directed by Engineer In Charge.	215.50	Rupees Two Hundred Fifteen and paise Fifty only..	One Cubic Metre	23586.47

5	6.24	Providing and laying in situ / ready mix / ready mix Mix-15 cement concrete of trap metal in foundation including necessary centering, formwork, bailing out water, compacting, curing etc. complete, with ordinary concrete mixer, with natural/ artificial sand.	5823.85	Rupees Five Thousand Eight Hundred Twenty three and paise Eighty five only.	One Cubic Metre	36340.82
6	11.21	Providing and laying in situ/ Ready Mix cement concrete Mix-30 of trap/ granite/quartzite/ gneiss metal for Reinforced Cement Concrete work in foundations like raft, strip foundations, grillage and footings of Reinforced Cement Concrete columns and steel stanchions etc. including bailing out water, formwork, laying/ pumping cover blocks, compaction and curing roughening the surface if special finish is to be provided, (Excluding reinforcement and structural steel) etc. complete, with fully automatic micro processor based Programmable Logic Controller with Superwisery Control and Data Acquisition enabled Reversible Drum Type mixer/ concrete Batch Mix plant (Pan mixer) etc. complete, with fine aggregate (Natural Sand/ Crushed Sand V.S.I. Grade finely washed etc.)	7408.00	Rupees Seven Thousand Four Hundred Eight and paise nil only.	One Cubic Metre	83043.68
7	8.13	Providing and laying Cast in situ/ Ready Mix cement concrete Mix-30 of trap/ granite/ quartzite/ gneiss metal for Reinforced Cement Concrete Slabs and Landings as per detailed designs and drawings including centering, formwork, cover blocks, laying/ pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete, (Excluding reinforcement and structural steel) with fully automatic micro processor based Programmable Logic Controller with Superwisery Control and Data Acquisition enabled Reversible Drum Type mixer/ concrete Batch Mix plant (Pan mixer) etc. complete, with fine aggregate (Natural Sand/ Crushed Sand V.S.I. Grade finely washed etc.)	13711.45	Rupees Thirteen Thousand Seven Hundred Eleven and paise Forty five only.	One Cubic Metre	111474.08
8	12.84	Providing and laying Cast in situ / Ready Mix cement concrete in Mix-30 of trap metal for RCC Part of required thickness including centering, formwork, cover blocks, laying, pumping, compacting, curing, finishing complete. (Excluding reinforcement) PLC with SCADA.	15631.46	Rupees Fifteen Thousand Six Hundred Thirty one and paise Forty six only.	One Cubic Metre	200707.94

9	3.218	Providing and fixing in position Thermo Mechanically Treated (TMT) FE -500 bar reinforcement of various diameters for Reinforced Cement Concrete pile caps, footings, foundations, slabs, beams columns, canopies, staircase, newels, chajjas, lintels, 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.	68307.75	Rupees Sixty eight Thousand Three Hundred Seven and paise Seventy five only.	One Metric Tonne	219814.34
10	140.00	Providing and applying a base coat comprising of 1 kilogram Polydee-MC and 1 kilogram fresh cement after wetting the surface followed by drying the surface for 2 days, apply primer coat of TP-40 and after drying, applying Polydee-11 two component (mixing ratio 2 A: 1 B) Antibacterial food grade coating inside drinking watertank in two coats with time interval of minimum 8 hours covering 7 years guarantee on Court Fee Stamp Paper of Rs.100/- etc complete.	1209.50	Rupees One Thousand Two Hundred Nine and paise Fifty only.	One Square Metre	169330.00
11	1.08	Providing and fixing Ductile iron Man Hole Covers/ Strom Water Grating and Grating with frame of Various sizes, weight and types and load bearing capacity as per EN-124, equivalent NECO with prior approval of concerned Superintending Engineer.	157.35	Rupees One Hundred Fifty seven and paise Thirty five only.	One Square Metre	169.93
12	1.00	Providing & constructing Brick Masonry Inspection Chamber 60 centimetre x 45 centimetre with Reinforced Cement Concrete raft in Black Cotton soil area including cost of reinforcement, 1:2:4 cement concrete channels half round Glazed Stone Ware pipes, Brick Masonry, plastering from inside and airtight 75 milimetre thick Reinforced Cement Concrete cover medium duty 100 kilogram etc. complete.	8026.20	Rupees Eight Thousand Twenty six and paise Twenty only.	One Number	8026.20
13	208.20	Providing and laying in trenches 40 milimetre diameter Chlorinated Poly Venyl Chloride pipe with necessary excavation, fittings, refilling trenches. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	451.05	Rupees Four Hundred Fifty one and paise Five only.	One Running Metre	93908.61

14	3.00	Providing and making Indian Standard Institute Mark ferrule connection of 40 milimetre diameter to water main including ferrule coupling cast iron bell mouth cover, built in non return valve and fixing including excavation and reinstatement complete.	4753.00	Rupees Four Thousand Seven Hundred Fifty three and paise nil only.	One Number	14259.00
15	5.00	Providing and fixing 45 centimetre wide steel ladder of 40 milimetre x 6 milimetre mild steel flat stringers and steps of 18 milimetre diameter mild steel bar for water tank including fixing it in (1:2:4) Mix-15 cement concrete block 60 centimetre x 30 centimetre x 30 centimetre and painting the ladder complete.	1207.40	Rupees One Thousand Two Hundred Seven and paise Forty only.	One Running Metre	6037.00
16	2.00	Providing and fixing screw down for 40 milimetre diameter wheeled stop tap of brass including necessary sockets/union nut complete.	1057.40	Rupees One Thousand Fifty seven and paise Forty only.	One Number	2114.80
17	1.00	Providing and making Indian Standard Institute Mark ferrule connection of 32 milimetre diameter to water main including ferrule coupling cast iron bell mouth cover, built in non return valve and fixing including excavation and reinstatement complete.	3451.20	Rupees Three Thousand Four Hundred Fifty one and paise Twenty only.	One Number	3451.20
<u>ELECTRICAL WORK</u>						
18	2	Supplying and erecting submersible pumpset of 2.25 KW/3 HP with 415 V, 50 c/s AC supply suitable for 150 mm dia. borewell suitable for 20 to 80 LPM discharge at 55 to 25 m head and (max. efficiency at 41 m head & 50 lpm) discharge & delivery Pipe of Size- 50mm dia. with a necessary H type clamps as per specification no. WP-SMP	27501.00	Rupees Twenty Seven Thousand Five Hundred One and paise Nil only.	One Number	55002.00
19	2	Supplying & erecting automatic control panel for 3 Ph, 415 volt, A.c. Submersible/centrifugal pump set upto 7.5 HP consisting of DOL starter having relay range 9-14 AMP,S.P.P., Combined ammeter/voltmeter, phase indicating lamp enclosed in CRCA powder coated Vibration proof enclosure with IP 54 protection. Control Panel should offer single phasing, phase reversal, phase imbalance etc	4982.00	Rupees Four Thousand Nine Hundred Eighty Two and paise Nil only.	One Number	9964.00

20	120	Supplying, erecting & terminating XLPE armoured cable 2 core 10 sq. mm. aluminium conductor with continuous 5.48 sq. mm. (12 SWG) G.I. earth wire complete erected with glands & lugs, on wall/ trusses/pole or laid in provided trench/ pipe as per specification no. CB-LT/AL	123.00	Rupees One Hundred Twenty Three and paise Nil only.	One Running Metre	14760.00
21	120	Supplying and laying (including excavation of suitable width & depth up to 90 cm) 50 mm outside dia. double wall corrugated pipes (DWC) of HDPE for enclosing cable below ground/road surface, to required depth complete	193.00	Rupees One Hundred Ninty Three and paise Nil only.	One Running Metre	23160.00
22	2	Supplying, erecting & marking SPMCB 40A to 63A C- series (for motor/power) in provided distribution board as per specification no. SW-SWR/MCB	309.00	Rupees Three Hundred Nine and paise Nil only.	One Number	618.00
Total Part A						1181045.51
Part - B						
23	11.21	Making Reimbursement to contractor against royly charges of natural materials like sand, all types of murum, metal, rubble, etc. After producing the necessary receipts and no dues certificate of royalty charges from competant revenue authority bye the contractor.	158.29	Rupees One Hundred Fifty Eight and paise Twenty Nine only.	One Cubic metre	1774.43
24	Lump-Sum	Re-embursement made to contractor for laboratory testing charges for material wherever required on the basis of testing frequency and charges fixed by vegelance and quality control circle, Pune or Govt. lab that is college of Engineering/Govt. Polytechnique for current year after producing govt receipt.				19,850.00
					Total	1202669.94
					Say Rs.	1202670.00
(Rupees Eleven Lakh Eighty One Thousand Forty Five only.)						

SCHEDULE - C

Memorandum showing the item of work to be carried out by the contractor.				
Sr. No	Item of Work	Standard Specifications as per specification book published by Govt. of Maharashtra in 1979 and 1981 Edition.		Additional Specification if any.
		Item No.	Page No.	
1	2	3	4	5
1	Excavation for foundation in earth, soil of all types, sand, gravel and soft murum, including removing the excavated material up to a distance of 50 metre 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. (Lift upto 1.5 metre). By mechanical means.	BdA-1	259	The useful excavated materials shall be utilised as directed by the Engineer In Charge.
2	Excavation for foundation in hard murum and boulders including removing the excavated material up to a distance 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. (Lift upto 1.5 metre). By mechanical means.	BdA-3	259	The useful excavated materials shall be utilised as directed by the Engineer In Charge.
3	Excavation for foundation in Hard rock by chiselling, wedging, line drilling, etc. including trimming and levelling the bed, removing the excavated material upto a distance of 50 metres beyond the building area stacking as directed, dewatering and back filling with available earth/ murum watering, ramming etc. complete. (Lift upto 1.5 metre). By mechanical means.	BdA-5	259	The useful excavated materials shall be utilised as directed by the Engineer In Charge.
4	Conveying materials obtained from excavation beyond building area with all lift and lead of 5.0 km as directed by Engineer In Charge			As Directed by Engineer In Charge

5	<p>Providing and laying Cast in situ/ Ready Mix cement concrete in Mix-15 of trap/ granite/ quartzite/ gneiss 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.), without SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With Vertical Shaft Impact (V.S.I.) quality Artificial Sand.</p>	Bd.E.4B-7	289 38	<p>1.The appropriate mix design shall be got prepared from the approved government laboratory well in advance and got approved from Engineer in charge before starting the work.2. Cement from the same stock sent for design shall be used for concreting work.3. The rate of consumption of cement in mix design are considered for the work as per general practice in actual design ,if the cement consumption is less than that shown in item,therate will be reduced accordingly .If the rate as per mix design for cement consumption is more than that as per item ,the extra cement will have to be brought by the contractor at his own cost.4. Before concreting work,cement form each consignment shall be got tested .if the strength of fresh cement available in stock and concreting work shall be done accordingly to modified mix design.5. The minimum strength of reinforced cement concrete to ensure durability shall as per Indian standard as per IS 456-2000 with latest ammendment .6. For each consignment of cement a sample should be got tested as per norms and frequency of Vigilance and Quality Control circle, laboratory..It will be entire responsibility of contractor for testing of cement and no extra payment will be made against these testing charges.</p>
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6	<p>Providing and laying in situ/ Ready Mix cement concrete Mix-30 of trap/ granite/quartzite/ gneiss metal for Reinforced Cement Concrete work in foundations like raft, strip foundations, grillage and footings of Reinforced Cement Concrete columns and steel stanchions etc. including bailing out water, formwork, laying/ pumping cover blocks, compaction and curing roughening the surface if special finish is to be provided, (Excluding reinforcement and structural steel) etc. complete, without SCADA enabled reversible Drum Type mixer/ concrete Batch mix plant (Pan mixer) etc. complete. With Vertical Shaft Impact (V.S.I.) quality Artificial Sand.</p>	Bd.F.3 B-7	298 38	<p>1.The appropriate mix design shall be got prepared from the approved government laboratory well in advance and got approved from Engineer in charge before starting the work.2. Cement from the same stock sent for design shall be used for concreting work.3. The rate of consumption of cement in mix design are considered for the work as per general practice in actual design ,if the cement consumption is less than that shown in item,therate will be reduced accordingly .If the rate as per mix design for cement consumption is more than that as per item ,the extra cement will have to be brought by the contractor at his own cost.4. Before concreting work,cement form each consignment shall be got tested .if the strength of fresh cement available in stock and concreting work shall be done accordingly to modified mix design.5. The minimum strength of reinforced cement concrete to ensure durability shall as per Indian standard as per IS 456-2000 with latest ammendment .6. For each consignment of cement a sample should be got tested as per norms and frequency of Vigilance and Quality Control circle, laboratory..It will be entire responsibility of contractor for testing of cement and no extra payment will be made against these testing charges.</p>
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7	<p>Providing and laying Cast in situ/ Ready Mix cement concrete Mix-30 of trap/ granite/ quartzite/ gneiss metal for Reinforced Cement Concrete Slabs and Landings as per detailed designs and drawings including centering, formwork, cover blocks, laying/ pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete, (Excluding reinforcement and structural steel) with fully automatic micro processor based Programmable Logic Controller with Superwisery Control and Data Acquisition enabled Reversible Drum Type mixer/ concrete Batch Mix plant (Pan mixer) etc. complete, with fine aggregate (Natural Sand/ Crushed Sand V.S.I. Grade finely washed etc.)</p>	Bd.F5 B-7	300 38	<p>1.The appropriate mix design shall be got prepared from the approved government laboratory well in advance and got approved from Engineer in charge before starting the work.2. Cement from the same stock sent for design shall be used for concreting work.3. The rate of consumption of cement in mix design are considered for the work as per general practice in actual design ,if the cement consumption is less than that shown in item,therate will be reduced accordingly .If the rate as per mix design for cement consumption is more than that as per item ,the extra cement will have to be brought by the contractor at his own cost.4. Before concreting work,cement form each consignment shall be got tested .if the strength of fresh cement available in stock and concreting work shall be done accordingly to modified mix design.5. The minimum strength of reinforced cement concrete to ensure durability shall as per Indian standard as per IS 456-2000 with latest ammendment .6. For each consignment of cement a sample should be got tested as per norms and frequency of Vigilance and Quality Control circle, laboratory..It will be entire responsibility of contractor for testing of cement and no extra payment will be made against these testing charges.</p>
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8	Providing and laying Cast in situ / Ready Mix cement concrete in Mix-30 of trap metal for RCC Pardi of required thickness including centering, formwork, cover blocks, laying, pumping, compacting, curing, finishing complete. (Excluding reinforcement) PLC with SCADA	Bd.F6 B-7	300 38	<p>1.The appropriate mix design shall be got prepared from the approved government laboratory well in advance and got approved from Engineer in charge before starting the work.2. Cement from the same stock sent for design shall be used for concreting work.3. The rate of consumption of cement in mix design are considered for the work as per general practice in actual design ,if the cement consumption is less than that shown in item,therate will be reduced accordingly .If the rate as per mix design for cement consumption is more than that as per item ,the extra cement will have to be brought by the contractor at his own cost.4. Before concreting work,cement form each consignment shall be got tested .if the strength of fresh cement available in stock and concreting work shall be done accordingly to modified mix design.5. The minimum strength of reinforced cement concrete to ensure durability shall as per Indian standard as per IS 456-2000 with latest ammendment .6. For each consignment of cement a sample should be got tested as per norms and frequency of Vigilance and Quality Control circle, laboratory..It will be entire responsibility of contractor for testing of cement and no extra payment will be made against these testing charges.</p>
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9	Providing and fixing in position Thermo Mechanically Treated (TMT) FE -500 bar reinforcement of various diameters for Reinforced Cement Concrete 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	306	1.As per Indian standard 1786/1985 with latest amendments. 2.Various diameters of TMT Fe-500 bars brought on site for the work shall be got tested categorywise and lotwise as directed by the Engineer in Charge .
10	Providing and applying a base coat comprising of 1 kilogram Polydee-MC and 1 kilogram fresh cement after wetting the surface followed by drying the surface for 2 days, apply primer coat of TP-40 and after drying, applying Polydee-11 two component (mixing ratio 2 A: 1 B) Antibacterial food grade coating inside drinking watertank in two coats with time interval of minimum 8 hours covering 7 years guarantee on Court Fee Stamp Paper of Rs.100/- etc complete.	BDJ		As directed by Engineer in charge.
11	Providing and fixing Ductile iron Man Hole Covers/ Strom Water Grating and Grating with frame of Various sizes, weight and types and load bearing capacity as per EN-124, equivalent NECO with prior approval of concerned Superintending Engineer.	BD-V		As directed by Engineer in charge.
12	Providing & constructing Brick Masonry Inspection Chamber 60 centimetre x 45 centimetre with Reinforced Cement Concrete raft in Black Cotton soil area including cost of reinforcement, 1:2:4 cement concrete channels half round Glazed Stone Ware pipes, Brick Masonry, plastering from inside and airtight 75 milimetre thickReinforced Cement Concrete cover medium duty 100 kilogram etc. complete.	Bd.V.43	Pg-574	As directed by Engineer in charge.
13	Providing and laying in trenches 40 milimetre diameter Chlorinated Poly Venyl Chloride pipe with necessary excavation, fittings, refilling trenches. Including removing existing pipe line if necessary and conveying and stacking the same in PWD chowky or as directed etc. complete.	BD.V 5	Pg-551	As directed by Engineer in charge.
14	Providing and making Indian Standard Institute Mark ferrule connection of 40 milimetre diameter to water main including ferrule coupling cast iron bell mouth cover, built in non return valve and fixing including excavation and reinstatement complete.	Bd.V 4	Pg 551	As directed by Engineer in charge.

15	Providing and fixing 45 centimetre wide steel ladder of 40 milimetre x 6 milimetre mild steel flat stringers and steps of 18 milimetre diameter mild steel bar for water tank including fixing it in (1:2:4) Mix-15 cement concrete block 60 centimetre x 30 centimetre x 30 centimetre and painting the ladder complete.	Bd.V 19	Pg 559	As directed by Engineer in charge
16	Providing and fixing screw down for 40 milimetre diameter wheeled stop tap of brass including necessary sockets/union nut complete.	Bd.V 9	Pg 555	As directed by Engineer in charge
17	Providing and making Indian Standard Institute Mark ferrule connection of 32 milimetre diameter to water main including ferrule coupling cast iron bell mouth cover, built in non return valve and fixing including excavation and reinstatement complete.	Bd.V 4	Pg 551	As directed by Engineer in charge
18	Additional Royalty Charges			As directed by Engineer in charge.

19	Conducting prescribed tests for Quality Control.		<p>1) The test shall be carried out in accordance with the Clause " Samples & Testing of Materials " give under "Additional General Conditions & Specification" of this tender document. 2) The testing of materials shall be carried out as per the frequency specified by the Vigilance & Quality Control Circle , Pune and shall be the responsibility of contractor.3)The material required for testing shall be sent by the contractor to the specified Laboratory at his own risk and cost.4)In case the desired results are not obtained during testing or the material is rejected due to unsatisfactory results the testing charges shall not be paid to the contractor.5)It shall be obligatory on contractor to produce the test result along with receipt of payment made to the Laboratory, for releasing payment towards Testing Charges.6)In case additional testing of material found necessary due to change in source, no separate payment shall be made and it shall be the entire responsibility of contractor.7)Testing charges are mentioned in view of the rates finalised by the Vigilance & Quality Control Circle, Pune and it will be the responsibility of contractor to pay the testing charges to the concerned Laboratory in accordance with the rates finaised. No difference shall be payable to the contractor in case testing charges are revised by the Laboratory.8)Material Testing shall be carried out as directed by Engineer in Charge.</p>
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