

CAPITAL GRAND FUND 2019-20
Pooluvapatti Selection Grade Town Panchayat
Notice Inviting Tender

**Deepening and Strengthening of bund, Providing Rivetment work Providing
babypond, Inlet and Outlet arrangements, Tree plantation, Providing fencing
of Vellimedu kulam kuttai**

Form of contract: Item rate (Two cover system)

1. Bids are invited in package for the **Deepening of Water Bodies** by Tender Inviting Authority (Executive officer), Pooluvapatti Town Panchayat of Tamil Nadu in Two cover system for the **Deepening of Water Bodies** under the "Capital Grand FUND 2019-20".
2. The bid documents will be available from 06.11.2019. The bid document can also be downloaded from the website <https://tntenders.gov.in> free of cost. Online Submission of tender by e – Procure system (e-Tender system) will also be accepted upto **3.00 PM on 09.06.2022**. Online submission of tender will also be accepted.
3. Amount of Earnest Money Deposit will be 1% of the value put to tender for a package.
4. Period of contract is **12** months.
5. Any additional / further details and conditions related to these works can be obtained from the office of the respective Executive Officers of Town Panchayats
6. Important dates

1	Date of Pre bid meeting	08.06.2022 AT 11.00 AM
2	Last date and time for downloading bid documents	09.06.2022
3	Last Date and time for submission of bid document, including online submission	09.06.2022 AT 3.00 PM
4	Date and time of opening of the Technical Bid	09.06.2022 AT 3.30 PM

7. **In the event of the specified date for submission of bids being declared a holiday, bids will be received and opened on the next working day at the same time and venue.**
8. Other details can be seen in the bid documents.


Executive Officer
Pooluvapatti Selection Grade Town Panchayat
Coimbatore – 641101

Tender Document

CAPITAL GRAND FUND 2019-20

TECHNICAL BID

Pooluvapatti Selection Grade Town Panchayat

NAME OF THE WORK : Deepening and Strengthening of bund,
Providing Rivetment work Providing
babypond, Inlet and Outlet arrangements, Tree
plantation, Providing fencing of Vellimedu
kulam kuttai Town Panchayat

E.M.D.AMOUNT : Rs. : 5,00,000/-

PERIOD OF DOWN LOADING
OF BID DOCUMENT : **UPTO 3:00 PM, date. 09.06.2022**

LAST DATE AND TIME FOR
RECEIPT OF BID : **DATE 09.06.2022_TIME : 3.00 PM**

TIME AND DATE OF
OPENING OF BIDS : **DATE 09.06.2022 TIME : 3.30 PM**

PLACE OF OPENING OF BIDS : **Pooluvapatti Selection Grade Town Panchayat**

OFFICER INVITING BIDS : Executive Officer
Pooluvapatti Town Panchayat

CHECK LIST FOR SUBMISSION OF BID

Bidder shall check the submission of relevant details and documents as mandated in the tender document, before submission of bids.

Sl.No.	Compliance criteria as per clause	Details	Check
1	15. 15.1	Earnest Money Deposit Whether Earnest Money Deposit at 1% of the contract value of work put to tender in the form of Banker's cheque, Demand Draft enclosed? (EMD in any other form will not be accepted)	YES / NO
2	4.1.A.1	Whether copy of Certificate of registration as class I / class II contractor and above, with proof for its currency enclosed?	YES / NO
3	4.1.A.2	Whether Proof for being in the Civil Engineering construction field at-least for the past Five year (2010-11 to 2014-15) enclosed?. [Bidder should submit the audited balance sheet for the last five years.]	YES / NO
4	4.1.A.3	Audited s Whether Proof for having an annual minimum financial turnover of not less than 50% of the value put to tender in a financial year in the preceding "Three" years ((2012-13 to 2014-15)) enclosed?	YES / NO
5	4.1.A.4	Whether proof for having satisfactorily completed BT Road Work(s) of not less than 50% of the value put to tender under a " single agreement " in any one of the preceding three years ((2012-13 to 2014-15) for a Government Department/Board/Government Undertaking enclosed?	YES/NO
6	4.1.A.5	Whether Proof of the applicant for having working capital sufficient to finance at least 15% of value put to tender enclosed? [Working capital will be calculated by adding the amount available in the bank account of the applicant on the date of submission of application and the unutilized amount of overdraft / credit facility extended to the applicant by the Nationalized / Scheduled banks]	YES/NO
7	4.1.B	Whether all the certificates are Notorised?	YES/NO
8	4.1.C & D	Whether the proof/details of availability of Contractor's Major Equipments proposed for carrying out the works enclosed? [If the contractor for BT road works does not own Paver Machine and Hot mix plant, lease agreement as prescribed in tender document enclosed]	YES/NO
9	General	Whether the latest TIN return enclosed ?	YES / NO
10	Section 2	Whether Annexure A to H have been enclosed duly filled in?	YES / NO

11	General	Whether Power of attorney / Authorization for	
		•Persons signing the Tender enclosed?	YES / NO
		•For Partner – in- charge if any, enclosed?	YES / NO
12	SECTION 2	Whether Qualification Information are annexed in the prescribed forms A to H ? Annexure A	Yes/No
		Annexure B	Yes/No
		Annexure C	Yes/No
		Annexure D	Yes/No
		Annexure E	Yes/No
		Annexure F	Yes/No
		Annexure G	Yes/No
		Annexure H	Yes/No
13		Whether the bidder has signed in all the pages of the tender document?	Yes /No
14	D. 18.1 and 18.2	Sealing and Marking of Bids in case of manual submission	
		a. Whether the cover containing EMD, VAT clearance certificate, qualification and information etc., has been super scribed as “Technical Bid”?	Yes/No
		b. Whether the other cover containing the duly filled in tender schedule is super scribed as “Price Bid”?	Yes/No
		c. Whether the bids are put in 2 separate covers and outer cover is sealed?	Yes/No
		d. Whether both these covers are put in a single big envelope and bear the following identification: “Tender for “Deepening and Strengthening of bund, Providing Rivetment work Providing babypond, Inlet and Outlet arrangements, Tree plantation, Providing fencing of Vellimedu kulam kuttai Town Panchayat. . Bid Reference No.320/2019 DO NOT OPEN BEFORE 3.30 PM on Date <u>09.06.2022</u>	Yes/No

Disclaimer: This Check list is only illustrative and not exhaustive. Hence, the bidder is requested to go through the entire Document and submit all relevant documents and details.

INVITATION FOR BID
(IFB)

SECTION -1

INSTRUCTIONS TO BIDDERS (ITB)

SECTION -1

INSTRUCTIONS TO BIDDERS (ITB)

Table of Contents

Clause	A. General	Page No.	Sl. No.	E. Bid Opening and Evaluation	Page No.
1	Scope of Bid	07	22	Bid Opening	12
2	Source of funds	07	23	Examination of Technical Bids and Determination of Responsiveness	13
3	Eligible bidders	07	24	Price Bid Opening	13
4	Qualification of the bidder	07	25	Process to be confidential	13
5	Cost of Bidding	08	26	Clarification of bids	13
6	Site Visit	08	27	Correction of errors	13
			28	Evaluation and comparison of bids	14
			F. Award of Contract		
B. Bid Documents			29	Award Criteria	14
7	Content of Bid Documents	09	30	Employers right to accept any Bid and to Reject any or all Bids	14
8	Clarification on Bid Documents	09	31	Notification of Award and Signing of agreement	14
9	Amendment to Bid Documents	09	32	Corrupt or Fraudulent Practices	15
C. Preparation of Bids			33	Procedure for e submission	15
10	Language of Bid	09			
11	Documents Comprising the Bid	09			
12	Bid Prices	10			
13	Currencies of Bid and Payment	10			
14	Bid Validity	10			
15	Earnest Money Deposit	10			
16	No Alternative Proposals by Bidders	11			
17	Format and Signing of Bid	11			
D. Submission of Bids					
18	Sealing and Marking of Bids	11			
19	Deadline for Submission of Bids	12			
20	Late Bids	12			
21	Withdrawal / Modification of Bids	12			

A. General

1. Scope of Bid

1.1 The Executive officer, Pooluvapatti Town Panchayat (referred to as Employer in these documents) invites bids for the works (as defined in these documents and referred to as "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 Clause 13 of Section 2.

2. Source of Funds

Under the "CAPITAL GRAND FUND 2019-20" – Government of Tamil Nadu have allotted funds Improvements of sandy under "CAPITAL GRAND fund 2019-20"

3. Eligible Bidders

3.1 All bidders shall furnish their qualification details in Section 3 based on which eligibility will be decided

3.2 Bidders shall not be under a declaration of ineligibility for corrupt and fraudulent practices.

3.3 No joint ventured or consortium shall be allowed to bid for the above mentioned package. No Sub Contracting will be permitted.

4. Qualification of the Bidders

4.1 A. 1) The Bidder should be at least a CLASS II contractor, currently registered with any State Government Department/Board/Government Undertaking for the packages having value up to Rs.75.00 Lakhs and at least a CLASS I contractor for the packages having value of more than Rs. 75 Lakhs.

2) The Applicants should have been in the Civil Engineering Construction field at-least for the past Five years. (2010-2011 to 2014-2015). He should submit the audited balance sheet for last five years.

3) Should have an annual minimum financial turnover of not less than 50% of the value put to tender in a financial year in the preceding "Three" years (2012-13, 13-14, 14-15)

4) Satisfactorily completed BT Road work(s) of not less than 50% of the value put to tender under a "**single agreement**" in any one of the preceding 'three" years (2012-13, 13-14, 14-15)) for Government Department/Board/Government Undertaking

5) The applicant should have working capital sufficient to finance at least 15% of value put to tender. [Working capital will be calculated by adding the amount available in the bank account of the applicant on the date of submission of application and the unutilized amount of overdraft / credit facility extended to the applicant by the Nationalized / Scheduled banks] copies.

B) All copies of certificates in support of the above should be attested by Notary Public / Officers not below the rank of Executive Engineer

C) Each bidder should further demonstrate:

The tenderers shall have the following minimum construction equipments Tools and Plants exclusively available for this work. – (Either own or under lease with the applicant)

SI No	Name of the Equipment	Quantity
	Water bodies	
1	Concrete Mixer Machine	2 Nos
2	Concrete Vibrator Machine	2 Nos
3	Earthwork excavator	1 No

D) Evidence to be produced:

- i. OWNERSHIP of the Concrete Mixer Machine, Concrete Vibrator Machine, Earthwork excavator or its LEASE from a lawful owner for use at any time during the period of contract. The bidder, who is owner of, shall establish that he is the owner or furnish a proof that he has leased from a lawful owner. Hence, the proof of ownership established by way of production of copy of purchase invoice duly notarized or certificate furnished by Divisional Engineer of Highways Department regarding the ownership or submission of original lease agreement along with copy of invoice duly attested by a notary public will be considered towards proof of ownership or lease from a lawful owner
- ii. Sworn in Affidavit and Chartered Accountant's Certificate stating the details of equipments, tools and plants available with the applicant with make, year of purchase, capacity, present working condition of the equipment etc.,

If the Tools and plants are proposed to be taken on lease or already on lease with the applicant, the source, from which the Tools and plants have been taken on lease or proposed to be taken on lease with proof, should be furnished

4.2 Even though the bidders meet the qualifying criteria, they will be disqualified if they have:

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

5 Cost of Bidding

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

6 Site visit

- 6.1** 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 cost of visiting the Site shall be at the Bidder's own expense.

B. Bid Documents

7. Content of Bid Documents

7.1 The set of bid documents comprises of the documents listed in the table below and addenda issued in accordance with Clause (if any)

Invitation for Bids		
Section	1	Instructions to Bidders
	2	Forms of Bid and Qualification Information
	3	Conditions of Contract
	4	Bill of Quantities

8. Clarification on Bid Documents

8.1 A prospective bidder requiring any clarification of the bidding documents may notify Executive Officer in writing or by cable (hereinafter "cable" includes telex and facsimile) at the Employer's address indicated in the invitation to bid. The Executive Officer will respond to any request for clarification which he received earlier than 48 hours prior to the opening of the tender.

8.2 The Executive Officer will hold pre bid meeting for the work. Clarification can also be obtained during the meeting to be held on 09.06.2022 **at 11:00 AM** at the Town Panchayat Office.

9. Amendment to Bid Documents

9.1 At any time after the issue of the tender documents and before the opening of the tender, the Tender Inviting Authority may make any changes, modifications or amendments to the tender documents. All such changes will also uploaded in the relevant websites.

9.2 Any addendum/ corrigendum thus issued shall be part of the bidding documents and shall be communicated in writing or by cable to all the purchasers of the bidding documents. Prospective bidders shall acknowledge receipt of each addendum by cable to the Employer.

9.3 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 Sub-Clause 19.2 below.

C. Preparation of Bids

10. Language of the Bid

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

11. Documents comprising the Bid

11.1 The bid submitted by the bidder shall comprise the following documents:

- (a) The Bid (in the formats indicated in Section 3).
- (b) Earnest Money Deposit (EMD)
- (c) Priced Bill of Quantities;
- (d) Qualification Information Form and Documents;
- (e) Exemption from EMD, if any, claimed by the bidder

and any other materials required to be completed and submitted by bidders in accordance with these instructions. The documents listed under sub-clause, 4 , 6 and 7.1 of section 1 and section 3 shall be filled in without exception.

12. Bid Prices

- 12.1** The contract shall be for the whole works as described in Sub-Clause 1.1, based on the priced Bill of Quantities submitted by the Bidder.
- 12.2** The bidder shall fill in rates and prices and line item total (both in figures and words) for all items of the Works described in the **Bill of Quantities** along with total bid price (both in figures and words). Items for which no rate or price is entered by the bidder will not be paid for by the Employer when executed and shall be deemed covered by the other rates and prices in the Bill of Quantities. Corrections, if any, shall be made by crossing out, initialing, dating and rewriting.
- 12.3** All duties, taxes, and other levies payable by the contractor under the contract, or for any other Act /Rules/Stipulations shall be included in the rates, prices and total Bid Price submitted by the Bidder.
- 12.4** Price Adjustment Clause as per the relevant provisions of G.O. 227 , MAWS, dt. 23.11.2009 is applicable for the tenders of value of Rs.1 cr and above, even if the contract period is for less than 1 year. This GO will be applicable for all Contracts of value of Rs. 1 crore and above

13. Currencies of Bid and Payment

- 13.1** The unit rates and the prices shall be quoted by the bidder entirely in Indian Rupees.

14. Bid Validity

- 14.1** Bids shall remain valid for a period not less than **ninety days** after the deadline date for bid submission specified in Clause 19. A bid valid for a shorter period shall be rejected as non-responsive.
- 14.2** In exceptional circumstances, prior to expiry of the original time limit, the Employer may request the bidders to extend the period of validity for a specified additional period. The bidder shall consider the same for a period not exceeding additional **thirty days**.
- 14.3** Bid evaluation will be based on the bid prices without taking into consideration the above correction.

15. Earnest Money Deposit

- 15.1** The Bidder shall furnish, as part of his Bid, Earnest Money Deposit at 1% (rounded off to next ten rupees) of the contract value of work put to tender in the form of Banker's cheque, Demand Draft Drawn in favour of Executive officer, Pooluvapatti Town Panchayat payable at the place of Town Panchayat EMD remitted in any other form will not be accepted.
- 15.2** Any bid not accompanied by an acceptable EMD and not secured as indicated in Sub-Clauses 15.1 above shall be rejected by the Employer as non-responsive.
- 15.3** The EMD of unsuccessful bidders will be returned within 28 days of the end of the bid validity period specified in Sub-Clause 14.1.
- 15.4** The EMD may be forfeited
- (a) if the Bidder withdraws the Bid after Bid opening during the period of Bid validity;
 - (b) if the Bidder does not accept the correction of the Bid Price, pursuant to Clause 27; or
 - (c) in the case of a successful Bidder, if the Bidder fails within the specified time limit to enter into an agreement

16. No Alternative Proposals by Bidders

- 16.1** Bidders shall submit offers that comply with the requirements of the bidding documents, including the basic technical design as indicated in the drawing and specifications. No alternatives will be considered.

17. Format and Signing of Bid

- 17.1** The Bid shall be typed or written in indelible ink and shall be signed by a person or persons duly authorized to sign on behalf of the Bidder. All pages of the bid where entries or amendments have been made shall be initialed by the person or persons signing the bid.
- 17.2** The Bid shall contain no alterations or additions, except those to comply with instructions issued by the Employer, or as necessary to correct errors made by the bidder, in which case such corrections shall be initialed by the person or persons signing the bid.
- 17.3** The Bidder shall furnish information as described in the Form of Bid on commissions or gratuities, if any, paid or to be paid to agents relating to this Bid, and to contract execution if the Bidder is awarded the contract.
- 17.4** E-Submission of tender is also accepted.

D. Submission of Bids

18. Sealing and Marking of Bids

- 18.1** The intending bidder should submit tender in two cover system. The cover containing EMD, VAT clearance certificate, qualification and information etc., shall be superscribed as "Technical Bid". Another cover containing the duly filled in tender schedule shall be superscribed as "Price Bid". Both these covers shall be put in a single big envelope and shall be submitted.

The Cover superscribed as "Technical Bid" will be opened first. The Price Bid cover will be opened only if the document required in the Technical Bid cover viz., EMD, VAT clearance certificate, work experience EMD exemption certificate(if applicable), etc., are found in order as per the tender conditions. If Technical Bid is not submitted with these particulars, the Price Bid cover will not be opened and the tender will be rejected and returned to the bidder "unopened".

- 18.2** The **inner and outer** envelopes shall
- (a) be addressed to the Employer at the following address:
The Executive officer,
Pooluvapatti Town Panchayat
 - (b) bear the following identification:

"Tender for Deepening and Strengthening of bund, Providing Rivetment work Providing babypond, Inlet and Outlet arrangements, Tree plantation, Providing fencing of Vellimedu kulam kuttai Town Panchayat" Town Panchayat

Bid Reference No.320/2019

- DO NOT OPEN BEFORE **3.30 PM** on **09.06.2022**

- 18.3** In addition to the identification required in Sub-Clause 18.2, the inner envelopes shall indicate the name and address of the bidder to enable the bid to be returned unopened in case it is declared late, pursuant to Clause 20.

- 18.4** If the outer envelope is not sealed and marked as above, the **Tender Inviting Authority** will assume no responsibility for the misplacement or premature opening of the bid.
- 19. Deadline for Submission of the Bids**
- 19.1** Bids must be received by the **Tender Inviting Authority (Executive officer)** at the address specified above not later than **3.00 PM on 09.06.2022**. In the event of the specified date for the submission of bids is declared a holiday, the Bids will be received upto the appointed time on the next working day.
- 19.2** The **Tender Inviting Authority (Executive officer)** may extend the deadline for submission of bids by issuing an amendment in accordance with Clause 9, 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.
- 20. Late Bids**
- 20.1** Any Bid received by the **Tender Inviting Authority (Executive officer)** after the deadline prescribed in Clause 19 will be returned unopened to the bidder.
- 21. Withdrawal / Modification of Bids**
- 21.1** Bidders may modify or withdraw their bids by giving notice in writing before the deadline prescribed in Clause 19.
- 21.2** Each Bidder's withdrawal notice shall be prepared, sealed, marked, and delivered in accordance with Clause 17 & 18, with the outer and inner envelopes additionally marked "**WITHDRAWAL**".
- 21.3** No bid may be modified after the deadline for submission of bids.
- 21.4** Withdrawal or modification of a Bid between the deadline for submission of bids and the expiration of the original period of bid validity specified in Clause 14.1 above or as extended pursuant to Clause 14.2 may result in the forfeiture of the Bid security pursuant to Clause 15.
- 21.5** Bidders may offer discount to or modify the prices of the bids by submitting the bid modifications in accordance with this clause, or include in the original bid submission.

E. Bid Opening and Evaluation

22. Technical Bid Opening

- 22.1** The **Tender Inviting Authority(Executive officer)** will open all the Technical Bids, Ist cover one subscribed as Technical Bid / received (except those received late), including modifications made pursuant to Clause 21, in the presence of the Bidders or their representatives who choose to attend at **3.30 PM on 09.06.2022** at Town Panchayat office. In the event of the specified date of Bid opening being declared a holiday, the Bids will be opened at the appointed time and location on the next working day.
- 22.2** Envelopes marked "**WITHDRAWAL**" shall be opened and read out first. Bids for which an acceptable notice of withdrawal has been submitted pursuant to Clause 21 shall not be opened.
- 22.3** The Bidders' names, the Bid withdrawals/ Modifications, the presence or absence of Bid security, and such other details as the **Tender Inviting Authority (Executive officer)** may consider appropriate, will be announced by the **Tender Inviting Authority (Executive officer)** at the opening. Bids sent pursuant to Clause 21 that are not opened and read out at bid opening will not be considered for further evaluation regardless of the circumstances. Late and withdrawn bids will be returned un-opened to bidders.

22.4 The **Tender Inviting Authority (Executive officer)** shall prepare minutes of the Bid opening, including the information disclosed to those present in accordance with Sub-Clause 22.3.

23. Examination of Technical Bids and Determination of Responsiveness

23.1 Prior to the detailed evaluation of Technical Bids, the Tender Scrutiny Committee will determine whether each Bid (a) meets the eligibility criteria defined in Clause 22; (b) has been properly signed; (c) is accompanied by the required securities and; (d) is substantially responsive to the requirements of the Bid documents.

23.2 A substantially responsive Bid is one which conforms to all the terms, conditions, and specifications of the Bid 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.

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

24. Price Bid Opening

24.1 The **Tender Inviting Authority (Executive officer)** shall notify **those bidders whose technical bids did not meet the minimum qualification criteria** or were considered non responsive, indicating that **their price bids will be returned un opened** after the award of the contract. The Employer shall simultaneously notify the technically qualified bidders indicating the date time and place set for opening of price bids.

24.2 The price bids shall be opened by the **Tender Inviting Authority (Executive officer)** in the presence of bidders representatives who choose to attend. The name of the bidders, quoted bid prices, discounts offered or modification if any shall be read aloud and the **Tender Inviting Authority (Executive officer)** shall prepare minutes of the price bid opening.

25 Process to be Confidential

25.1 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 effort by a Bidder to influence the **Tender Inviting Authority (Executive officer)** processing of Bids or award decisions may result in the rejection of his Bid.

26 Clarification of Bids

26.1 To assist in the examination, evaluation, and comparison of Bids, bidder may be asked to clarify Bid, including breakdowns of the 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 **Tender Scrutiny Committee** in the evaluation of the Bids in accordance with Clause 27.

26.2 Subject to sub-clause 26.1, no Bidder shall contact the **Employer** or his subordinates on any matter relating to its bid from the time of the bid opening to the time the contract is awarded. If the Bidder wishes to bring out additional information, it should be done in writing.

26.3 Any effort by the Bidder to influence the **Tender Inviting Authority (Executive officer)** or any other person involved in the process of the bid evaluation, bid comparison or contract award decisions may result in the rejection of the Bidders' bid.

27. Correction of Errors

- 27.1** Bids determined to be substantially responsive will be checked by the **Tender Inviting Authority (Executive officer)** for any arithmetic errors. Errors will be corrected by the Employer as follows:
- (a) where there is a discrepancy between the rates in figures and in words, **the rate whichever is less** will govern; and
 - (b) where there is a discrepancy between the unit and the line item total, resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern.
- 27.2** The amount stated in the Bid will be adjusted by the **Tender Inviting Authority (Executive officer)** in accordance with the above procedure for the correction of errors and, with the concurrence of the Bidder, shall be considered as binding upon the Bidder. If the Bidder does not accept the corrected amount the Bid will be rejected and the Bid security may be forfeited in accordance with Sub-Clause 15.4 (b).
- 28. Evaluation and Comparison of Bids**
- 28.1** The **Tender Inviting Authority (Executive officer)** will evaluate and compare only the Bids determined to be substantially responsive in accordance with Clause 23.
- 28.2** In evaluating the Bids, the **Tender Scrutiny Committee** will determine for each Bid the evaluated Bid Price by adjusting the Bid Price as follows:
- (a) making any correction for errors pursuant to Clause 27; or
 - (b) making an appropriate adjustments for any other acceptable variations, deviations; and
 - (c) making appropriate adjustments to reflect discounts or other price modifications offered in accordance with Sub Clause 21.5.
- 28.3** The **Tender Inviting Authority (Executive officer)** reserves the right to accept or reject any variation, deviation, or alternative offer. Variations, deviations, and alternative offers 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.
- 28.4.** In respect of the successful tenderer, the EMD remitted along with the tender shall be converted as **Security Deposit**. The successful tenderer will be called upon to pay for an amount equivalent to 2% of the contract value (which includes 1% Earnest Money Deposit already paid) within 15 days from the receipt of Letter of Acceptance.

F. Award of Contract

29. Award Criteria

- 29.1** Subject to Clause 31, the employer will award the Contract to the Bidder whose Bid has been determined 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.
- 29.2** The contractor, shall note that the Joint venture is not permitted under this contract and also Sub contracting is not permitted.

30. Employer 's Right to Accept any Bid and to Reject any or all Bids

- 30.1** Notwithstanding Clause 29, the Town Panchayat Executive officer 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.
- 30.2** Negotiation of rates will be made only with the lowest Bidder for reducing the quoted rates

31. Notification of Award and Signing of Agreement

- 31.1** The Bidder whose Bid has been accepted will be notified of the award prior to expiry of the Bid validity period by cable, telex or facsimile confirmed by registered letter. This letter (hereinafter and in the Conditions of Contract called the "Letter of Acceptance") will state the sum that will be paid to the Contractor in consideration of the execution, completion, and maintenance of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Contract called the "Contract Price").
- 31.2** The notification of award will constitute the formation of the Contract, subject only to the furnishing of an security deposit in accordance with the provisions of Clause 28.4.
- 31.3** The Agreement will incorporate all terms and conditions to be executed between the employer and successful bidder. It shall be signed within 15 days following the issue of Letter of Acceptance and delivered by successful bidder.
- 31.4** Upon the furnishing by the successful Bidder of the Security Deposit, if any the Executive officer will promptly notify the other Bidders that their Bids have been unsuccessful.

32. Corrupt or Fraudulent Practices

- 32.1** The Employer requires that Bidders observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the Employer :
- (a) defines, for the purposes of this provision, the terms set forth below as follows :
 - (i) "corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution; and
 - (ii) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition or furnishing of false and fabricated documents
 - (b) 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:
 - i. will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a Bank-financed contract. Further, Criminal proceedings will also be initiated against the Bidder/ Contractor.

33. Procedure for e submission:

1. Bidder should do the registration in the e – tender site using the option available. Then the Digital signature registration has to be done with the e-token, after logging into the site. The e-token may be obtained from one of the authorized Certifying authorities such as SIFY/TCS/nCode/SCS/SGS etc. The list of address of the DSC vendors can be seen in <https://tntenders.gov.in/nicgep/>
2. Bidder then should login to the site using user id and the corresponding passwords.
3. The e-token that is registered should be used by the bidder and should not be misused by others.
4. After downloading the tender schedules, the Bidder should go through them carefully and then submit the documents as directed, otherwise, the bid will be rejected.
5. If there are any clarifications, this may be obtained online through the e-tender site, or thro' the contact details. Bidder should take into account the corrigendum published before submitting the bids online.
6. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender schedule and they should be in the prescribed format.

7. The bidder should read all the terms & conditions mentioned in the bid document and accept the same to proceed further to submit the bids.
8. The Bidder has to submit the tender document online well in advance before the prescribed time to avoid any delay or problem during the e-submission process.
9. Bidders seeking exemption from payment of EMD, as per existing Government Orders, and choosing e-submission option shall access the relevant option available in the e-submission format and submit scanned copy of related documents without fail.
10. The details of the bid security document should be submitted physically before the opening the tender. The scanned copies furnished at time of e-submission and the original bid security should be the same otherwise the tender will be summarily rejected.
11. The Executive officer, Town Panchayat will not be held responsible for any sort of delay or the technical difficulty faced in the submission of tenders online by the bidders.
12. The bidder may also submit the bid documents by online mode through the site (<https://tntenders.gov.in>)
13. The tendering system will give an ACKNOWLEDGEMENT Message only after successful uploading of all the required bid documents. The ACKNOWLEDGEMENT is the bid summary. With the Bid No., Date & Time of submission of the bid with all other relevant details. The documents submitted by the bidders will be digitally signed with the e-token of the bidder and then submitted.
14. The ACKNOWLEDGEMENT should be printed and to be kept as a token of the submission of the bid. The ACKNOWLEDGMENT will act as a proof of bid submission for a tender floated and will also act as an entry point to participate in the bid opening date.
15. Bidder should log into the site well in advance for bid submission so that he submits the bid in time i.e. on or before the bid submission time. If there is any delay, due to other issues, bidder only is responsible.
16. Each document to be uploaded thro' online for the tenders should be less than 2 MB, If any document is more than 2 MB, it can be reduced through zip format and the same can be uploaded. It may be however noted that. If the file size is less than 1MB the transaction uploading time will be very fast.
17. The time setting fixed in the server side & displayed at the top of the tender site, will be valid for all actions of requesting, bid submission, bid opening etc., in the e-tender system. The bidders should follow this time only, during bid submission.
18. All the data being entered by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered will not be viewable by unauthorized persons during bid submission & not be viewable by anyone until the time of bid opening. Overall, the submitted tender documents become readable only after the tender opening by the authorized individual.
19. The Confidentiality of the bids is maintained since the secured Socket layer 128 bit encryption technology is used. Data storage encryption of sensitive fields is done.
20. The bidders are requested to upload all related documents through e-tendering on line system to the tender inviting authority(Executive officer) **well before 3.00 PM** (as per Server System Clock) on **09.06.2022**
21. Tenders will be opened by the Tender inviting authority (Executive officer) or his authorized officer(s) at **3.30 P.M. on 09.06.2022** in the presence of tenderers or their authorized representatives if any & members of Tender Scrutiny Committee.

SECTION 2
ADDITIONAL CONDITIONS OF CONTRACT

SECTION 2

ADDITIONAL CONDITIONS OF CONTRACT

Table of Contents

Sl. No.	Description	Page No.	Sl. No.	Description	Page No.
	A. General			C. Quality Control	
1	Definitions	19	23	Identifying Defects	23
2	Interpretation	20	24	Tests	24
3	Language and Law	20	25	Correction of Defects	24
4	Engineer's Decisions	20	26	Uncorrected Defects	24
5	Delegation	20		D. Cost Control	
6	Communications	21	27	Bill of quantities	24
7	Other Contractors	21	28	Payments	24
8	Personnel	21	29	Tax	24
9	Employer's and Contractor's Risks	21	30	Currencies	24
10	Employer's Risks	21	31	Retention	25
11	Contractor's Risks	21	32	Liquidated damages	25
12	Contractor to construct the works	21	33	Cost of Repairs	25
13	The works to be completed by the intended completion date	21		E. Finishing the contract	
14	Approval by the Assistant Engineer/Junior Engineer	22	34	Completion	25
15	Safety	22	35	Taking Over	25
16	Discoveries	22	36	Termination	25
17	Access to the site	22	37	Payment upon Termination	26
18	Instructions	22	38	Property	26
	B. Time Control		39	Force Majeure Event	26
19	Program	22	40	Legal Provisions	26
20	Delays ordered by the Employer	23	41	Caution boards	26
21	Management Meetings	23	42	Tender Transparency Act	26
22	Early Warning	23			

SECTION 2

Additional Conditions of Contract

A. General

1. Definitions

1.1

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

The **Completion Date** is the date of completion of the Works as certified by the Engineer in accordance with Sub Clause.34.1 of section 2.

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

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.

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

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

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

The Defects Liability Period is the period of 3 year for CC Pavement from the completion of whole of the work.

Employer is Executive officer of the Town Panchayat

The Executive officer of the Town Panchayat or in his absence **Assistant Engineer/Junior Engineer** authorized by Employer is responsible for inviting tender, handling process, clarify issued related to tenders, signing of agreement and supervising the execution of the works and administering the Contract.

The **Tender Inviting Authority** is Executive officer of the Town Panchayat.

The **Tender Scrutiny Committee** is the committee of officers which will open, scrutinize and evaluates the bids.

Engineer means the Assistant Engineer/Junior Engineer who is the designated project engineer for the Tamil Nadu Urban Roads Infrastructure Project(2013-14) Fund scheme.

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

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 Clause 13 of Section 2. The Intended Completion Date may be revised only by the **Executive officer** by issuing an extension of time.

Materials are all supplies, including consumables, used by the contractor for in Town Panchayat in the Works.

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

The **Site** is the area defined as the road specified in the bid document. The date of handing over of the site is the date on which the work order is issued.

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

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

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

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

The **Works** are what the Contract requires the Contractor to construct, install, and turn over to the **Tender Inviting Authority**.

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 Executive officer** will provide instructions clarifying queries about the Conditions of Contract.

2.2 If sectional completion is specified in the Clause 13 of Section 2, references in the Conditions of Contract to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion date for the whole of the Works).

2.3 The documents forming the Contract shall be interpreted in the following order of priority:

- (1) Agreement
- (2) Letter of Acceptance, notice to proceed with the works
- (3) Contractor's Bid
- (4) Conditions of Contract including Additional Conditions of Contract
- (5) Specifications
- (6) Drawings and
- (7) Bill of Quantities

3. Language and Law

3.1 The language of the Contract and the law governing the Contract are stated in the "English" only.

4. Engineer's Decisions

4.1 Except where otherwise specifically stated, the **Assistant Engineer/Junior Engineer** will decide contractual matters between the **Employer** and the Contractor representing the **Employer**.

5. Delegation

5.1 The **Employer** may delegate any of his duties and responsibilities to other people.

6. Communications

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

7. Other Contractors

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

8. Personnel

- 8.1 The Contractor shall employ the key personnel named in the Schedule of Key Personnel as referred to in the Annexure 'A' of Section 3, to carry out the functions stated in the Schedule or other personnel approved by the **Executive officer**. The **Executive officer** will approve any proposed replacement of key personnel only if their qualifications, abilities, and relevant experience are substantially equal to or better than those of the personnel listed in the Schedule.

- 8.2 If the **Executive officer** asks the Contractor to remove a person who is a member of the Contractor's staff or his 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 work in the Contract.

9. Employer's and Contractor's Risks

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

10. Employer's Risks

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

11. Contractor's Risks

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

12. Contractor to Construct the Works

- 12.1 The Contractor shall construct and install the Works in accordance with the Specification and Drawings, and as per instructions of **Assistant Engineer/Junior Engineer**.

13. The works to be Completed by the Intended Completion Date

- 13.1 The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the program and complete the work as follows.

The following milestones have to be met

- a. Minimum one third of the value of work should be completed by the end of the 3rd month, and
- b. Work should be completed in all respects by the end of the 6th month.

If there is default in meeting either or both these deadlines, Liquidated damages @ **5%** of the unfinished value of work (in relation to the two milestones) will be levied per day till their completion.

The period of completion shall be 12 months from the date of issue of Work Order to the successful contractor.

14. Approval by the Assistant Executive Engineer

- 14.1** The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the **Assistant Executive Engineer**, who is to approve them if they comply with the Specifications and Drawings.
- 14.2** The Contractor shall be responsible for design of Temporary Works.
- 14.3** The **Assistant Executive Engineer** approval shall not alter the Contractor's responsibility for design of the Temporary Works.
- 14.4** All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the **Assistant Executive Engineer**, before their use.

15. Safety

- 15.1** The Contractor shall be responsible for the safety of all activities on the Site.

16. Discoveries

- 16.1** Anything of historical or other interest or of significant value unexpectedly discovered on the Site is the property of the Employer. The Contractor is to notify the **Executive officer** of such discoveries and carry out the **Executive officer's** instructions for dealing with them.

17. Access to the Site

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

18. Instructions

- 18.1** The Contractor shall carry out all instructions of the **Executive officer**, which comply with the applicable laws where the Site is located.

B. Time Control

19. Program

- 19.1** Within the time stated in the Clause 13 of Section 2, the Contractor shall submit to the Engineer for approval a Program showing the general methods, arrangements, order, and timing for all the activities in the Works along with monthly cash flow forecast.
- 19.2** An update of the Program shall be a program showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work including any changes to the sequence of the activities.
- 19.3** The Contractor shall submit to the **Executive officer**, for approval, an updated Program at intervals no longer than the period stated in the Clause 13 of Section 2. If the Contractor does not submit an updated Program within this period, the **Executive officer** may withhold the amount stated in the Clause 31 of Section 2 from the next payment certificate and continue to

withhold this amount until the next payment after the date on which the overdue Program has been submitted.

- 19.4 The **Executive officer's** approval of the Program shall not alter the Contractor's obligations. The Contractor may revise the Program and submit it to the Engineer again at any time. A revised Program is to show the effect of Variations and Compensation Events.

20. Delays Ordered by the Employer

- 20.1 The **Executive officer** may instruct the Contractor to delay the start or progress of any activity within the Works.

21. Management Meetings

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

22. Early Warning

- 22.1 The Contractor is to warn the **Executive officer** 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.
- 22.2 The Contractor shall cooperate with the **Executive officer** 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

23. Identifying Defects

- 23.1 The **Assistant Executive 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 **Assistant Executive Engineer** may instruct the Contractor to search for a Defect and to uncover and test any work that the **Assistant Executive Engineer** considers may have a Defect.
- 23.2 The contractor shall permit the Employer's Technical auditor to check the contractor's work and notify **Assistant Engineer/Junior Engineer** and Contractor of any defects that are found. Such a check shall not affect the Contractor's or the Engineer's responsibility as defined in the Contract Agreement.
- 23.3 The contractor shall permit the State Quality monitoring Agency to check the contractor's work and notify the **Assistant Engineer/Junior Engineer** and Contractor of any defects that are found. Such a check shall not affect the Contractor's or the Engineer's responsibility as defined in the Contract Agreement

24. Tests

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

25. Correction of Defects

- 25.1** The **Executive officer** 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 Clause 31 of Section 2. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.
- 25.2** Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time specified by the **Executive officer's** notice.

26. Uncorrected Defects

- 26.1** If the Contractor has not corrected a Defect within the time specified in the **Executive officer's** notice, the **Assistant Engineer/Junior Engineer** will assess the cost of having the Defect corrected, and the Contractor will pay this amount.
- Note:-** Where in certain cases, the technical specifications provide for acceptance of works within specified tolerance limits at reduced rates, Engineer will certify payments to Contractor accordingly.

D. Cost Control

27. Bill of Quantities

- 27.1** The Bill of Quantities shall contain items for the construction, installation, testing, and commissioning work to be done by the contractor.
- 27.2** 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.

28. Payments

- 28.1** **Part or complete Payment will be made EVERY MONTH by the Executive Officer based on the OUT -TURN of satisfactory completion of work in the PREVIOUS MONTH and value of work executed shall be determined, based on the measurements and check measurements by the Engineer in the M.Book.**
- 28.2** Items of the Works for which no rate or price has been entered in will not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.

29. Tax

- 29.1** The rates quoted by the Contractor shall be deemed to be inclusive of the sales and other taxes that the Contractor will have to pay for the performance of this Contract. The Employer will perform such duties in regard to the deduction of such taxes at source as per applicable law.

30. Currencies

- 30.1** All payments shall be made in Indian Rupees.

31. Retention

- 31.1** The Employer shall retain a sum equivalent to 5% of the value of the each bill as retention money from each payment due to the Contractor.

31.2 Out of the 5% of the retention amount, on issue of completion certificate for the work 2.5% will be released to the Contractor while the balance 2.5% will be retained during defect liability period (3 year). The retained 2.5% will be released by the Executive officer, after ensuring no liability in connection with work executed.

32. Liquidated Damages

The Contractor shall full fill two milestones viz.,

The following milestones have to be met

- a. Minimum one third of the value of work should be completed by the end of the 3rd month, and
- b. Work should be completed in all respects by the end of the 6th month.

If there is default in meeting either or both these deadlines, Liquidated damages @ **5%** of the unfinished value of work (in relation to the two milestones) will be levied per day till their completion.

If the work is not completed even 45 days after the 12 months period, the contract is liable for summary cancellation, Security deposit forfeited and contractor black listed.

However, as earlier mentioned, the employer can cancel the contract if the work is not executed as per the contract in the intermediate period also.

33. Cost of Repairs

- 33.1** 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 periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions.

E. Finishing the Contract

34. Completion

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

35. Taking Over

- 35.1** The Employer shall take over the Site and the Works within seven days of the **Assistant Engineer/Junior Engineer** issuing a certificate of Completion.

36. Termination

- 36.1** The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.
- 36.2** Fundamental breaches of Contract include, but shall not be limited to the following:
- a) The **Executive officer** 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 **Assistant Engineer/Junior Engineer**
 - b) The Contractor does not maintain a security which is required;
 - c) The Contractor has not completed even 45 days after the contract period
 - d) If the Contractor, in the judgment of the Employer has engaged in corrupt or fraudulent practices in competing for or in the executing the Contract.
- 36.3** 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.

37. Payment upon Termination

- 37.1** If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the **Assistant Engineer/Junior Engineer** shall issue a certificate for the value of the work done up to the date of the issue of the certificate, less other recoveries due in terms of the contract, less taxes due to be deducted at source as per applicable law and less the percentage to apply to the work not completed as indicated in the Clause 13 of Section 2. 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.

38. Property

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

39. Force Majeure Event

- 39.1** No party is eligible to terminate the agreement due to force majeure events.

40. Legal Provisions

- 40.1** Bidder shall abide all statutory legal provisions made in relevant Laws./ Acts / Rules including but not confined to the Child Labour Act, Factories Act, Industrial Disputes Act, etc. The Employer has the right to take action to invoke the Revenue Recovery Act to recover any amount due, wherever necessary.

40.2 Risk Insurance

The work executed by the contractor under this contract shall be maintained by the contractor's risk until the work is taken over by the Executive officer. The Government should not be liable to pay for any loss or damages occasioned by (or) arising out of fire, flood, volcanic eruptions, earth quake, other conclusion of nature and all other natural calamities risk arising out of act of God during such period and that the option whether to take insurance coverage (or) not to care such risks is left to the contractor.

41. Caution boards: "CAUTION: WORK IN PROGRESS ROAD CLOSED"

Warning Notice shall be placed at points in the neighborhood of the work where other roads join and cross the road and at such points as may be directed to enable motorists, cyclists, or vehicular traffic to avoid the obstructed road by taking alternative routes, extra cost will not be paid for any incidental items.

42. Tender Transparency Act

The Tamil Nadu Tender Transparency Act will be applicable for this tender.

SECTION - 3

Formats of Qualification Information

1. Qualification Information

The Applicant shall include with the Qualification schedule, details in the prescribed proforma vide Annexure "A" to "H".

- | | |
|--------------------|-------------------------------------------------------------------------------|
| I. Annexure 'A' | - Structure and Organization |
| II. Annexure 'B' | - Financial Capability Statement |
| III. Annexure 'C' | - Plant and Equipments |
| IV. Annexure 'D' | - Work experience (works completed) |
| V. Annexure 'E' | - Details of Abandonment of work Litigation / debarring done |
| VI. Annexure 'F' | - Affidavit on Non-judicial stamp paper |
| VII. Annexure 'G' | - Undertaking to abide by modified terms and Conditions, if any |
| VIII. Annexure 'H' | - Details of Technical Personnel under Regular Employment with the Applicant. |

Annexure “A”

STRUCTURE AND ORGANISATION

1	Name of the Bidder	:	
2	Status	:	
	Individual contractor	:	
	Sole Proprietary Firm	:	
	Firm in Partnership	:	
	Private Limited Company	:	
	Public Limited Company	:	
3	Head Office/Registered office address with phone/ Fax Number / E-mail ID	:	
4	Local office (if any) address with Phone/ Telex / Fax Number	:	
5	Main line of Business [such as (Civil) Engineering Contractor / General Engineering Contractor/ Electrical Engineering Contractor etc, should be specified.]	:	
6	Name, position, status, capacity etc, of the Key personnel/ [directors of the company (Attach organization chart showing the structure of the company/firm)]	:	
7	Name, capacity and address of the signatory who has Signed the Qualification Application. Attested copy of authorization issued (either by power of attorney or as per articles of Partnership Deed/ Memorandum of Association) in favour of the signatory to sign the qualification Application price Tender/ Agreement should be appended.	:	

ANNEXURE “B”

FINANCIAL CAPABILITY

1	Name and address of the Applicant	:			
2	Income Tax Permanent Account No. C.I. H. No.	:			
3	TIN Number	:			
	Annual turn over as per Income Tax returns filed for the past five years	:	TAX YEAR	Figures (Rs.)	Words (Rs)
		:	2015-2016		
		:	2016-2017		
		:	2017-2018		
		:	2018-2019		
		:	2019-2020		
		:	TAX YEAR	Figures	Words
5	Annual turn over as per audited statement of account duly certified by the Chartered Accountant during the preceding Five years (Attach attested copy of balance sheets)	:	2015-2016		
		:	2016-2017		
		:	2017-2018		
		:	2018-2019		
		:	2019-2020		
6	Working Capital	:			
	I. Balance in bank account (Rs.)	:			
	II. Unutilized overdraft / Credit facility in the Nationalized / Scheduled bank (Rs.)	:			

ANNEXURE "C"

DETAILS OF CONSTRUCTION EQUIPMENTS, TOOLS & PLANTS, VEHICLES THAT COULD BE DEPLOYED EXCLUSIVELY FOR THIS WORK

NAME OF APPLICANT:

Sl.No.	Name of equipment/ Tools and plants/vehicles	Total requirement for this work	Equipments owned by the Applicant		Equipments currently under lease, available with the Applicant				Equipments proposed to be taken on lease		
			Number	Year of purchase make and capacity	Present working condition	Number	Year of Manufacture, Make & Capacity	Present working condition	Number	Year of Manufacture, Make & Capacity	Present working condition
	For Kitchen Room, Store										
1	Concrete Mixer Machine	2 Nos									
2	Concrete Vibrator Machine	2 Nos									
3	Earthwork excavator	1 No									

Note: For the equipments currently under lease with the Applicant, date of expiry of lease period shall be furnished

ANNEXURE "D"

Deepening and Strengthening of bund, Providing Rivetment work Providing babypond, Inlet and Outlet arrangements, Tree plantation, Providing fencing of Vellimedu kulam kuttai Town Panchayat

**WORK(S) OF NOT LESS THAN 50% OF THE
VALUE PUT TO TENDER UNDER A "SINGLE AGREEMENT" IN ANY ONE OF THE PRECEDING 'THREE' YEARS
(2012-13, 13-14, 14-15) FOR GOVERNMENT DEPARTMENT/BOARD/GOVERNMENT UNDERTAKING**

NAME OF BIDDER :

Sl. No.	Type and Nature of work	Location Village/ Town/Taluk/ District/State	Name and designation of the employer/ owner	Value of work as per Agreement Rs.	Agreement Number	Stipulated period of contract as per agreement	Date of commencement of the work	Date of actual completion of work	Reasons for delay in completion (If any)	Actual value of work executed as per final payment	Quality of work done *
1											
2											
3											
4											
5											
6											
7											

- Note:
- Certificate issued by the Engineer - in - charge (not below the rank of Executive Engineer/ Project Engineer) of each of the work is to be appended.
 - * Please indicate whether the work is "Satisfactorily Completed." Dated Signature of the applicant with seal

ANNEXURE “E”

**INFORMATION REGARDING CURRENT LITIGATION / DEBARRING / EXPELLING
OF APPLICANT OR ABANDONMENT OF WORK BY THE APPLICANT**

1. (a) Is the Applicant currently involved in any Arbitration/
litigation relating to any contract works Yes / No
- (b) If Yes, Details thereon
2. (a) Has the Applicant or any of it's constituent
partners been Debarred/Expelled by any agency
during the
last “Five” years Yes / No
- (b) If yes, Details thereon
3. (a) Has the Applicant or any of it's constituent Partners
failed to complete, any contract work during the past
“Five” years. Yes / No
- (b) If yes, give details thereon

Dated Signature of Applicant with seal

Note: If any information in this Annexure is found to be incorrect or concealed, the bid
will be summarily rejected & price bid will not be opened.

ANNEXURE “F” AFFIDAVIT

**(To be furnished in a Twenty Rupees Non-Judicial Stamp Paper duly
Certified by Notary Public)**

1. I/We the undersigned solemnly declare that all the statements made in the documents, records etc., attached with this application are true and correct to the best of my/our knowledge
2. I/We the undersigned do hereby certify that neither my/our firm/company nor any of it's constituent partners have abandoned any work/works of similar nature and magnitude in India, during the Last “Five” years.
3. I/We the undersigned do hereby certify that any of the contracts awarded to me/us has not been terminated rescinded, due to breach of contract on my/our part, during the last “Five” Years.
4. I/We the undersigned authorize(s) and request any bank/person/firm/corporation/Government Departments to furnish pertinent information deemed necessary and requested by the Tender Inviting Authority----- Town Panchayat,..... District to verify the statement made by me/us or to assess my/our competence and general reputation.
5. I/We, the undersigned, understand(s) that further qualifying information / clarifications on the statement made by me/us may be requested by the Tender Inviting Authority -----Town Panchayat,.....District and agree(s) to furnish such information/ clarification within “SEVEN” Days from the date of receipt of such request from the Tender Inviting Authority ----- Town Panchayat, District.

Dated Signature of Applicant with Seal:

(To be signed by the officer authorized by the Firm/Company to sign on behalf, the Firm/Company with company's seal)

Note: - In case of sole proprietary concern, affidavit should be signed only by the sole proprietor.

(Title of the Officer)

(Title of the firm/Company) (Date)

The above named deponent has understood the contents well and solemnly and sincerely declared and affirmed by the deponent in my presence at-----and signed before me on this day of

(Seal) (Signature of the Notary Public)

Bidders Signature with Seal

ANNEXURE "G"

UNDER TAKING

Under taking should be furnished in a Twenty Rupees Non-Judicial Stamp paper with the Qualification Application and certified by the Notary Public.

I/We

the applicant do hereby undertake that I/we will abide by the terms and conditions if any modified by the Tender Inviting Authority -----Town Panchayat in the contract conditions subsequent to submission of Qualification Annexure/price tender or subsequent to execution of the agreement.

Place:

Date :

Signature of the bidder with Seal

The above named deponent has understood the contents well and solemnly and sincerely declared and affirmed by the deponent in my presence at ----- and signed before me - -----on this day of -----.

Place:

Date:

Signature of the Notary Public with Seal

I/We

the applicant do hereby undertake that

I/we will abide by the terms and conditions set forth in the tender document and am willing to undertake the / Up gradation of roads Nos. in Package No /Town Panchayat of District under the GENERAL FUND 2015-16 at the rate as given in the price bid cover.

Place: Date :

Bidders Signature with Seal

ANNEXURE "H"

Details of Technical Personnel Under regular employment of the applicant who can be made available exclusively for this work

Name of Bidder:

Sl. No.	Designation	Name	Educational Qualification	Under regular employment with Applicant since	Total Span of Experience	Salary being paid	Remarks
1	B.E Civil (or) equivalent Degree holder with 5 years experience (or) not less than two retired Sub Divisional Officer (Assistant Executive Engineer or Assistant Divisional Engineer)	1					
		2					
		3					
		4					
		5					
		6					
		7					
		8					
2	Diploma holders in Civil Engineering with 2 years of the experience (or) Four Retired Junior Engineers.	1					
		2					
		3					
		4					
		5					
		6					
		7					
		8					

**Model Letter of Acceptance,
Model Form of Agreement,
and
Model Work Order**

Letter of Acceptance

From

Executive officer
Pooluvapatti Town Panchayat

To

Name and Address of the Successful
Bidder

Roc. No. 320/2019 ————— (date)

Sub:- Deepening and Strengthening of bund, Providing Rivetment work Providing babypond, Inlet and Outlet arrangements, Tree plantation, Providing fencing of Vellimedu kulam kuttaiin pooluvapatti Town Panchayat "CAPITAL GRAND FUND 2019-20 – issue of Letter of Acceptance – Regarding.

Ref:- 1. **Your RE Tender dated on .09.06.2022**
2. Town Panchayat Council Resolution No. -----dated-----

This is to notify you that your Bid dated .2019 for execution of the Deepening and Strengthening of bund, Providing Rivetment work Providing babypond, Inlet and Outlet arrangements, Tree plantation, Providing fencing of Vellimedu kulam kuttaiin Pooluvapatti Town Panchayat.

[File No.-320/2019) 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.

2) You are hereby requested to furnish Security Deposit for an amount equivalent to 2% of the contract value (which includes Earnest Money Deposit already paid) within 15 days from the receipt of this Letter of Acceptance. In terms of clause 30 of the tender document, the Security Deposit should be valid up to 7 days from the date of expiry of Defects Liability Period. You are also required to execute an agreement for fulfillment of the contract in a Rs. 20/- Judicial Stamp Paper. If you fail to remit the required Security deposit and execute the agreement within 15 days, your tender is liable for cancellation and EMD forfeited without notice.

3. You are informed that this is only the letter of acceptance of your bid. **Formal work order for the work will be issued on remitting the 2% Security Deposit and execution of agreement.**

Executive officer
Pooluvapatti Town Panchayat

Bidder's Signature

Agreement Form

Agreement

This agreement, made the _____ day of _____ 20_____,
between _____
_____ [Executive officer] of the one part and

_____ [name and address of contractor] (hereinafter called "the Contractor")
of the other part.

Whereas the Executive officer is desirous that the Contractor execute Deepening and Strengthening of bund, Providing Rivetment work Providing baby pond, Inlet and Outlet arrangements, Tree plantation, Providing fencing of Vellimedu kulam kuttai Town Panchayat. [File No.320 /2019.] (hereinafter called "the Works") and the Executive officer has accepted the Bid by the Contractor for the execution and completion of such Works and the remedying of any defects therein, at a contract price of Rs.....

NOW THIS AGREEMENT WITNESSETH as follows:

1. In this Agreement, words and expression shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to, and they shall be deemed to form and be read and construed as part of this Agreement.
2. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all aspects with the provisions of the Contract.
3. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying the defects wherein 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.
4. The following documents shall be deemed to form and be read and treated as part and parcel of this Agreement, viz.:
 - i) Tender Document including the Contractor's Bid Documents and all other documents furnished by the bidder and submitted as part of the Bid;
 - ii) Conditions of contract (including Additional Conditions of Contract);
 - iii) Specifications;
 - iv) Drawings;
 - v) Bill of Quantities;
 - vi) Letter of Acceptance;
 - vii) Work Order (to be issued)
5. Detailed conditions agreed in the tender document form part of the agreement. The services to be performed, timelines to be met with, penalty clauses for non performance, and the other stipulations will be as furnished herein:
 - i. **Contract Period:** The Contract period is for 12 months from the date of issue of work order to the successful contractor.
 - ii. **Payment Schedule:** Part or complete Payment will be made every month by the Executive Officer based on the outturn of satisfactory completion of work in the previous month and value

of work executed shall be determined, based on the measurements and check measurements by the Engineer in the M.Book.

iii. **Milestones and Liquidation Damages:**

If there is default in meeting either or both these deadlines, Liquidated damages @ 0.1% of the unfinished value of work (in relation to the two milestones) will be levied per day till their completion.

iv. No Joint venture is permitted or Sub contracting is permitted

v. **Machineries:** The bidder should own or lease Machines . The detailed list of Machineries as detailed in the Tender document shall be made available at the work site.

vi. **Retention Money:** The Town Panchayat shall retain a sum equivalent to 5% of the value of the each bill as retention money from each payment due to the Contractor. Out of the 5% of the retention amount, on issue of completion certificate for the work 2.5% will be released to the Contractor, while the balance 2.5% will be retained during defect liability period (ie., 3 year). The retained 2.5% will be released by the Executive Officer, after ensuring no liability in connection with work executed.

vii. **State Quality Monitors:** In order to ensure quality of the work, Third party checks and inspections by the State Quality Monitors will be taken up. Any defects pointed out by the State Quality monitors shall be attended by the Contractor at his own cost and rectified.

viii. **Fraudulent Practices :** If it is found any time during the tender process, award of contract, or during the contract period, that the Contractor has furnished false certificate or if the Contractor, in the judgment of the Employer has engaged in corrupt or fraudulent practices in competing for, getting the contract or in the executing the Contract, the Contract will be summarily terminated and Criminal Proceedings will be initiated.

ix. **Termination of the Contract:** If the work is not completed even 15 days after the contract period (12 months period), the contract is liable for summary cancellation

x. **Defect Liability Period:** The defect liability period is 3 years.

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

The Common Seal _____
was hereunto affixed in the presence of:

Signed, Sealed and Delivered by the said

in the presence of:

Binding Signature of Employer (Executive officer) _____

Binding Signature of Contractor _____

Work Order

From

To

Executive officer
Pooluvapatti Town Panchayat

Name and Address of the Successful
Bidder

Roc. No.----- (date)

Sub:- “CAPITAL GRAND FUND 2019-20” - “**Deepening and Strengthening of bund, Providing Rivetment work, Providing babypond, Inlet and Outlet arrangements, Tree plantation, Providing fencing of Vellimedu kulam kuttai**” – issuing of notice to proceed with the work-Regarding.

Ref:- 1. **Your RE Tender dated on 09.06.2022**
2. Town Panchayat Council Resolution No. -----dated-----
3. Letter of Acceptance_____ dated_____
3. Your Agreement dated-----

Pursuant to your furnishing the requisite Security Deposit as stipulated in ITB clause 30 and signing of the contract agreement for the work of Deepening and Strengthening of bund, Providing Rivetment work, Providing babypond, Inlet and Outlet arrangements, Tree plantation, Providing fencing of Vellimedu kulam kuttai Town Panchayat. @ a Bid Price of Rs._____, you are hereby instructed to proceed with the execution of the said works in accordance with the contract terms and conditions. The Contract Period is 12 months from the date of issue of work order.

You are hereby instructed to proceed with the execution of the above said work in accordance with the conditions stipulated as per the agreement. Your attention is drawn to the following specific conditions for strict compliance:

1. **Contract Period:** The Contract period is for 12 months from the date of issue of Work Order to the successful contractor.
2. **Payment Schedule:** Part or complete Payment will be made every month by the Executive Officer based on the outturn of satisfactory completion of work in the previous month and value of work executed shall be determined, based on the measurements and check measurements by the Engineer in the M.Book.
3. **Milestones and Liquidation Damages:**

Work should be completed in all respects by the end of the 12th month.

If there is default in meeting either or both these deadlines, Liquidated damages @ 0.1% of the unfinished value of work (in relation to the two milestones) will be levied per day till their completion.

4. No joint ventured or consortium shall be allowed or Sub contracting is permitted.
5. **Machineries:** The bidder should own or lease Machines. The detailed list of Machineries as detailed in the Tender document shall be made available at the work site.
6. **Retention Money:** The Town Panchayat shall retain a sum equivalent to 5% of the value of the each bill as retention money from each payment due to the Contractor. Out of the 5% of the

retention amount, on issue of completion certificate for the work 2.5% will be released to the Contractor, while the balance 2.5% will be retained during defect liability period (ie., 3 year). The retained 2.5% will be released by the Executive Officer, after ensuring no liability in connection with work executed.

7. **State Quality Monitors:** In order to ensure quality of the work, Third party checks and inspections by the State Quality Monitors will be taken up. Any defects pointed out by the State Quality monitors shall be attended by the Contractor at his own cost and rectified.
8. **Fraudulent Practices :** If it is found any time during the tender process, award of contract, or during the contract period, that the Contractor has furnished false certificate or if the Contractor, in the judgment of the Employer has engaged in corrupt or fraudulent practices in competing for, getting the contract or in the executing the Contract, the Contract will be summarily terminated and Criminal Proceedings will be initiated.
9. **Termination of the Contract:** If the work is not completed even 45days after the contract period (12 months period), the contract is liable for summary cancellation
10. **Defect Liability Period:** The defect liability period is 3 years

Executive officer
Pooluvapatti Town Panchayat

Tender Document
“ CAPITAL GRAND FUND – 2019-20 ”

PRICE BID

Pooluvapatti Town Panchayat

NAME OF THE WORK : **Deepening and Strengthening of bund,
Providing Rivetment workProviding
babypond,Inlet and Outlet arrangements,Tree
plantation,Providing fencing of Vellimedu kulam
kuttai**
: **5,00,000/-**

E.M.D.AMOUNT : Rs.

PERIOD OF DOWN LOADING : **UPTO 3:00 PM, date. 09.06.2022**
OF BID DOCUMENT

LAST DATE AND TIME FOR : **DATE 09.06.2022_TIME : 3.00 PM**
RECEIPT OF BID

TIME AND DATE OF : **DATE 09.06.2022 TIME : 3.30 PM**
OPENING OF BIDS

PLACE OF OPENING OF BIDS : **Pooluvapatti Town Panchayat**

OFFICER INVITING BIDS : **Executive Officer**
Pooluvapatti Town Panchayat

Price Bid Date :

Invitation for Bid No.

To:

Executive officer,
Town Panchayat,

.

We, the undersigned, declare that:

(a) We have examined and have no reservations to the Bid Documents.

(b) We offer to execute in conformity with the Bid Documents for the work of
Deepening and Strengthening of bund, Providing Rivetment work Providing babypond, Inlet and Outlet arrangements, Tree plantation, Providing fencing of Vellimedu kulam kuttai Town
Panchayat) under the "CAPITAL GRAND FUND 2019-20".

(c) The total price of our Bid, excluding any discounts offered in item (d) below is

- (i) In figures :- Rs...../-
- (ii) In Words:- Rupees

(d) The discounts offered are

- (i) In figures :- Rs...../-
- (ii) In Words:- Rupees

(e) The net price of our bid, after discount offered in (d) above is

(i) In figures :- Rs...../-

(ii) In Words:- Rupees only

(f) Our Bid shall be valid for a period of **90 days** from the date fixed for the bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiry of that period.

(g) If our Bid is accepted, we commit to remit Security Deposit in accordance with the Bid Documents within the stipulated time.

SCHEDULE OF RATES AND APPROXIMATE QUANTITIES

1. The quantities given here are those upon which the item rate tender cost of the work is based, but they are subject to alternations, omissions, deductions or addition as provided for in the conditions of this contract and do not necessarily show the actual quantities of work to be done. The unit rates quoted below are those governing payment for extras or deductions or omissions according to the condition of the contract, as set forth in the Standard Specifications for roads and bridges with the MORTH specifications and other condition of specifications of the contract.
2. It is to be expressly understood that the measured work is to be taken net (Not withstanding any custom or practice to the contrary) according to the actual quantities. When in places and finished according to the drawings, or as may be ordered from time to time by the Engineer in charge and the cost calculated by measurement or weight at the respective prices, without any additional charge for any necessary or contingent works concerned therewith. The rates quoted are for the finished works in situ and complete in every respect.
3. The description given in Schedule - A are to indicate the item of work only and need not be construed as full specification. The quoted rate shall be for carrying out the item as per standards and specifications described in the relevant MOST specification. The contractor shall take no advantage of any apparent error or omission in the Schedule - A description.
4. The Tenderers should quote their rates for the quantity and units specified under metric units under Schedule 'A'.
5. The contractor should sign all the pages of schedule 'A' enclosed in the tender document without any omission. Otherwise the tender will be liable for rejection as per the rules.

**Executive Officer
Town Panchayat
Pooluvapatti**

ADDITIONAL CONDITION

The Contractor should use steel centering sheets over sites as to obtain the required finish to the under site of the slab centering steel sheets must be made smooth and perfectly level and to give smooth and even finish to the RCC ceiling centering and form work shall be provided to the area ordered by the Executive Engineer during execution.

ADDITIONAL CONDITION OF CONTRACT – II

The Contractor shall at his own expense provide arrangements for this provision of footwear for any labour during cement mixing work all other similar type of work involving the use of tar mortar etc. to satisfaction for the Engineer – in charge and on his failure to do so, the Government shall be entitled to provide same and recover the cost for the contractor.

When there are complaints of non-payment of wages to the labourers bills of the contractor may be withheld pending a cleared of certified from the labour department.

ADDITIONAL CONDITION OF CONTRACT-III

Rules for the provision of health and sanitary arrangement for worker employed by the Town Panchayat and his contractors.

The Contractor's special attention is invited to clause 37 , 38, 39 and 51 of the Tamil nadu Building Practice and he is requested to provide at his own expense the following amonitions to the satisfaction of the Executive Engineer.

FIRST AID

At the work site there shall be maintained a readily accessible place. First aid appliances and medicines including adequate supply of sterilized dressings and sterilized cotton wool. The appliances shall be kept in a good order. They shall be under the charges of responsible person who shall be readily available during working hours.

DRINKING WATER

1. Water of good quality fit for drinking purposes shall be provided for the work people on a scale of not less than three gallon head per day.
2. Where drinking water is obtained from an intermittent Public water Supply each work place shall be provided with the storage tanks where such drinking water shall be stored.
3. Every water supply and storage shall be at a distance not less than 50 feet from any latrine drain or other existing well which is within such proximity of latrine drain or any other source of pollution, the well shall be properly closed, and be provided with a trap door, which shall be dust and waterproof.
4. A rollable pump shall be fitted to each covered well. The trap door shall be kept locked and opened only for cleaning or inspection which shall be done atleast once in a month.

LATRINES AND URINALS

There shall be provided within the premises of every work place latrines and urinal in an accessible place and the accommodation separately for each of them shall be on the following scale or on the scale so directed by the Executive Engineer in any particular area.

1. Where the number of persons employed does not exceed 50-2 seats
2. Where the number of persons employed exceed 50 but does not exceed 100 – 3 seats
3. For every additional 100 persons 3 seats.

If women are employed, separate latrines and urinals screened from those for men shall be provided on the same scale. Except in work places provided with water flushed latrine connected with a water borne sewage system, all latrines shall be provided with acceptable dry earth system which will be cleared atleast four times daily and atleast twice during working hours and kept in a strictly sanitary condition. The latrines and urinals shall be tarred inside and outside atleast once a year.

The escreta from the latrines shall be disposed off at the contractor's expense, in outside pits approved by the local public health authority. The contractor shall also employ adequate number of scavengers, conservancy staff to keep the latrines and urinal in a clean condition.

SHELTER DURING REST

At the work site, there shall be provided at free of cost two suitable sheds one for meals and another for rest separately for men and women for the use of labourers.

CRECHES

At every work place at which 50 or more women are working there shall be provided two huts of suitable size for the use of children under the age of 8 years belonging to such women. One hut shall be used

for infants, games and play and the other as their bedroom. The huts shall not be constructed on a lower standard than the following:

1. Thatched roofs
2. Mud floors and walls

The creches should be properly maintained and necessary equipments like toys etc., should be provided and huts shall be provided with suitable and sufficient sweepers to keep the place clean. There shall be two ayahs in attendance. Sanitary utensils shall be provided to the satisfaction of the health officer of the area concerned.

The number of huts shall be restricted to children and their attendants of the children.

CANTEEN

A Cooked food canteen on a moderated scale shall be provided for the benefits of the workers if it is considered expedient.

SHEDS FOR WORKMEN

The Contractor should provide at his own expenses shed for housing the workmen. The Sheds shall be on a standard not less than the cheap shelter type, to live in which the work pertaining to locality area accustomed to. A floor area of about 1.8 metre X 1.5 Metres for 2 persons shall be provided. The Sheds to be in rows with 1.3 Metres clear space between sheds and 9 Meters clear space between rows if conditions permit. The work people's camp shall be laid out in units of 400 persons each. Each unit to have clear space of 12 meter around.

ADDITIONAL CONDITION-IV

Safety provision in the building industry conditions in addition to clause 36 preliminary specification of T.N.B.P.

ARTICLES – 1

1. Suitable scaffolds shall be provided for workmen for all work that cannot be safely done from ladder or by any other means.
2. A Scaffold shall not be constructed, taken down or subsequently altered except,
 - a. Under the supervision of a competent and responsible person and
 - b. By competent workers possessing adequate experience in this kind of work.
3. Scaffolds shall not be overloaded so far as practicable and shall be evenly distributed.
4. Before installing lifting gear on scaffolds special precautions shall be taken to ensure the strength and stability of the scaffolds.
5. A Competent person shall periodically inspect scaffolds.
6. Before allowing a scaffold to be used by his workmen every employer shall satisfy as to whether the scaffold has been executed by his workmen or not he should take step to ensure that it functions fully with the requirements of this article.

ARTICLES – 2

1. Working platform gangways and staircase shall be so constructed that no part thereof can sag unduly or unequally.
2. Be so constructed and maintained to obviate from risks of persons tripping or slipping and
3. Be kept free from any unnecessary obstruction.
4. Every working platform gangway working place and staircase shall be suitably forced.

ARTICLES – 3

1. Every opening in the building or in a working platform shall except for the time and to the extent required to allow the excess of persons or the transport or shifting of materials be provided with suitable means to prevent the fall of persons or materials.
2. When persons are employed on a roof where there is danger of falling from the height exceeding that to be prescribed by national laws of regulations, suitable precautions shall be taken to prevent the fall of persons or materials.
3. Suitable precautions shall be taken to prevent persons being struck by articles which might fall from scaffolds or other working places.

ARTICLES-4

1. Safe means of access shall be provided, to all working platforms and other working places.
2. Every ladder shall be securely fixed and of such length as to provide secure hand hold and foot hold at every position at which it is used.
3. No material on the site shall be so attached or placed as to cause danger to any person.

PART – II

GENERAL RULES AS TO HOISTING APPLIANCES

ARTICLE 5

1. Hoisting machines and tackle including their attachments enholages and supports shall
 - a. Be of good mechanical conditions sound material and adequate strength and free from patriotic defects and
 - b. Be kept in food repair and in good working order.
2. Every rope used in hoisting or lowering materials or as a means of suspension shall be of suitable quality and adequate strength and free from patient defects.

ARTICLE – 6

1. Hoisting machines and tackle shall be examined and adequately tested after erection on the site and before use and be reexamined in position at intervals to be prescribed by national law of regulation.
2. Every chain ring, hook shackle, swivel and pulley block used in hoisting or lowering materials or as a means of suspension shall be periodically examined.

ARTICLE – 7

1. Every crane driver or hoisting appliance operator shall be properly qualified.

ARTICLE – 8

1. In the case of every hoisting machine and every chain ring hook, shackle swivel and pulley block used in hoisting or lowering or as a means of suspension, the safe working load shall be ascertained by adequate means.
2. Every hoisting machine and all gear referred to in the proceeding paragraphs shall be plainly marked with the safe working load.
3. In the case of hoisting machine having a variable safe working load, each safe working load and the conditions under which it is applicable shall be clearly indicated.
4. No part of any hoisting machine or of any gear referred to in the paragraph (i) of this article shall be loaded beyond the safe working load except for the purpose of testing.

ARTICLE – 9

1. Motor gearing, transmission, electric wiring and other dangerous parts of hoisting appliances shall be provided with sufficient safeguards.
2. Hoisting appliances shall be provided with such means as well reduce the risk of the accident descent of the load.
3. Adequate precautions shall be taken to reduce the risk of any part of suspended load becoming accidentally displayed.

PART – III

GENERAL RULES TO SAFETY EQUIPMENT AND FIRST AID

ARTICLE – 10

1. All necessary personal safety equipment shall be kept available for the use of the persons employed on the site and be maintained in a condition suitable for immediate use.
2. The workers shall be required to used the equipment thus provided and the employer shall take adequate steps to ensure proper use of the equipment by those concerned.

ARTICLE – 11

When work is carried on in proximity to any place where there is risk of drawing all necessary equipment shall be provided and kept ready for use and all necessary step shall be taken for the prompt rescue of any person in danger.

ARTICLE – 12

Where large work places are situated in cities, towns or in their sub-urban and no beds are considered necessary owing to the proximity of city or town hospital, suitable transport shall be provided to facilitate removal urgent cases to the hospitals, at their work places some conveyance facilities such as car shall be kept ready available to the injured person or persons suddenly taken seriously ill to the nearest hospital.

MOSAIC FLOORING

1. Cement concrete flooring tiles shall be manufactured from a mixed cement natural aggregates and colour materials where required by pressure process. During manufacture the tiles shall be subject to pressure of not less than 140 kg per sq.m. (or 2000 lbs. per sq. inch.)
2. Proportion of cement to aggregate in backing of the tiles shall not be less than 1:5 by weight.
3. On removal from mould, the tiles shall be kept in moist condition continuously for atleast 7 days and subsequently if necessary kept moist for such a longer period that would ensure their conformity to the requirements of Transfers strength, resistance to wear and tear absorption and would minimize shrinkage and cracking, tiles shall be stored under cover.
4. Tolerance: Tolerance on length and breadth shall be plus or minus one millimeter. Tolerance on thickness shall be plus 5mm that the range of dimensions if any or one delivery of tiles got exceed 1 mm on length and breadth and 3 mm on thickness.

THICKNESS OF WEARING LAYERS

Plain cement and plain coloured tiles for heavy duty	6 mm
Plain (mosaic) terrace tiles with chips of size Varying from the smallest upto 6 mm ($\frac{1}{4}$ ")	5mm
Mosaic terrace tiles with chips of size ranging from the smallest upto 12 mm ($\frac{1}{2}$ ")	5mm
Mosaic terrace with chips of size varying from the smallest upto 20 mm ($\frac{3}{4}$ ")	6mm

5. Colours and appearance:- The colour and texture of the wearing layer shall be uniform through out its thickness.
6. When specifying the tiles, the contractor should specifically indicate whether the chips to be used are from the smallest units 6mm or from the smallest upto 12mm or from the smallest upto 20mm size. The officers of the department shall also specify size of chips by referring the approximate photograph given in figures upto figures 4 to 6 Indian standard 1237/1959.

GENERAL QUALITY OF TILES

1. Unless otherwise required the wearing face of the terrace tiles shall be mechanically sound and flat. The wearing face of the tiles should be plane from projection depressions and crack (Hair cracks not included) and shall be reasonably parallel to the back free of tiles all angle shall be right angles and all edges shall be sharp and true.
2. Breaking traverse strength of tile shall be given as below:

Size of tiles	Span	Breaking wet test	Load based dry Test
19.85x19.85cm	15cm	71 Kg	106 Kg
24.85x24.85cm	20cm	90 Kg	120 Kg
29.85x29.85 cm	25cm	99 Kg	149Kg

3. The average percentage of ware absorption shall not be less than six full tiles shall not exceed ten in the case of water absorption test.
4. The density of the tiles shall be in the order of about 2.4 gms. The tiles shall be laid with the minimum possible width of joint and not exceeding $\frac{1}{32}$ inch. The joints shall be filled with gray cement to match the finish of the tiles and shall be made almost invisible when the floors is

given the final polish . The Polishing shall be done by means of electric polisher wherever possible and hand polish to other places like vertical faces or walls covered and other areas where the machines can have no access and to a high degree so as to present a perfectly smooth and glossy surface as oven as possible.

5. All angles at junctions of vertical faces shall be rounded off to 1 ½" radius with same quality of materials and colour of the tiles of the floor. But laid in situ and these cover shall be measured as part of flooring and laid for at the same rates as the flat floors. The colours of the tiles shall generally match other coloured face adjacent or as may be directed by Executive Engineer.
6. The dadoing and skirting have to be finished by giving necessary races in the brick wall itself so that the projections does not exceed ¾" from the face of the wall i.e. the finish plastered surfaces.
7. Based on the modules of the ruptures of 30Kg. Per Sq.m. for dry test and two thirds of the valued of wet test.

GUIDE LINES FOR ADOPTION OF STRENGTH GRADENING OF CONCRETE

1. Approximately the M100, M150, M200, M250 grades of concrete corresponds to 1:3:6, 1:2:4, 1:1 1/2 :3 and 1:2 nominal mixed of ordinary concrete currently used. The national building code gives necessary specification for strength grading of concrete, proportionately and works control and the same may be followed the extract of the same is enclosed.
2. The proportion of aggregates, cement and water to be used for controlled concrete shall be designed by preliminary tests of the materials to be actually used to obtain the specified strength with the maximum quantity of cements. However, the maximum total quantity of aggregate by weight per 50 Kg of cement shall not normally exceed 450 Kg.
3. For any particular item compressive strength required to be obtained by the concrete at 28 days in the preliminary and work tests on the 15 cm cubes minimum cement content, required to be used and the approximate proportions approved fine and coarse aggregate shall be specified, in the tender schedule. These particulars will be only for the guidance of the contractor for quoting rates.
4. Immediately upon the receipt of award of contract, the contractor shall inform the Executive Engineer the exact location of the sources of the material which he propose to use and get the materials approved. The mix with the actual approved Material to be used shall be got designed in an approved laboratory by the contractor with minimum quantity of cement to give the specified strength in the preliminary tests and the proportions got approved from the Executive Engineer in writing. These proportions shall be used so long as the materials continue to be of the same quality and the same sources subject only to slight changes in the relative qualities of fine and coarse aggregate for the purpose of promoting work ability provided the work tests also show the required strength.
5. If during the progress of work, the contractor wishes to changes the materials the proportion shall be fixed on the basis of the fresh preliminary tests to give the required strength after the Executive Engineer is satisfied that the materials satisfy the specification. No adjustment of cost shall be made for change of proportions of cement fixed in the original preliminary tests.

MIXING

Mixing shall be done only by mechanical mixes. The quantities of fine aggregate and water shall be adjusted duly in the field to compensate for bulkage due to the quantity of moisture present in fine aggregate and free water in the coarse aggregate at the time of use.

TESTS

Tests shall be got done in an approved laboratory at the cost of the contractor.

SALES TAX REGISTRATION & DEDUCTION OF SALES TAX FROM BILLS

The renderers should be required to indicated their registration number under the Tamilnadu general Sales Tax Act 1959 in the tender form and produce sales tax clearance certificate issued by the Commercial tax department before final settlement of bills.

According to the notification issued by the Commissioner of sales tax Chennai with regard to "Deduction of Sales tax at source in respect or works contractor in the TAMILNADU GOVERNMENT GAZETTE CHENNAI, Dt: 31-05-99, a now provision under 7 F for deduction of tax at Sources is introduced in the Tamilnadu General sales Tax Act 1959 by TamilNadu Act 15 of 1999 with effect from 10.06.99. As per this new section, 7 F of this act, at the time of payment of such sum deduction @ 2% [Two Percent] in respect of all other works contractor from the total amount payable to the contractors and the amount so deducted shall be deposited to the Assessing officer concerned with in "SEVEN" Days.

FOR CONTRACTORS SPECIAL ATTENTION

1. Clean river sand shall be used in all cases.
2. Only clean fresh water shall be used on the work. The Contractor shall make his own arrangement for water and shall meet all charges there for. The special attention of the Contractor is drawn to clause 39 of preliminary specification of the T.N.B.P regarding water and lighting.
3. The broken stone for concrete and RCC work shall be granite and passed by the Executive Engineer.
4. All Iron work or steel work of every kind such as to be embedded in concrete shall immediately on arrival at the site be properly scrapped and wire brushed and given priming coat of approved lead painting without claims for extra.
5. The Iron holdfasts shall be built up on walls in cement mortar 1:3 at the time of construction of walls. No extra claim shall be due for the same wherever the holdfasts are to be provided to 9" thick wall. Those should be fixed with cement concrete 1:3:6 usin 20 mm gauge broken granite stone jelly for proper anchorage and proper binding.
6. The Teakwood shall be best Indian Teakwood only and shall be subject to inspection and approval by the Executive Engineer before use on the work. Country wood where specified shall be of "Karimarudhu" or 'Kongu' for scantling "Aiyini" for planks.
7. Holes for Electric, wiring, water supply and drainage's etc. shall be provided as directed during progress of work without any claim for extra.
8. The work will be carried out with the least hindrance to the adjoining building and the contractor will be responsible for the damages caused to the existing fixtures, electric fittings etc. the course of execution and the contractor shall make good any damages without any claim for extra.
9. In the case of 'T' beams and 'L' beams the quantity given in the schedules is the quantity of rib portion only. The top flange portion will be always measured with the general slab portion and paid for at the slab rate only, For all RCC works, the rate shall include the treatment of bearing as per TAMILNADU BUILDING, PRACTICE.
10. Concrete works: All exposed concrete surfaces will be required to be finished by cement plaster as details in Schedule 'A'.
11. Plastering all external corners, edges of beams, edges of doors and windows opening etc., shall be finished sharp using richer mortar and also finished truly vertical or horizontal as the case may be. The rate for plastering shall include the cost of finishing as above and no separate extra for the corners, edges beams etc. shall be paid.
12. If rates are not separately called for, for similar items of works in difference floors, the contractor should not that one rate is applicable for all floors indicated in the detailed plans. Any claims for extra for such items floor war will not be entertained under any circumstances.
13. The projection if any to the masonry will be measured under the relevant items and no extra will paid for finishing the same.
14. The contractor shall accordingly arrange his own insurance against fire, floor, volcanic eruption, earth quake other convention of nature and all other natural calamities risks arising out of acts

of God during such period and that the Government shall not be liable for any loss or damages occasioned by or arising out of any such acts of God.

15. Provided, however that the contractor shall not be liable for all or any loss or damages occasioned by or arising out of act of foreign enemies, invasion hostilities of war like operation (before of after declaration of war) rebellion, military or Usurped Power.

RETENTION OR WITH HELD AMOUNT

1. 2½ % of the total value of the work will be retained in the final bill of the work for the period one year reckoned from the date of completion of the work in the order to enable the department to watch the effect of all seasons of the work. The contractor should furnish an indemnity bond for further period of four years. If any defects are notified in the above said period the defects should be rectified by the contractor at his own costs as directed by the Departmental Officers and no extra payment be : made for the rectification of such work.

REVENUE RECOVERY ACT

1. Whenever any amount has to be paid by the contractor in lieu of determination of the contract and virtue of clause 57(4) any amount that may be due or may become due from the contractor under the presence and the contractor is not responding to the demands for the payment of said amount, then the Government shall be entitled to recover the said amount under the provision of the Revenue Recovery Act.
2. In the event of work being transferred to any other Circle/Division /Sub Division/ Superintending Engineer / Executive Engineer /Assistant Executive Engineer who is in charge of Circle/Division/ Sub Division having jurisdiction over the work shall be component to exercise all the powers and privileges reserved in favour of Govt.

RISK INSURANCE

The Contractor shall not be liable for all or any loss of damages occasioned by or arising out of acts of foreign enemies Invasions, hostilities or war like operations (before or after declaration or war) rebellion military or usurped power.

ARBITRATION CLAUSE

1. In case any dispute or difference between the parties to the contract either during the progress or after the completion of the works or after determination, abandonment or breach of the contract or as to any other matter or thing arising there under except as to the matters left to the sole discretion of the Executive Engineers under clause 18,20,25-3, 27-1, 34,35 and 37 of the general condition of the contractor as to the with holding by the Executive Engineers or the payment of any bill to which the contractor may claim to be entitled. Then either party shall forth with give to the other, notice of such dispute or difference and such disputer or difference shall be and is hereby referred to the arbitration of the Superintending Engineer, Building Maintenance Circle Chennai – 600005. (Mentioned in the “Articles of Agreement” (here in after called the Arbitrator) In case where the value of claim is less than and upto Rs. 16,000/- (Rupees fifty Thousand only)
2. In case where the value of claim is more than Rs. 16,000/- The parties will seek remedy through the competent civil Court. (G.O.Ms.No.253, P.W.D. Dt: 24.02.1981)
3. If at any subsequent to the execution of this arrangement, Government materials other than those specified in the agreement are supplied to the contractor for use of the work, they will be charges at the market value prevailing at the time of supply to stock issues rates, whichever is higher. The contractor will be informed in writing of this charge and he should intimate in writing the rate which he demands for finish the work in view of the fact that he is to use Government materials. No Centage of incidental charges will be borne by the Government in connection with the supply of the materials referred to in this paragraph.

ADDITIONAL SPECIFICAION

1. Payments for centering works for all RCC items shall be made only after the concrete is laid, even though separate items for centering works are include in the schedule. The

centering and form shall be provided to the extent and area ordered by the Executive Engineer during execution.

2. All cement concrete for RCC works shall be machine mixed and vibrated.
3. All lime mortar shall be ground in mortar will be as per TNBP.
4. M.S. Steel rods should be cut and placed as reinforcement with proper care according to the available rods at site, so as to ensure the minimum possible wastage. The maximum percentage of wastage of permissible in any size of reinforcement rods shall be of 5% which will be charged only at the Issued rate of steel.

CONDITION OF ENGAGING CHILD LABOUR

The work contract assigned to the contractor shall be cancelled if they engaged child labour in executing works and such contractor will be black listed for Three years.

ADDITIONAL CONDITION – 1

1. The materials noted in the list enclosed will be supplied departmentally at the section stores at site of work and their cost recovered from the contractor's bill at issue rates noted against each.
2. The Contractor shall be responsible for the safe custody and storage of the materials under dry conditions at the places of the work spot approved by the Executive Engineer.
3. No royalty shall be charged where due for materials quarried from the PWD or District Board or other Government Quarries.
4. The Contractor shall pay royalty or charges due for use of private quarries and private land.
5. The contractor shall form his own approach road to the work site for which no extra will be due to him. On completion of work, the contractor shall not be permitted to remove the materials laid for formation of road. If the contractor is allowed to use the existing road, he shall maintain them in good condition at his own cost throughout the period of the contract.
6. Any surplus materials remaining at the site, will not generally be taken over by the Department whether before or after the completion or termination of contract. Such materials either which were originally procured by the contractors were issued to them by the department and charged to their accounts are the property to the contractors and can however be taken by the Department is required, for use on other works, which are in progress only, be special arrangement and at the prevailing market rates viz. The rates which the article or articles of a similar description can be procured at a given time at store, godown, from public market suitable to the Division for obtaining such there of.
7. If the materials were originally used by the Department the price allowed to the contractor on re-acquisition shall not exceed the amount charged to the contractor excluding the element of storage charges if any.
8. If at time subsequent to the execution of this arrangement, Government materials other than those specified in the agreement are supplied to the contractor for use on the work they will be charged at the market valued prevailing at the time of supply or stock issue rates which ever is higher. The contractor will be informed in writing of this charges and he should intimate in writing the rate the demands for finish the work in view of the fact that he is not to use Government materials. No centage or incidental charges will be borne by the government in connection with the supply of materials referred to in this Paragraph.5.
9. The surplus materials which were originally issued to the contractor back to the department for use of the work shall not be removed from the site of work without getting the written permission of the Executive Engineer.
10. The Contractor shall not employ the labours below the age of 12 years and shall also note that he must offer employment ex-toddy tappers and unemployment agricultural labours as far as possible.

11. Any of the items in the schedule may be omitted or radically altered no variation in rates shall become payable to contractors on account of such omissions or variation in quantity.
12. Reference to TNBP in the schedule of quantities referred and addenda and corrigenda issued thereafter.
13. The construction of building will be deemed to be completed only, if all the items of work including finishing items contemplated herein after executed.
14. The contractors shall abide the contractor's labour regulation of the Town Panchayat framed by the Taminadu Government.
15. Construcion Materials : - Supplement to clause of 20 of general Conditions.
16. 5.1 Cement :- The contractor has to make his own arrangements for the procurement of cement of required specifications for the works subject to the followings:-
17. The Contractor shall procure in standard packing of 50kg per bag from the authorized manufacturers. The contractor shall make necessary arrangement at his own cost to the satisfaction of Engineer In-charge of actual weightment of random sample from the available stock and shall conform with the specification laid down by the Indian standards institution or other standard foreign institution as the case may be, Cement shall be got tested for all the tests as directed by the Engineer In-Charge atleast one month in advance before the use of cement bags brought and kept at site godown
18. The employer will furnish air recraing agents and admixtures required to the contractor free of cost at the employer stores. The use of such admixtures and agents shall be made as per the instructions of the Engineer – In-Charge. The cost of cartage/storage, handling, batching mixing shall be borne by the contractor and shall be included by him to unit officers tendered for concrete.
19. The contractor should store the cement of 60 days requirement atleast one month in advance to ensure the quality of cement to brought to site and shall no remove the same without the written permission of Engineer –In-Charge.
20. The contractor shall forthwith remove from the works area, and the cement that the Engineer-In-Charge may disallow for use on account of failure to meet with required quality and standard.
21. The contractor will have to construct sheds for storing cement having capacity not less than the cement required for 90 days use, at approved locations. The Engineer-In-Charge or the representative shall have free access to such store at all times.
22. Cement which has been unduly long in Storage with the contractor or alternatively has deteriorated due to inadequate storage and thus become unfit for use on the works will be rejected by the department and no claim will be entertained. The contractor shall forth with remove from the work area any cement the Engineer-In-Charges may disallow for use of work and replace it by cement complying with the relevant Indian standards.

5.2 STEEL

The contractor shall provide mild steel (MS) reinforcement basis, High Yield strength deformed (HYSD) bars rods and structural steel etc., required for the works, only from the main and secondary producers manufacturing steel or other authorizes agents to the prescribed specifications. Bureau of Indian standards requirements and licensed to affixing ISI test certificate Issued by the Government approval laboratory certification marks and acceptable to the Engineer-In-Charges before use on works.

PRELIMINARY TEST

If concrete mixes are specified by its strength then the mix needs be designed, and preliminary test should be carried out.

Preliminary test is conducted in a laboratory on the trial mix of concrete produced in the laboratory with the object of :

Designing a concrete mix before the actual concrete operation starts.

B WORK TESTS

The Test shall be conducted either in the field or in a laboratory on the sample made in the work spot of the concrete used on the work.

The samples shall be spread as evenly as possible throughout the day then wide changes of whether conditions occur during concrete additional sample may be taken as desired by the Executive Engineer.

All Expenses on the tests shall be borne by the contractor. Nothing extra shall be paid to the contractor for carrying out the tests.

All Samples or testes shall be taken in the presence of the Assistant Engineer concerned and the contractor or his authorizes agent.

All mix design and test date and results shall be maintained as part of the record for the contract and shall be signed by the Assistant Executive Engineer and the Contractor.

A Register of cement concrete cubes cast and tested giving the following particulars shall be maintained at the site:-

1. Name Of the Work and reference to Agreement:
2. Serial Number
3. Date and time of sample taken
4. Sample Number
5. Number of Cube
6. Identification marks
7. Proportions of mix
8. Initials of Assistant Executive Engineer and the contractor's authorized agent in whose presence the sample is taken.
9. Result of 7 days test.
10. Result of 28 days test.
11. Review and remarks by Executive Engineer.

EXTRACT OF NATIONAL BUILDING CODE OF INDIA, 1970
PART IV SECTION 5 A: PLAIN AND REINFORCED CONCRETE

1. Grades of concrete.
2. Plain and reinforced concrete shall be in seven grades as designated as M100, M150, M200, M250, M300, M350 and M400.

Note: In the designation of a concrete mix, letter 'M' refers to the mix and the number of specified 28 days work cube compressive strength of the mix expressed in Kg/sq.cm.

3. Where ordinary Portland cement or Portland blast furnace slag cement conforming to accepted standard VI 5(2)* is used.
4. IS 455/1967 Specification for Portland and blast furnace slag cement.
5. The strength requirement specified in Table I shall apply to both controlled concrete and ordinary concrete (see 4.31) Preliminary tests need not however, be made in the case of ordinary concrete:
6. In order to get a relatively quicker idea of the quality of concrete, optional works tests on beams for modulus of rupture at 72+ or -2 hours / at 7 days. Compressive strength tests at 7 days may be carried out in addition to 28 days compressive strength test. In all cases, the 28 days compressive strength specified. In table I shall alone be the criterion for acceptance or rejection of the concrete. If however from tests carried out in a particular job over a reasonably long period, it has been established to the satisfaction of engineer –In-Charge that a suitable ratio between the 28 days strength and the modulus of rupture at 72 +or -2 hours at 7 days of compressive strength at 7 days may be accepted. The Engineer-In-Charges may suitably relax the frequency of 28 days compressive strength test specified in table 5 provided the expected strength valued at the specified early age are consistently met. For this purpose the valued given in Table 2 may be taken for general guidance in the case of concrete made with ordinary cement.

7. Whether the strength of a concrete mix, as indicated by test lies between the strength for any two grades, specified in Table 1, such concrete shall be classified for all purpose as a concrete belonging to the lower of the two grain between which its strength lies.
8. Proportioning and works control:
9. Methods of proportioning: The determination of the proportion of cement aggregate and water to attain the required strength shall be made by one of the following:
10. With preliminary tests by designing the concrete mix such concrete shall be called controlled concrete.
11. Without preliminary tests by adopting nominal concrete mixes, Such concrete shall be ordinary concrete.
12. Controlled Concrete:

As far as practicable, controlled concrete should be used on all concrete works. Controlled concrete for use in plain and reinforced concrete structures shall be in grade M100, M150, M200, M250, M300, M350 and M400.

The maximum total quantity of aggregate by weight per 50 Kg. Of cement shall not exceed 450 Kg. Except where other wise specifically permitted by the Engineer-In-Charge.

Except where it can be shown to the satisfaction of the Engineer –In-Charge that supply of proper graded aggregate of Uniform quantity may be maintained over the period of work the grading of aggregate should be controlled by obtaining the coarse aggregate in different sizes and blending them in the right proportion when required the different sizes being stocked in separate stock pile. The materials should be stock piled for several hours preferably a day before use. The grading of coarse and fine aggregate should be checked as frequently as possible the frequency for a given job being determined by the Engineer-In-Charge to ensure that the suppliers are maintaining the grading uniform with that on the samples use in the preliminary tests.

In Proportioning concrete the quantity of both cement and aggregate should be determined by weight. Where the weight of cement is determined by accepting the manufactures weight per bag and reasonable number of bags should be weighed separately to check the net weight where the cement is weight on the site and not in bags it should be weighed Separately from the aggregates. Water should other measured by volumes in calibrated tanks on weighted. All measuring conditions and their accuracy may be periodically checked.

It is most important to maintain the water cement ration constant at its correct value. To this end, determination of moisture contents in both fine and coarse job being determined by the Engineer –In-Charge according to weather conditions. The amount of the added water should be adjusted to compensate for any observed variations in the moisture contents. The Determination of moisture content in the aggregate shall be carried out in accordance with good practice (VI-5-9) IS 2386 Part II - 1963. To allow for the variation in the weight of aggregates due to variation in their moisture content suitable adjustment in the weight of aggregate should also be made.

A Competent person should be employed where first duty will be supervised all stages in the preparation and placing of the concrete. All work test specimen should be made and site tests carried out with his direct supervision.

Ordinary Concrete:

Where it is considered not practicable to use controlled concrete, ordinary concrete may be used for concrete of grades M100, M150, M200, M250 . The proportions of materials for nominal concrete mixes for ordinary concrete shall be in accordance with table 3.

In proportioning concrete the quantity of cement should be determined by weight. The quantities of fine and coarse aggregates may be determined by volume but these should also preferably be determined from the volume specified in table 3 and the weight per litre of dry aggregate. If fine aggregate is moist and volume batching is adopted, allowances shall be made for building in accordance with good practice (VI5(9)*).

The Water cement ratio shall not be more than the specified in table 3. The cement content of the mix specified in the table 3 for any nominal mix may be increased If the quantity of water in a mix has to be increased to overcome to the difficulties of placement and compaction so that the water cement ratio specified in Table 3 is not exceeded.

Note : 1: In case of vibrated concrete, the limited specified may be suitably reduced to avoid aggregation.

Note : 2 : The quantity of water used in the concrete mix for reinforced concrete work should be sufficient, but should not be more than what is sufficient to produce a dense concrete of adequate workability for the purpose

Workability of concrete should be controlled by direct measurement of water content , making allowance for any surface water in the fine and coarse aggregates. The Slump test may be conducted in accordance with good practice (VI.5.(10)).

Allowance should be made for surface water present in the aggregate when computing the water cement ratio. Surface water shall be determined by field methods in accordance with good practice VI.5(9)*. In the absence of exact data the amount of surface water may be estimated from the values given in the Table – 4.

If ordinary concrete made in accordance with the proportions given for a particular grade does not yield the specified strength due to proper qualities of materials not being available, such concrete shall be classed as belonging to the appropriate lower grade. Ordinary concrete proportioned for a grade given in accordance with table – 3 shall not however be placed in a higher grade on the ground that the test strengths are higher than the minimum specified . No interpolation shall be permissible.

Sample size and acceptance criteria

All tests shall be carried out in accordance with good practice (VI-5-(4))

The Number of test specimens required, the frequency of samplings and the criteria for acceptance of a concrete as conforming to the specified grade shall be in accordance with table 5 for both ordinary concrete and controlled concrete. No preliminary tests are , however, necessary in the case of ordinary concrete.

ISI 199 – 1959-Methods of sampling, and analysis of concrete.

IS 23866 methods of test for aggregates for concrete. IS (Part III) 1963- Specific gravity density voids absorption and bulking.

IS 516-1959 Method of tests for strength of concrete.

TABLE :1

**STRENGTH REQUIREMENTS OF CONCRETE
(CLAUSE 4.2.2.1 AND 4.2.2.2)**

All values in Kgs/ Cm. Sq.)

Grade of Concrete Compressive strength of 15cm cubes at 28 days after mixing conducted in accordance with good practice VI.5(4)*

1.	Preliminary tests Min 2.	Work test Min 3.
M100	135	100
M150	200	150
M200	260	200
M250	320	250
M300	360	300
M350	440	350
M400	500	400

Note 1 : Preliminary Test :- Test is conducted in laboratory on the trial mix of concrete produced in the laboratory with the object of

1. Designing a concrete mix before the actual concreting operation starts
2. Determining the adjustments required in the designed mix when there is a change in the materials used during the execution of work , or.
3. Verifying the strength of concrete mix.

Note : 2: Work test : A test conducted either in the field or in laboratory on the specimens made on the works out of the concrete being used on the works.

Note :3: Size of Cubes : In the working test, with the approval of the Engineer-In-Charge 10 cm cubes may be used in place of 15 cm cubes provided the maximum nominal size of aggregate does not exceed 20mm. Even the use of 15 cm cubes should normally be restricted to concrete's having a maximum nominal size of aggregate not exceeding 40 mm. Where concrete with aggregates larger than 40 mm size is required to be tested, the size of cubes should be specified by the Engineer-In-Charge keeping in view that generally the length of side of the cube should be about four times the maximum nominal size of aggregate in the concrete constituting the cube specimen.

Note :4: Strength in Relation to Size of the Cube:- Where 10 cm cubes are used the values obtained from the tests of 10 cm cubes shall be reduced to the extent established by comparative preliminary tests with 10 and 15 cm cubes or in the absence of such comparative tests by 10 percent of the tests.

Practice (VI-5(4)*) instead of one cube, where cylinder strength figures are adopted the compressive strength figures given above shall be modified according to the formula. Minimum cylinder compressive strength required 0.3 compressive strength specified for 15 cm cubes.

*THE CENTRAL ROAD RESEARCH INSTITUTE, New Delhi has carried out tests with a view to establishing a relation between water cement ratio and the compressive strength of concrete using ordinary Portland cement manufactured in the country confirming to accepted standards (VI-5-2)).

As a result of these, it has been considered advisable to give graphs showing the relationship between the compressive strength of concrete mixes with different water cement ratios and the 7 day compressive strength of cement tested in accordance with good practice (VI-5-2)). These graphs have been given in Appendix-A. As they would be some assistance in obtaining the water cement ratio for trial mix of concrete.

TABLE :2

STRENGTH REQUIREMENTS OF CONCRETE

(CLAUSE 4.2.2.2(a))

All valued in Kgs/ Cm. Sq.)

All tests shall be conducted in accordance with good practice VI.5(4)*

Grade of Concrete	Compressive strength of 15cm cubes at 7 days	Modules Scripture by	
		At 72 +0r -2 Hours	At 7 days 4.12
M100	70	12	17
M150	100	15	21
M200	135	17	24
M250	170	19	27
M300	200	21	30
M350	235	23	32
M400	270	25	34

Note : Notes 3 to 5 under Table 1 are also applicable to this table.

*L.S. 510-1959 Methods of test for strength of concrete.

*L.S. 261- 1967 – Specification for ordinary rapid hardening and best Portland cement.

CONCRETE MIX PROPORTIONS

(CLAUSE 4.3.3)

ORDINARY CONCRETE

Grade of Concrete 1.	Total qty of dry aggregates by volume per 50 Kg . of cement to be taken as the sum of the individual volumes of fine and coarse aggregate max. 2.	Proportion of fine aggregate to coarse aggregate 3.	Qty. Of water per 50 Kgs. Of cement Max. 4.
M150	220 Ltrs	--	32 Ltrs
M200	160 Ltrs	--	30 Ltrs
M250	100 Ltrs	--	27 Ltrs

Note : It may be noted for general guidance that M100, M150, M200 and M250 of ordinary concrete correspond approximately to 1:3:6, 1:2:4, 1:1 ½ Nominal mixes of ordinary concrete currently used in the country.*

The Preparations of the aggregate should be adjusted from upper limited to lower limit progressively as the grading of the fine aggregate becomes finer and the maximum size of coarse aggregate becomes larger, Example, for an average grading of fine aggregate i.e. Zone II in accordance with good practice (VI-5-(1)) the proportion shall be 1:1 ½ , 1:2, and 1:3 for maximum size of aggregate 10mm, 20 mm and 30 mm respectively.

SURFACE WATER CARRIED BY AVERAGE AGGREGATE

Aggregate 1.	Appr. Qty. of surface water 1/M3 2.
Very wet sand	120
Moderate wet sand	80
Moist sand	40

* I.S. 383- 1963 Specification for coarse and fine aggregate for natural coarse for concrete.

* I.S. 516-1959 specification for nominal and manufactured aggregate for use in mass concrete.
ACCEPTANCE CRITERIA FOR CONCRETE (ALL GRADES)

PRELIMINARY TEST				WORK TEST						
Minimum specimens from each Batch (Cubes)	No. of from Batch	Minimum frequency	Criteria for acceptance	Minimum No. of Specimen Taken from the same day's work (cubes) Beam				Minimum frequency		Criteria acceptance
7 days compressive Strength test as an optional test if desired	28 day compressive strength test			7 day compressive strength test as optional test if desired	28 day compressive strength test	72 + or - 2 hours test as optional test if desired	7 day test as optional test if desired	In terms of the quantity of concrete	In terms of period	

ADDITIONAL CONDITION

SPECIFICATION FOR SANITARY FITTING DRAINAGE AND WATER SUPPLY

1. Water Closets basins urinals sinks and other sanitary ware shall be of approved make as required in the relevant items fixing of these shall be in accordance with the special specification.
2. The rates shall include all dismantling making holes in walls or slabs and restoring the structure to the original conditions after the completion of the work.
3. The rates for laying G.I. Pipes or PVC pipes shall include fixing with wooden plugs G.I./C.I. clamps and brass screws where the pipes are fixed to wall. The rates for G.I. Pipes shall also include wrapping them with tarred taps where they are buried in earth tarring the portions embedded in masonry and painting with white lead two coats for portions above ground level.
4. The Clamps for G.I. Pipes fitting should not be spaced more than a part the wooden plugs for pipe and bracket fitting should be properly fixed in CM 1:3 in holder make in masonry with the wide and of wedge shaped plugs in side the walls. The size of plugs should not be less than 1 Sq. Inch at one end, ½ Aq. Inch the other end with depth of not less than 3".
5. Painting with two coats of best white paint or any other colour approved by the Executive Engineer over priming coat of red lead to all flushing tanking brackets clamps used for fixing pipes and all other connections.
6. The Contractor should employ sufficient number of qualified licensed plumber with necessary experience and skill in the trade to the satisfaction of the Executive Engineer concerned for execution of water supply and sanitary items of work.
7. The rate shall include all dismantling making holes in walls or slabs and testing the structure to the original condition after the completion of the work.
8. All items of work shall be done in accordance with the relevant classes of TNDSS and agenda volume to the TNDSS or amendments from time to time.
9. The contractor shall be responsible for the safe custody of all the departmental materials once they are handed over to the contractor at the departmental stores . The cost of any materials in the custody of the contractor stolen, lost, destroyed or damaged or if rendered unfit for the work will be recovered from the contractor at the issue rate.
10. For finding, fineness modules and coarse aggregate hand operated over a apparatus may be procured along with weighing machine for weighing the aggregate and the sand.
11. In the case of any breach of the terms of the contract the contract will be closed at the risk and the costs of the contractor in addition to the forfeiture of the EMD and security deposit.
12. The testing is to be done at the contractor's cost for all building materials and also for concrete cubes.
13. The work shall be executed and measured as per metric dimension given in the schedule of quantities drawings etc., (F.P. Units where indicated are for guidance only)

14. Unless otherwise specified all the rates quoted by the contractor shall be for works at all levels of the buildings.
15. Rules for every item of work to be done under this contract shall be for all lifts and leads, heights, depths, lengths and widths.

Except when specifically mentioned in the item, otherwise nothing extra will be paid on this account. The rate for all item in which use of cement is involved is inclusive of charges for curing.

SUPPLYING AND FIXING INDIAN TYPE WATER CLOSET

The PVC flushing tank shall be of three gallons capacity of Indian make confirming to ISI specification supported on C.I. Brackets with necessary C.I. Chain and handle for pull float bell valve ½" PVC connections to the water main and closet including pier the White glazed paint 2 coats over a priming coat of red lead.

The Fixing of water closet shall include the dismantling of existing floor wherever indicated making holes in necessary walls etc, and restoring structure to original condition after completion of the work. The flushing tank and accessories will be fixed to the walls with necessary clamps and brackets in C.M. 1:4

ADDITIONAL CONDITION FOR CONTRACTOR'S SPECIAL CONDITION

1. If at any time the Executive Engineer shall be of the opinion that the contractor is delaying commencement of the work or violating any of the progress of the work as defined by the tabular statement rate of progress. In the article of agreement the Executive Engineer shall so advise the contractor in writing and at the same time demand complied. If the contractor neglects to comply with such demand within seven days after the receipt of such notice it shall these or at any time thereafter be lawful for the Executive Engineer to determine the contract which determination shall carry with the forfeiture of the security deposit and the total of the amount withheld from the final bill together with value of such works as may have been executed and not paid for such proportion of such sums as shall be assessed by the Executive Engineer.
2. The tenderer shall ensure that no damage is caused to the existing structure/ building whether it is Govt. Owned or private owned etc. in the adjustment areas close preliminary to the proposed site and if any damage is caused due to pipe driving etc. to the adjacent buildings it shall be rectified / compensated by the tenderer at his own cost to the satisfaction of departmental officers/ owners of any private building affected (i.e) the contractor should indemnify the department against damages if any to adjacent building due to the driving.
3. The contractor has to make his own arrangements for procuring water for construction purpose construction and curing should be done with water free from injurious amounts of deleterious materials portable water are generally considered satisfactory for curing and fixing concrete and masonry. However the water to be used should be periodically test and at contractors cost for its suitability for using the construction work and get approved from departmental Engineers.

ADDITIONAL CONDITIONS

"On evaluation of Tender it is found that if the overall quoted amount of the Tender, the Contractor shall pay additional security at 2% of the estimated value. If the Tender discount exceeds 15% to 20% the Contractor shall pay the additional security deposit of 50% of the difference between the quoted amount and the estimated amount failure to furnish the additional security deposit within 15 days from the date of receipt of Acceptance order and execute the agreement shall entail the cancellation of award of Contract and forfeiture of E.M.D. Furnished.