GOVERNMENT OF TAMIL NADU

HINDU RELIGIOUS DEPARTMENT

OFFICE OF THE EXECUTIVE OFFICER
ARULMIGU SUBRAMANIYASWAMY THIRUKOVIL,
CHENNIMALAI – 638 051. PERUNDURAI (TK), ERODE DISTRICT

Tender documents

Name of the Work : Estimate for the Proposed

Construction of Devotees Rest

Mandapam for Arulmighu

Subramaniyaswamy Thirukovil At Chennimalai, Perundurai Taluk and

Erode District.

Year : 2017 - 2018

Cost of tender document : Rs. 15,000.00

Sales tax : Rs. 750.00

Total : Rs. 15,750.00

Tender shall be submitted on or before 15.09.2017 15.00 hours

Tender document sold to

Executive Officer
Arulmigu Subramainiyaswamy Temple
Chennimalai-638 051.

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Executive Officer Arulmigu Subramainiyaswamy Temple Chennimalai-638 051.

SECTION I

TENDER APPLICATION

l)atod	•
Dated	

From

To

Executive Officer Arulmigu Subramaniyaswamy Temple Chennimalai-638 051.

Sir,

1. I/We do hereby tender and if this tender be accepted undertake to execute the following works viz:

As shown in drawings and described in the specification deposited in the office of the Executive Officer, Arulmigu Subramaniyaswamy Thirukovil, Chennimalai. Erode District with such Variation by way of alterations or additions in and omissions from the said works and method of payment as are provided for in the conditions of contract for the sum of Rs.

Or such other sum as may be arrived at under the clause of the standard preliminary specification relating to "Payment of lumpsum basis or by final measurement at unit prices".

- 2. I/We have also completed the priced list of items in Schedule 'A' annexed (inwords and figures) for which I/We agree to execute the work and receive payment on measured quantities, as per the general conditions to the contract.
- 3. I/We hear by distinctly and expressly declare and acknowledge that before the submission on my/our tender, I/We have carefully followed the instructions in the Tender Notice and have read the Tamilnadu Building Practice and the general conditions to the contract and the Tamilnadu Building practice addenda volume there in and that I/We have made such examination of the contract documents and of the plans, specification, quantities and the location where the said work is to be done and such investigation of the work required to be done, and in regard to the materials required to be furnished as to enable me/us to thoroughly understand the intention of the same and the requirements, covenant's, stipulations and restrictions contained in the contract and in the said plans specifications are distinctly agree that I/We will not hereafter make any claim or demand upon the Government based upon or arising out of any alleged misunderstanding or misconception or mistake on my/our part of the said requirements, covenants, stipulations and restrictions and conditions.

Signature of Tenderer.

	being a registered Executive Officer contractor enclose and Income Tax verifications certificate / have already produced an Income Tax verification certificate in respect							
should Notice	be given.) The will be as followed	the previous he legal addre ows:-	ess of t	the contrac	ctors for	services	of all lette	ers and
5. Rs.	(i) (a)	I/We enclose		with a chal				
as Ear	nest Money no	ot to bear inte	rest.					
5.	(i) (b)	I/We have	paid	Rs				
•								
as Ear	nest Money D	eposit since I he Earnest Mo	am / V	Ve are				,,
5.	. , . ,	of cash depos						
						•		by
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		dged in favou					0	niy)
5.		We are						
	ted from payı		······································					

6. If my/our tender is not accepted this sum shall be returned to me/us on my/our applications when intimation is sent to me/us of rejection or at the expiration of 90 days from the date of this tender, whichever is clear. If my/our tender is accepted, the earnest money shall be retained by the Government as security for the due fulfillment of contract. If upon intimations being given to me/us by the authority authorized by the Governor under Article 299(1) of the constitution (hereinafter called" the accepting authority") of acceptance of tender, (I/We() fail to make the additional security deposit, then, I/We agree to the forfeiture of earnest money deposit. Any notice required to be served on me/us hereunder shall be sufficiently served on me/us if delivered to me/us personally or forwarded to me/us by post to (registered or ordinary) or left at my/our address given here in. Such notice shall, if sent by post be deemed to have been served on me/us at the time when in due course of post in would be delivered at the address to which it is sent.

- 7. I/We fully understand that on receipt of communication of acceptance of tender, from the accepting authority, there emerge a valid contract between me/us and the Government of Tamilnadu and the Tender documents i.e, Tender notice, tender with schedules, general condition to contract and special conditions of the tender, negotiation letters communication of acceptance of tenders, shall constitute the contract for this purpose and be the foundation of rights of both the parties as defined in classes (IV) of the tender notice, provided that it shall be open to the accepting authority to insist on execution of any written agreement by tenderers, if administratively considered necessary or expedient.
- 8. I/We have also signed the copy of the Tamilnadu Building Practice and National Building code and addenda volume there-to maintained in the office of the Executive Officer, Arulmigu Subramaniyaswamy Temple, Chennimalai, in acknowledgement of being bound by all condition of the clauses of the General conditions to the contract and all specifications for items of works described by specification number in Schedule 'A'.
- 10. The term Departmental Officer in the said conditions shall mean the Executive Officers in charge of the divisions having jurisdiction for the time being ovedr the work, who shall be competent to exercise all the powers and previleges herein infavour of the Government with the previous sanction or subject to ratification by the competent authorities in case where such sanction or ratification may be necessary and who has been duly authorized under Article 299 (1) of the Constitution.
- 10. "I/We agree that the time shall be considered as essence of this contract and to commence the work as soon as this contract is accepted by competent authority as defined by the Tamilnadu Public Works Department Code and the site (or premises) is handed over to me/us as provided for in the said conditions and agree to complete the work with in months from the date of such handing over of the site (or premises) and to show progress as defined in the tabular statement Rate of Progress' subject nevertheless to the provisions for extension of time contained in clause 56 of the general conditions to the contract appended to the Tamilnadu Building Practice".
- 11. I/We agree that upon the terms and conditions of this contract being fulfilled and performed to the satisfaction of the departmental Officer, the Security deposited by me/us as herein before recited or such portion there of as I/We may the entitled to, under the said conditions be paid back to me/us as provided in Clause 64 of the General conditions of the contract.

12. I alli/ We ale biolessionally qualified and illy/our qualification are as folio	ualified and my/our qualification are as follows	and r	aualified	professionally	/We are	I am	12.
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I/We in pursuance of clause 18 of Tender notice undertake to employ the following Technical staff for supervision of the work and will see that one of them is always at site during working house personally checking all items of works and paying extra attention to such works as may require special attention (e.g) reinforced cement concrete.

S.No.	Name of technical staff proposed to be employed	Qualification and experience

Note : a) The last two clauses should be scored out if the work involved is less than Rs.1,00,000/- $^{\circ}$

b) The tenderer should score out the last clause or penultimate accordingly as they are themselves professionally qualified or under to employ technical staff under them.

Signature of

Designation

Signature of Tenderer.

ANNEXURE - I

PARTICULARS TO BE FURNISHED BY TENDERERS

1.	Name of Tenderer	:
2.	Name of Work	:
3.	Date of Tender	:
4.	Total value of Tender	:
5.	Details about E.M.D enclosed for the Tender and its validity	:
6.	Registered class of the Tender with Monetary limit and department in Which registered (certified copy of The registration should be attached	:
7.	Recent works executed (Details about the name and place of work, value of works etc., should be given	:
8.	Works under execution (details about the name and place of works, value of works etc., should be furnished)	:
9.	Command of labour in brief	:
10.	Turnover of pervious year (particulars for a period of three Consecutive years to be furnished)	:
11.	Whether income – tax clearance Certificate is enclosed, if not when it will be produced	:
12.	Whether Sales tax clearance certificate Is enclosed. If not when will be enclosed	:
13.	Teachnical Assistant Details	:

1.	Name Qualification Certificate Experience	: : :
2.	Name Qualification Certificate	: :
Experi	ence	
Or		
3)	Name	
Retire	d civil Engineer	
Desigr	nation and date of retirement	
(copy	enclosed)	
4)	If any other particulars	:

Signature of Tenderer

LUMPSUM CONTRACT TENDER NOTICE

For and on behalf of the temple, sealed tender will be received by the Executive Officer, Chennimalai 15.00 hours on 15.09.2017 For the work of : -

Construction of Devotees Rest Mandapam for Arulmighu Subramaniyaswamy Thirukovil At Chennimalai, Perundurai Taluk & Erode District.

The tenders so received on $\underline{15.09.2017}$ and those received by post upto 15.00 hours on 15.09.2017 will be opened on 15.09.2017 at 15.30 hours

The tender should be in the prescribed form obtainable from the Executive Office. The Tenders will be opened by the Executive Officer, Arulmigu Subramaniyaswamy Temple, Chennimalai at the place and on the date afore mentioned at 15.30 hours. The tenderers or their agents are expected to be present at the time of opening of the tenders. The tender receiving officer will be opening each tender, prepare statement of the attested and unattested corrections therein and hand it over to the tenderer concerned and all such corrections in the presence of the tenderer. If any of the tenderers of their agents find it inconvenient to be present at the time then in such case. The tender receiving officer will on opening of the tender of the absentee tenderer make out a statement of the unattested corrections and communicate it to him. The absentee tenderers shall then accept the statement of corrections without any questions whatsoever.

2. Tenders must be submitted in sealed covers and should be addressed to the Executive Officer, Chennimalai the name of the tenderer and the name of work being noted on the cover.

If the tender is made by an individual, it shall be signed with his full name and his address shall be given. If it is made by a firm, it shall be signed with the Co-partnership name by a member of the firm, it shall be signed with the Co-partnership name by a member of the firm, who shall also sign his own name, and the name and address of each member of the firm shall be given. If the tender is made by a corporation, it shall be signed by a duly authorized officer who shall produce with his tender, satisfactory evidence of his authorization. Such tendering corporation may be required before the contract is executed, to furnish evidence of its corporate existence.

3. Each tenderer must also send a certificate of Income Tax Verification from the appropriate Income Tax authority in the form prescribed therefore. This certificate will be valid for one year from the date of issue for all tenders submitted during the period.

In the case of proprietory and partnership firm, it will be necessary to produce the certificate afore-mentioned for the proprietor or proprietors and for each of the partners as the case may be.

If the tenderer is a registered contractor and if a certificate for the current year has already been produced by him during the calendar year in which the tender is made, it will be sufficient if particulars regarding the previous occasion on which the same certificate was produced are given.

All the tenders received without a certificate as afore-mentioned will be summarily rejected.

4. Each tenderer must pay as Earnest Money a sum of Rs. 38000/- (Rupees Thirty Eight Thousand (only)

Executive Officer
Arulmigu Subramainiyaswamy Temple
Chennimalai-638 051.

In to the temple Divisionenclose with his tender the chalan endorsed accordingly. The Earnest Money Deposit can also be paid in any other form as may be approved by the State Government from time to time as per para 155 of TNPWD Code. This earnest money will be refunded to the unsuccessful tenderer on applications, after intimation is sent of rejection of the tender or at the expiration of three months from the date of tender, whichever is earlier. The refund will be authorized by the Assistant Commissioner/Executive Officer suitable endorsement on the chalan. The Earnest Money will not be received in cash or currency notes by the Executive Officer calling for tenders. When currency notes are given, the tenderer should sign his name in full with date in the back of all currency notes given by him, whatever their denomination may be.

The E.M.D should be remitted in the shape of small savings scrips, Deposits, Pass Books, N.S.C., I.V.P. If the Earnest Money is remitted in the shape of National Savings certificates, and K.V.P. it must be pledged in favour of the concerned Executive Officer. If in the shape of Indira vikaspatra, the name and address of the contractor should be filled in ink in the rear side of the Indira VikasPatra and a constent letter should be enclosed maintaining the work for which EMD is remitted. If the EMD in the shape of N.S.C. and K.V.P. is not pledged the tender will be summarily rejected. The EMD in the shape of Demand Draft/Bankers cheque, should be drawn in favour of the Executive Officer by designation only.

The Earnest money will be retained in the case of the successful tenderer and will not carry any interest. The successful tenderer should convert the Earnest money deposit already remitted into small savings scrips/Deposists/Accounts and pledge the same in the name of the Executive Officer Divisionbefore signing the agreement.

5. i) The tender will remain valid for a period from the last date of receipt of tenders. The validity period can be extended further if the contractor gives his consent in writing specifying the period of extension.

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- iv) If the contractor fails to carry out the contract, after paying the requisite deposits, then he will be liable for the excess expenditure, if any incurred to complete the work as contemplated in the General condition to the contract.
- v) It shall be expressly understood by the Tenderer, that on receipt of written communication of acceptance of tender from the accepting authority, there emerges a valid contract between the Governor of Tamilnadu and the tenderer, for execution of the work without any separate written agreement. Hence, for this purpose, the tender documents i.e., Tender Notice, tender offered by the contractor, General conditions to the contract, special conditions to the contract, negotiation correspondences, written communication of acceptance of tender etc., shall constitute a valid contract and that will be the foundation of the rights of both the parties to the contract.

Provided that it shall be open to the accepting authority to insist execution of any written agreement by the tenderer, if administratively considered necessary or expedient.

- 6. The tenderer shall examine closely the Tamilnadu Building Practice and also the general conditions to the contract contained therein and sign the Divisional Office copy of the Tamilnadu Building Practice and the addenda volume in token of such study before submitting his tender unit rates, which shall be for finished work insite. He shall also carefully study the drawings and additional specifications, and all the documents connected with the contract. The Tamilnadu Building Practice and other documents which form part of agreement to be entered into by the accepted tenderer such as specifications, plans, descriptive specifications sheets regarding materials etc., can be seen at any time between 10.00 hours and 17.45 hours on the office days in the office of the Executive Officer, Arulmighu Subramaniyaswamy Temple, Chennimalai Copy of the set of contract documents can also be had on payments of Rs. 15000/- + 5% S.T. for each set, inclusive of Sales tax and surcharge thereof.
- 7. The Tenderer's attention is directed to the requirement of materials under the clause "Materials and Workmanship" in the general conditions of the contract. Materials conforming to the ISI standards shall be used on the work, and the tenderer shall be used on the work, and the tenderer shall quote his rates accordingly.
- 8. Every tenderer is expected before quoting his rates/percentage to inspect the site of the proposed work. He should also inspect the quarries and satisfy himself about the quality and availability of materials. The best class of materials to be obtained form the quarries or other sources defined shall be used on the work. In every case, the materials must comply with the relevant standard specification, samples of materials as called for in the standard specification are in the tender notice or as required by the Executive Officer in any case shall be submitted to the Executive Officer approval before the supply to site of work is begin. If the contractor, after the examination of the source materials defined in the lead particulars statement, is of the opinion that the materials complying with standard or other specifications of the contract cannot be obtained in sufficient quantity from the source he shall state clearly in his tender and state wherefrom he intends to obtain materials subject to the approval of the Executive Officer.

The Temple will not however, after acceptance of a contract rate pay any extra charges for lead or for any other reason, in case the contractor is found later on to have misjudged the materials available attention of the contractor is directed to the standard preliminary specification regarding payment of seignior age, tolls, etc.

- 9. The Tenderer's particular attention is drawn to the sections and clause in the standard preliminary specification dealing with :-
 - 1. Test inspection and rejection of defective materials of the work
 - 2. Carriage
 - 3. Construction Plant
 - 4. Water and Lighting
 - 5. Cleaning up during progress and for delivery
 - 6. Accidents
 - 7. Delays
 - 8. Particulars of Payment

The contractor should closely pursue all the specifications clauses which govern the rates which he is tendering.

10. A Schedule of quantities accompanies this tender notice. It shall be definitely understood that the temple does not accept any responsibility on the correctness or completeness of this schedule and that this schedule is liable to alteration by omissions, deductions or additions at the discretion of the Executive Officer or as set forth in the conditions of contract.

The tender will however, base his lumpsum tender on this schedule of quantities. He should quote specific rates/percentage for each item in the schedule, and the rate should be in Rupees and Paise. The rates/percentage should be written both in words and figures. The tenderer should also show the totals of each items and grand total of the whole contract and quote in the tender a lumpsum for which he will undertake to do whole work, subject to the conditions of contract, such lumpsum agreeing with total amount of schedule 'A'. This Schedule accompanying the lumpsum tender shall be written legibly and free from erasures, overwriting or conversions of figures; corrections where unavoidable shall be made by crossing out, initialing, dating and rewriting.

All rates/percentages quoted in the tender shall be inclusive of sales tax, payable under the general sales tax act as amended from time to time (including amendment act 28/84) and that the contractor is responsible to file the sales tax return and pay the amount of tax as demanded by the commercial tax department. No request for payment of sales tax separately in addition to tendered rates due to any please of subsequent levy or increase in tax will be entertained vide also clause 38(2) of general conditions to contract.

- 11. Tenders offering a percentage deduction from or increase on the estimate amount and those not submitted in proper form or in due time will be rejected. Rates or lumpsum amount for items not called for, shall not be included in the tender. No alteration which is made by tenderer in the contract form, the conditions of contract drawings specifications or quantities accompanying same will be recognised and if any alterations are made the tender will be void.
- 12. The tenderer should work out his own rates, without reference, being made to the Public Works Department current schedule of rates or the HR & CE Department estimate rates which are not open for inspection by tenderers. However in case of Tenders called for under percentage rate tender system the tenders should workout his own rate, but quote his percentage rate above or below the total estimates cost of work of the Department indicated in the tender schedule.
- 13. The Price at which and the source from which certain particulars materials shall be obtained by the contractor are given at the end of the schedule accompanying the tender form.

The tenderers must accept the materials at these prices, and shall quote their price for finished work accordingly. Not with standing any subsequent change in the market value, for these materials, the charge to the contractor will remain as originally entered in the written contract. No centage or incidental charges will be borne by the Government in connection with this supply.

14. The attention of tenderers is directed to the Contract requirement as to the time of beginning work the rate of progress and the dates for the completion of the whole work and its several parts. The following rate of progress and proportionate value of work done will be required. Date of commencement of this program will be the date on which the site (or premises) is handed over to the contractor.

Period after date of commencement	Percentage of work completed (Bases on the contract lumpsum amount)
Ist Two Months	30%
IInd Four Months	60%
IIIrd Six Months	100%

- 15. No part of the contract shall be sublet without written permission of the Executive Officer nor shall transfer be made by power of attorney, authorizing others to receive payment on the contractor's behalf.
- 16. If further necessary information is required, the Executive Officer of the division will furnish such; but it must be clearly understood that the tenders mut be received in order according to instructions.
- 17. The Executive Officer other sanctioning authority reserves the right to reject any tender or all the tenders.
- 18. The tenderers who are themselves not professionally qualified shall undertake to employ the qualified technical men at their cost to look after the work. The tenderers should state in clear terms whether they are professionally qualified or whether they undertake to employ technical men required the department specified in the schedule below. In case the selected tenderers is professionally qualified or has undertaken to employ technical men under him, he should see that, one of the technically qualified men is always at the site of the work during working hours personally checking all items of works and paying extra attention to such works as may demand special attention e.g., reinforced concrete works etc.

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	The Schedule
Value of contract	Minimum qualification and number of Technical persons to be employed.
Above Rs. 1,00,000/- and uptoRs. 5.00 Lakhs	1. One Diploma holder in cilvilEngineering .
	OR
	2. Not less than one retired Junior Engineer
Above Rs. 5.00 Lakhs and	1. One B.E. (Civil) OR
Upto 10.00 Lakhs.	2. Equivalent Degree holder OR
	3. Not less than one retired
	AEE/ADE OR
	One Diploma holder with three years experience
Above Rs. 10.00 Lakhs and	1. One B.E.(Civil) with 3 years experience Plus on diploma holder in civil Engineering
Upto 25.00 Lakhs.	OR
	 Equivalent Degree holder with 3 year Experience plus on Diploma holder in Civil Engineering OR
	 Not less than one retired AEE/ADE plus one Diploma holder in Civil Engineering OR
	4. Two Diploma holders in Civil Engineering with 3 and 5 years experience respectively

Contd.....

Executive Officer Arulmigu Subramainiyaswamy Temple Chennimalai-638 051.

		Minimum qualification and number of Technical persons to be employed.	
Above Rs. 25.00 Lakhs and uptoRs. 50.00 Lakhs		 One B.E.(Civil) with 3 years experience Plus on diploma holder in civil Engineering OR One B.E.(Civil) with 3 years experience	
		two retired Junior Engineers.	
with 3 retired And 2. One B. And 3. One mo		2. One B.E. (Civil) or equivalent Degree holderAnd3. One more Diploma holder in Civil	
Note (2)	A penalty of Rs. 2000/- p.m. for diploma holder and Rs. 5000/- p.m. for degree holder be levied in the case of default on the part of contractor in following the condition laid down above.		
Note (3)	Note (3) The employment of technical assistant should be based only on the value of contract. Engineers with Mechanical Engineering qualification and retired from civil engineering departments are also suitable to supervise the Civil Engineering works because of their experience in Civil Engineering field.		

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- 18. In case the contractor who is professionally qualified is not in a position to remain always at the site of work and to pay extra attention to such works, as may demand special attention (e.g.) RCC works etc., he should employ technically qualified members prescribed above.
- a) It will not be incumbent on the part of the contractors to employ technical assistant/Assistants when the work is in absence due to valid reasons and if during such period in the opinion of the Executive Engineer, the employment of technical assistant/Assistants is not required for the due fulfillment of the contract.
- 19. A tenderer submitting a tender which the tender accepting authority considers excessive and or indicative of insufficient knowledge of current prices or definite attempt at profiteering will tender himself liable to be debarred permanently from tendering or for such period as the tender accepting authority may decide. The tender rates should be based on the controlled price for materials, if any fixed by the Government or the reasonable price permissible for the tenderer to charge a private purchase under the provision of clause 8 of hoarding and the profiteering prevention ordinance, 1943 as amended from time to time and on similar principles in regard to labour and supervision in the contruction.
- 20. The contractor shall comply with the provisions of the Apprentices Act, 1961, and the rules and orders issued there under from time to time. If he fails to do so, his failure will be a breach of the contract and the competent authority may at his discretion, cancel the contract provided in the condition of the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provision of the Act. Contractor shall during the currency of contract ensure engagement of the apprentice in the categories mentioned below who may be assigned to him by the Director of Employment and Training / State Apprenticeship Advisor, Tamilnadu. The Contractor shall train them as required under the Apprentices Act, 1961 and the rules made there under and shall be responsible for all obligations of the employee under the said act include the eligibility to make payment to the apprentices as required under the said act.

Value of Contract.	Category	No. to be appointed
Rs. 1.00 Lakh and uptoRs.	Buildings Constructor	1
3.00 Lakhs	2. Brick layer	1
	·	
Above Rs. 3.00 Lakh and	Building Constructor	1
uptoRs. 10.00 Lakhs	2. Brick layer	1
	Diploma holder in Civil	
	Engineering	1
Above Rs. 10.00 Lakh and	1 Puilding Constructor	1
	Building Constructor	1
uptoRs. 50.00 Lakhs	2. Brick layer	1
	3. B.E.(Civil) or equivalent	
	degree holder	1

Unless the contractor has been exempted from engagement of apprentices by the Director of employment and Training / State Apprenticeship Advisor, a certificate to the effect that the contractor had discharged his obligation under the said Act satisfactorily should be obtained from the Director of Employment and Training / State Apprenticeship Advisor and the same should be produced by the contractor for final payment in the settlement of the contract.

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- 21. The contractor should offer employment to ex-today tappers as far as possible. The number of ex-today tappers to whom he can so offer employment should be mentioned in the tender and he should undertake in the agreement to offer such employment to such number.
- 22. The fact of submitting the tender implies that the tenderers have actually inspected the site of work and have examined before tendering the nature and extent of various kinds of soils at various depth and have based their tender in such examination by them and no future representation in this regard will be considered.
- 23. The contractor shall be solely responsible for the payment of sales tax under the provisions of the Madras Central Sales Tax Act, 1959 (Madras act II of 1939) as in force for the various items of works. Time being and the rates for the various items of work shall remain unaffected by the changes that may be made from time to time in the rate at which such tax is payable. Sales tax and the materials supplied to the contractor as amended from time to time shall be paid by them separately and the relevant challans produced to the department officers.
- 24. on evaluation of tenders, if it is found that if the overall quoted amount of the tender is less than 5 to 15% of the value put to tender, the contractor shall pay an additional security at 2% of the estimated value. If the tender discount excess 15% to 20% the contractor shall pay an additional security deposit of 50% of the difference between the quoted amount and the estimate amount. Failure to furnish the additional security deposit within 15 days from the date of receipt of acceptance and execute the agreement shall entail cancellation of award of contract and forfeiture of E.M.D. furnished.
- 25. Resources in materials like teakwood etc., and the extent to which department help is required for procurement of materials and transfer of same.
- 26. Executive Officer reserves to himself the right of allotting different sub works to the different contractors or to one and the same contractor as he may decide after the receipt of tenders.

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SPECIAL INSTRUCTIONS TO THE TENDERERS:

- 1. The Tenderer should carefully go through the tender schedule and quote their rates percentage for all items.
- 2. The rates/percentage should be filled neatly in figures and works and taking into account the metric units specified in the tender. Scribing, over writing and erasing should be avoided as far as possible.
- 3. The amount of each items of work should be worked out, proper care must be taken in working out the amount of each item of work taking into account the unit for which the rate is quoted and the quantity of work to be done in the item.
- 4. i) The Tender should be submitted along with a covering letter giving full details as called for in the tender notice and with particular care to the following items.
 - ii) Details of the Earnest Money Deposit remitted.
- iii) In case the tenderers eligible for concessional Earnest money deposit and accordingly they have remitted, the reference number and date in which the concession was granted to them to be specified and if possible a copy of this aforesaid reference may be enclosed with the tender for ready reference.
- iv) Income tax clearance certificate for the current year should be submitted along with the tender or the tender on which the income tax clearance certificate for the current year was submitted to this office should be specified.
- v) Details of previous works done by the tenderers covering the cost of the work, the agreement and date, the department in which the work was carried out etc., so to assess the previous experience of the tenderers should be furnished.
- vi) List of various machinery and other equipment at the tenderer's disposal for use in the execution of the work.
- vii) Certificate showing the annual turn over of the contractor for the last one year issued by the respective bank should be attached.
- 5. The tender form should be filled in while submitting the tender. The tenderers submitting without filling up the tender form are liable to be rejected.
- 6. The tender must be submitted a fullscape cover thereby duly signing all the conditions, plans and schedule issued as tender documents.

7. Postal Tenders:

- a) The contractors may have the option to present the tender directly or to sent it by registered post acknowledgement due on or before the last date for except of tenders i.e......
- b) i) In case of sending tenders by registered post acknowledgement due, it is the responsibility of the tenderer himself to dispatch the tender sufficiently early so as to reach the tender opening authority before the date notified in the Tender notice for opening of tenders.
- ii) The tender registered in the post officer after the due date will not be considered.
- c) No representation, appeal of any kind will be allowed belated receipt of tender by post beyond the notified date or loss in transit etc.
- d) Tenders offered in person before the last due date postal tenders received will be opened in a consolidated manner as usual on the notified date for opening of tenders.

FOR CONTRACTORS SPECIAL ATTENTION

- 1. Clean fresh water and river sand shall be used in all cases.
- 2. Only clean fresh water shall be used on the work. The contractors shall make his own arrangements for water and shall meet all charges therefore. The special attention of the contractor is drawn to clause 30 preliminary specification in the TNDSS regarding water and lighting.
- 3. The broken stone for concrete and RCC works should be granted and passed by the Executive engineer.
- 4. All iron work, steel work of every kind except such is to be embodied in cement concrete shall immediately arrive at the site be properly scrapped with wire brush and given a priming coat of approved lead painting without claim for extra.
- 5. The Iron fasts shall be built up in walls in cement mortar 1:3 at the time of construction of walls. No extra claims shall be due for the same wherever holdfasts are to be provided to 9" thick walls those should be fixed with cement concrete 1:3:6 using 3/4" gauge broken granite stone jelly for proper anchorage and proper binding. No separate rate for such pockets of concrete filling at hold fast points will be allowed and this will be measured as masonry along with adjacent masonry.
- 6. The teakwood shall be of best Indian teakwood only and shall be subject to inspection and approval by the Assistance Executive engineer before use on the work. Countrywood where specified shall be of karimarudhu of Kongu for scantling and Alyini for planks.
- 7. Holders and charge of Electric wiring, water supply and drainage 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 officers and the contractor will be responsible for any damages, caused to the existing fixures, electric fitting to in the course of execution and the contractors shall make good any damage without any claim for extra.

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- 9. In the case of 'T' beam and 'L' beams, the quantity given in the schedule is the quantity of rib portion only. The top flange portion will be always measured with the general slabs and paid for at the slab rate only for all RCC works the rate shall include the treatment of bearing as per plate No of 1946 as per TNDSS pages of 1964 edition)
- 10. Concrete work all exposed concrete surface will be required to be line by and in the schedule.
- 11. Plastering: All external corners, edges of beams, edges of doors and window opening etc., shall be finished shop using richest mortar if necessary 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 extra rate in the corners, edges etc., shall be paid.
- 12. If rates are not separately called for similar items of works in different floors, the contractors should have that rate applicable for all floors indicating the detailed plans. Any claim for extra for such item floor war will not be entertained under any circumstances.
- 13. The projection if any to the masonry will be measured under relevant items and no extra will be paid for finishing the same.
- 14. The Executive Officer reserves the right to split up the work and entrust the main work, internal water supply and sanitary arrangements to different contractor without assigning any reasons therefore.
- 15. (i) The works in Public Works Department (Buildings) and Irrigation executed by the contractor under the contractor under the contract shall be maintained at contractor's risk unit the work is taken over by the Executive Officer. The contractor shall accordingly arrange his own insurance against fire, flood, volcamo, eruption, earthquake, other convulsions of nature and 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 damage occasioned by or arising out of any such acts of God.
- (ii) Provided however that the contractors shall not be liable for all or any loss or damages occasioned by or arising out of acts for foreign enemies, invasion, hostiles or warlike operations (before or after declaration of war rebellion, military of usurper power".

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<u> </u>		
S	TION	. — 11

List of drawings schedule Schedule – B

Name of work :-

SI. No. Job No. Drawings No. Description

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CONSTRUCTION MATERIAL

1. CEMENT

The Contractor hasto make his own arrangements for the procurement of cement to required specifications for the works subject to the following:-

- a) The Contractor shall procure cement required for the works only from reputed cement factories (main producer or their authorized agents, manufacturing cement to I.S.I. standards) acceptable to the Engineer-in-charge. The Contractor shall be required to furnish to the Engineer-in-charge bills of payment and test certificates issued by the manufacturers or their authorized agents to authenticate procurement of quality cement from the approved cement factory. The Contractor shall make his own arrangements for safe haulage and adequate storage of cement.
- b) The contractor shall procure M.43 grade Portland cement in standard packing of 50 kgs, per bag bearing manufactures name and ISI marking from the authorized manufacturers. The contractor shall make necessary arrangements at his own cost to the satisfaction of the Engineer-in-charge for a weightment of random sample from the available stock and shall conform with the specification laid down by the Indian Standard Institution as the case may be. cement shall be got tested for all the tests including through destructive and non destructive test materials as directed by the Engineer-in-charge in advance before use of cement bags. In case, test results indicate that the cement corrupted by the contractor doest not confirm to the relevant code, the same shall stand rejected and shall be removed from the site by the contractor at his own cost with in a day's time written order from the Engineer-in-charge to do so.
- c) 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.
- d) The Cement shall be brought at site in bulk of approximately 50 tonnes or as decided by the Engineer-in-charge for large works.
- e) The cement godown of the capacity to store a minimum of 1000 bags of cement shall be constructed by the contractor at site of work, for which no extra payment shall be made. The contractor shall facilitate inspection of the Cement Godown by the Engineer-in-Charge at any time.
- f) The Contractor shall further at all times satisfy the Engineer-in-charge on demand by production of records and test book or by submission of returns and other proofs as directed that the cement is being used as tested and approved by the Engineer-in-Charge for the purpose and the contractor shall at all times, keeps his record upto date and enable the Engineer-in-Charge to apply such checks as he may desire.
- g) 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.
- h) The contractor shall forth with remove from the work area any cement the Engineer-in-charge may disallow for use on work and replace it by cement complying relevant Indian Standard.

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II. STEEL

The contractor shall provide Mild Steel (M.S.) Reinforcement 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 their authorized agents to the prescribed specifications of Bureau of Indian Standards requirements and licensed to affix I.S.I. or other equivalent charge. Necessary I.S.I test certificates are to produced to the Executive Engineer before use on works.

The diameters and Weight of steel should be as follows:

Sl.No.	Diameter of Rod.	Sectional weight in Kilogram per running Meter both for plain and HYSD Steel	
1.	6 Millimeters	0.22	
2.	8 Millimeters	0.39	
3.	10 Millimeters	0.62	
4.	12 Millimeters	0.89	
5.	14 Millimeters	1.21	
6.	16 Millimeters	1.58	
7.	18 Millimeters	2.00	
8.	20 Millimeters	2.47	
9.	22 Millimeters	2.98	
10.	25 Millimeters	3.85	
11.	28 Millimeters	4.83	
12.	32 Millimeters	6.31	
13.	34 Millimeters	6.71	
14.	36 Millimeters	7.99	
15.	40 Millimeters	9.86	
16.	42 Millimeters	10.88	

Note: If any rods other than those specified above are used, weight shall be as per standard steel tables.

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SECTION - III

GUIDELINES FOR ADOPTION OF STRENGTH GRADING OF CONCRETE AND ACCEPTANCE CRITERIA

MIXING: Mixing shall be done only by mechanical mixers. The quantities of fine aggregate and water shall be adjusted duly in the filed, to compensate for bulkage due to the quantity of the coarse aggregate at the time of use.

WORKS TESTS: The tests shall be conducted either in the field or in laboratory on the samples made on the workspot of the concrete used on the works.

The sampling shall be evenly as possible throughout the day. When wide changes in weather conditions occur during concreting, additional sample may be taken as desired by the Executive Engineer. All the samples for tests shall be taken in the presence of the Assistant Executive Engineer concerned and the contractor or his authorised agent.

A register of cement concrete cube cast and test giving the following particulars shall be maintained at the site, in the proforma prescribed below:-

- 1. Name of the work and reference to agreement
- 2. Serial Number
- 3. Date and time of samples taken
- 4. Sample Number
- 5. Number of cube
- 6. Identification marks
- 7. Proportions of mix
- 8. Description of the portion of works represented by the sample and quantity of concrete represented by the sample
- 9. Result of 7 days test
- 10. Result of 28 days test
- 11. Review remarks by the Executive Engineer.

The Executive Engineer should satisfy himself about the result of cube tests etc., before payment of bill.

ORDINARY CONCRETE

Where it is considered not practicable to use controlled concrete, ordinary concrete may be used for concrete of grades M.100, M150, M200, M250. The proportions of materials for nominal concrete mixes for ordinary concrete shall be in accordance with Table 3.

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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 by weight (m) per liters of any aggregate. If fine aggregate moist and volume batching in accordance with good practice (VI (9)

(a) In the latter case, in table 3 and the weight

The water cement ratio shall not be more than these specified in table. 3.

The cement concent of the mix specified in Table 3 any nominal mix may be increased in the quantity of water mix has to be increased to overcome the difficulties of basement compaction, so that the water cement ratio specified in Table is not exceeded.

NOTE:

- 1. In the case of vibrated concrete, the limit specified may be suitable reduced to avoid aggregation.
- 2. The quantity of water used in the concrete mix for reinforced cement concrete work should be sufficient but should not be more than what is sufficient to produce concrete of adequate workability for the purpose which will surround and properly grip, all the inforcement workability of the concrete should be controlled by maintaining a water cement ratio that is found to give a concrete to which is just sufficient not be placed and compacted without difficulty with the means available.

Workability of the concrete should be controlled by direct measurement of water to be added making allowance for surface water in the sand and coarse aggregate. The slump test may be conducted in accordance with good practice (viz:5(w) + IS 199-1959 Methods of sampling and analysis of concrete.

IS 2386 (Part III-1963) specific gravity, density, voids, absorption and bulking methods of tests for aggregate for concrete.

Allowances should be made for surface water present in the aggregate when computing the water content, surface water shall be determined by field methods in accordance with good practice (VI 5(9) in the absence of exact data, the amount surface water may be estimated from the value given in Table.

In ordinary concrete made in accordance with the proportions given for a particular grade does not yield the specific strength due to proper qualities of materials not being available. Such concrete shall be classified as belong to the appropriate lower grade, ordinary concrete proportion for a given grade.

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IS 2386 Method of test for aggregate for concrete IS 2386 (Part-III) 1963 specific gravity Density works absorption and bulking

In accordance with table 3 shall not however be placed in a higher grade on the ground that the test strength 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 code practice (VI-5) (4)

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

I.S. 1959, Methods of test for strength of concrete.

Part – I Strength Requirements of concrete (Clause 4.2.2.1 and 4.2.2.2.) (All values in Kg/cm.2)

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

Grade of concrete	Preliminary Test Mix	Works Test Mix
M.100	135	100
M.150	200	150
M.200	200	200
M.250	320	250
M.300	380	300
M.350	440	350
M.400	500	400

Note: I Preliminary test :- A test conducted in a laboratory on the trial mix of concrete produced in the laboratory with the object of

- a) Designing a concrete mix before the actual concreting operation starts.
- b) Determining the adjustment required in the designed mix when there is a change in the materials used during the execution of work.
- c) Verifying the strength of concrete mix
- 2. **Work test:** To be conducted either in filed or in laboratory on the specimen made on the works out of the concrete being used on the works.

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3. <u>Size of cubes :-</u> In the working test, with the approval of the Engineer-incharge, 10cm cubes may be used in place of 1 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 having a minimum nominal size of aggregate not exceeding 40mm where concrete with aggregates larger than 40mm 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 size of the cube should be about four times that maximum nominal size of aggregate in the concrete constitutions the cube specimen.

Note 4:- STRENGTH RELATION TO SIZE OF THE CUBES

Where 10cm cubes are used, the values obtained from tests on 10cm cubes shall be reduced to the extent established by comparative preliminary tests with 10 and 15 cubes, in the absence of such comparative statements by 10 percent of the value determined from the tests, in order to give the equivalent strength for 10cm, cubes when cubes larger than 5cm adopted generally no modifications is necessary unless otherwise specified by Engineer-in-charge.

I.S. 516 1959 Methods of test strength of concrete

Note 5:- **Cylinder strength** :- Corporative strengths tests may with the approval of the Engineer-in-charge be conducted in 15cm diameter and 30cm high cylinders in accordance with good practice.

(VI-3) (1) *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 on concrete conforming to acceptance standards (VI-5) (2) instead of one cubes, where cylinder strength figures given above shall be modified accordingly the formula.

Minimum cylinder compressive strength requires 0.8 compressive strength specified for 15 cm cube (1) As a result of these, it has been considered advisable to give graph showing the relationship between the compressive strength of concrete mixes with different water cement ratio and the 7 days 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 of some assistance in obtaining the water cement ratio for trial mixes of concrete.

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2. ADDITIONAL SPECIFICATION - 1

- 1. The arrangements of M.S. rods for reinforcement for such RCC works shall be in accordance with department drawing supplied.
- 2. (i) The planks for form works and centering for RCC work shall be of well seasoned timber approved by the Executive Engineer. According to clause 10 of TNDSS No. 30, they must be made smooth be made smooth and perfectly level at top so as to give smooth and even finish to the RCC ceiling. Alternatively the contractor may use sal sheets over wooden forms provided to the extent and are ordered by the Executive Engineer during the execution.
- (ii) Payments for centering works all RCC items shall be made only after concrete is laid over though separate items for centering work are included in the schedule.
- 3. All lime mortar shall be ground in mortar will as per TNDSS.
- 4. All Cement concrete for RCC works shall be machine mixed and vibrated.
- 5. The contractor's special attention is invited to clause 7 and 33 of P.S. and TNDSS and he is requested to provide at his own expense sheds, latrines and urinal for is workmen.
- 6. If light is required to fulfill the agreed rates of progress, all arrangements shall be made by the contractors inclusive of lighting without any claim for extra rate.
- 7. The contractor shall not employ the labour below the age of 14 years and shall also note that the must offer employment to exservicemen, ex-today tappers and unemployed agricultural labourers as far as possible.
- 8. The work contract assigned to the contractor's shall be cancelled if they engage child labour in executing works and such contractors should be black listed for three years.
- 9. Many of the items in the schedule may be omitted or radically altered. No variation in rate shall become payable to contractors on account of such omissions or variation in quantities.
- 10. Reference to TNDSS in the schedule of quantities referred to reprint 1952 and addenda and corrigenda issued there after.
- 11. The construction of the buildings will be deemed to be completed only if all the items of works including finishing items of works completed therein are executed.
- 12. The contractor shall abide by the contractors labour regulation of the P.W. Framed by the Tamilnadu Government.
- 13. All pipes specials and fixtures conform to the relevant I.S. I specifications and to be got approved by the Executive Engineer before use on work.

3. Additional specification II Mosaic Flooring

- 1. Cement concrete flooring tiles shall be manufactured from a mixture of cement natural aggregates and colouring materials where required by pressured process. During manufacture, the tiles shall be subject to a pressure of not less than 140 kgs per sq.m (or 2000 Ibs per square inch)
- 2. Proportion of cement of aggregate in the backing of the tiles shall not be lesser than 1:3 by weight.

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- 3. On removal from mould, the tiles, shall be kept in moist condition continuously atleast for days and subsequently if necessary kept moist for such a longer period that would ensure their conformity to the requirements of transverse strength, resistance of wet and water absorption and would minimise shrinkage and cracking. Tiles shall not be scored under cover.
- 4. Tolerance: Tolerance on length and breadth shall be plus or minus/one millimeter. Tolerance in thick-ness be plus 5mm that the range of dimensions is any of on breadth and 3mm on thickness.
- 5. Colour 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 upto 20mm size. The officers of the department shall also specify size of chips by reiterating the approximate photograph given in figure 4 in Indian Standard No. 1237/1959.

GENERAL QUANTITY OF TILES:

Unless otherwise required, the wearing face of the terrace tiles shall be technically of founded and filled. The bearing face of the tiles shall be placed free from projections, depression and cracks (hair cracks not included and shall be reasonable parallel to the back face of tiles). All angles shall be right angles and all rices shall be sharp and true.

7. Breaking transverse strength of tiles shall be given as below

Size of tiles	Span	Breaking Weight Test	Land based dry test
Centimeters	Cm	Kg	Kg
19.58 x 19.58	15	71	106
24.85 x 24.85	10	90	120
29.85 x 29.85	25	99	149

- 8. The average wear of not less than 12 specimens shall exceed 2 mm and the wear or any individual specimen shall not exceed 2.5m when tested in all Abrasion testing machine.
- 9. The average percentage of wear absorptions not less than six full tiles specimen shall not exceed than in the case of water absorption.
- 10. The density of tiles shall be in the order of about 2.50 gms. The tiles shall be laid with the minimum possible width of joints not exceeding 1/32 inch. The joints shall be filled with grey cement to match the finish of the tiles and shall be made almost invisible when the floor is given the final polish. The polishing shall be done by means of electric polisher whenever possible and hand polish to other places like vertical faces or wall and other areas where the machine can have no access and glossy surface as even as possible.

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Table 2.

Optional works test requirements of concrete

Clause, 2.2.(A)

(All value in Kg/CM2)

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

Grade of Concrete	Compressive Strength on 15cm cubes in 7 days	Modules rupture test min. at 72+Hours	By beams 1+7 days
M.100	70	12	17
M.150	100	15	21
M.200	130	17	24
M.250	170	19	27
M.300	200	21	30
M.350	235	23	31
M.400	270	25	34

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

I.S. 510 – 1959 Methods for test for strength concrete.

I.S. 26-1967 Specification for ordinary rapid hardening and low head Portland cement.

TABLE 3. (CLAUSE 4.3.3)		CONCRETE MIX PROPORTIONS ORDINARY CONCRETE		
Grade of Concrete	Total quantity of dry aggregates by volume per 50 Kg. of cement to be Taken as the sum of individual volume of fine and coarse aggregates mix	aggregate to coarse aggregate	Quantity of water per 50 of cement mix.	
M. 100	500	Generally 1.2 for fine	34 Litres.	
	240	Aggregate by volume but	32 Litres.	
	160	subject to an upper limit	30 Litres.	
	100	of 1:11/2 and lower limit	27 Litres.	
		of 1:3		

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Note 1 : It may be noted for general guidance that M 100, M 150, M 200 and M 250 of ordinary concrete correspond approximately to 1:3:6, 1:2:4, 1:1/2:3 and currently used in the country .

The proportion of the aggregates should be adjusted from upper limit to lower limit progressively as the grading of the fine aggregate becomes finer and the maximum size of coarse aggregate becomes larger.

Examples: For an average grading of fine aggregate that one in accordance with good practive VI.5(1) the proportion shall be 1:1 1/2 1:2 and 1:3 for maximum size of aggregate 10mm, 20mm and 30mm respectively.

Table: Surface water carried by average aggregate:-

Aggregate	Approximate quantity of surface water
Very wet sand	120
Moderately Wet sand	80
Moist sand	40

^{*} Moist gravel or crushed work 30 to 40

I.S.P. 383-1963 Specification for coarse and fine aggregates for natural sources for concrete.

I.S.519-1959 Specification for natural and manufacture aggregates for use in mass concrete.

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Minimum Frequency 1	Criteria for acceptance 2	Minimum No. of specimens from the same day's work. 3 4 5 6	In terms of the quantity of concrete 7	In terms of period 8	Criteria for 9
For each batch with a minimum of three batches.	Accept if average compressive strength of the specimen tested is not less than the compressive strength specified in Table 1, (for optional tests see Table 2) subject to the condition that only one out of six consecutive test may give a value less than specified strength.	5 5 5 5	Fro every 150 m3 of concrete or part there of	As such intervals as the Engineer-in-charge may decide over in the case of ordinary concrete same shall be drawn on each day four days of concreting and thereafter atleast once in seven days of concreting.	Average strength of the specimen tested is not less than the strength specified in Table-I (for) optional test see Table (2) Subject to the condition that only out of the three consecutive test may give value less than 90% specified strength.

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Minimum Frequency 1	Criteria for acceptance 2	Minimum No. of specimens from the same day's work. 3 4 5 6	In terms of the quantity of concrete 7	In terms of period 8	Criteria for 9
For each batch with a minimum of three batches.	Accept if average compressive strength of the specimen tested is not less than the compressive strength specified in Table 1, subject to the condition that the average compressive strength shall be more than the specified compressive strength in Table I, by at least the value of standard deviation of the series of test.	5 5 5 5	Fro every 150 m3 of concrete or part there of	As such intervals as the Engineer-in-charge may decide Howover controlled concrete samples shall be drawn on each day for the first four days of concreting and thereafter atleast once in seven days of concreting	Accept average strength of specimen tested is not less than the strength specified in Table-I (for optional test see Table 2) Subject to the condition that one out of five consecutive test may find a value less than specified strength.

D2 Where 'd' = Individual deviation from the average and;

n-1 Where'n' = Number of specimens tested.

All angles and junctions of vertical faces shall be rounded to 1 $\frac{1}{2}$ " radius with same quality of materials and colour of the tiles of the floor. But laid in site and these cover shall be measured as part of flooring and laid for the same rates and the flat floors. The colours of the tiles shall generally match adjacent or as may be directed by the executive Engineers.

The dadooing the skirting have to be finished by giving necessary faces in the Brick wall itself so that the projection does not exceed 3/4" from the face of the wall i.e finish plastered surface.

Based on the modules or rupture of 30kg.perSq.M. for dry test and two thirds of the value of wet test.

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SECTION - IV

ADDITIONAL CONDITION NO. 1

- 1. paints of approved quality are to be procured by the contractor himself and used on the work The Paint tin must be opened in the presence of Section Officer/Sub Divisional Officers and then only used on the work after getting the approval of the concerned officers.
- 2. The contractor shall be responsible for the safe custody and storage of the materials.
- 3. No royalty shall be charged where due for materials quarried from the Public Works Department or District Board or other Government quarries. Assistance as necessary will be given to the contractor by the Temple to obtain access to quarries approved by the Executive Engineer. No plot rent shall be charged so far as materials stocked in the Government land during the / within one month after the work is completed.
- 4. Royalty or charges due for use of private quarries and private land shall by paid by the contractor.
- 5. The contractor shall form his own approach road to the worksite for which no extra will be due to him. On completion of the 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 roads, he shall maintain them in good condition at his own cost through out the period of the contract.

Any surplus materials remaining at the site will not be generally 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 or were issued to them by the Department and charged to their accounts are the property of the contractor and can however be taken over by the department if required for use on other work which are in progress only by special arrangement, and at the prevailing market rates viz., the rates at which the article or articles of a similar description can be procured at given time from Public Market.

If the materials were originally used by the departments, the prices allowed to the contractor on requisition shall not exceed the amount charged to the contractor excluding the element of storage charges if any.

The surplus materials which were originally issued to the contractor by the Department for use on the work shall not be removed from the site of work without getting the written permission of the Executive Engineer.

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ADDITIONAL CONDITIONS OF CONTRACT NO. II

- 1. The contractor shall at his own expenses arrange for the provision of footwear for any labour doing cement mixing work and all other similar type of work involving the use of tar, mortar etc., to the satisfaction of engineer in charge and on his failure to do so, Government shall be entitled to provide the same and recover the cost from the contractor.
- 2. When there are complaints of non-payment of wages, for the labour, bills of the contractor may be withheld pending clearance certificate from the labour department.

ADDITIONAL CONDITION NO. III

Rules for the provision of health and sanitary arrangements for workers employed by the Templeand the contractors.

The contractor's special attentions is invited to clause 37,38,39 and 51 of the preliminary specifications to the Tamilnadu Building Practice specification and he is requested to provide all his own expenses the following amenities to the satisfaction of the Executive Engineer.

- 1. **FIRST AID**: At the work site, yard shall be maintained in a readily accessible place first aid appliances and medicines including an adequate supply of sterilized dressings and sterilized cotton wool the appliances shall be kept in a good order. They shall be placed under the charge of responsible person who shall be readily available during working hours.
- 2. **DRINKING WATER:** (A) Water of good quality fit by drinking purpose shall be provided for the working people in scale not less than 14 liters per head per day.
- (b) Where drinking water is obtained from an intermittent public water supply, each working place shall be provided with storage tank, where such drinking water shall be stored.
- (c) Every water supply and storage shall be as a distance of not less than 50 feet from any latrine, drain or other existing well which is within such proximity of latrine, drain or where water is drawn from it for drinking. All such wells shall be entirely closed and be provided with a trap door which shall be dust and water-proof.
- 3. **WASHING AND BATHING PLACES**: Adequate washing and bathing places shall be provided separately for men and women. Such places shall be kept in clean and drained conditions. Bathing or washing should not be allowed in or nearby drinking.
- 4. **LATRINE AND URINALS:** These shall be provided/within the premises of every work place; latrines and urinals in an accessible place the accommondations separately for each of them shall be on the following scale or on the scale selected by the Executive Engineers in any particulars case.*

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- (i) Where the number of persons employed do not exceed 50,2 Seats.
- (ii) Where the quarter of persons employed 50,5 seats but does not exceed 100.
- (iii) For every additional 100 persons, 3 seats

If women are employed separate latrines and urinals screened from those for man shall be provided on the same scale.

Except in work places provided with water flushed shall be provided with a water borne sewage system with receiptable or any earth system which will be cleaned at least four times daily and atleast twice during working hours and kept in a strictly sanitary condition. The receiptables shall be tarred inside and outside atleast once a year.

The excreta from the latrines shall be disposed of at the contractor's expenses, in and outlay pits approved by the local public health authority. The contractor shall also employ adequate number of scavengers/conservancy staff to keep the latrines and urinals in a clean condition.

- 5. **SHELTERS DURING REST:** At the work site there shall be provided free of cost, two suitable sheds on for male and another for female to rest and for the use of labour.
- 6. **CRECHES:** At every work place at which 25 or more women worker are ordinary employed, there shall be provided two huts of suitable size for the use of children under the 6 years belonging to such women. One hut shall be used for infants game and palt and the other as their bed room. The nut shall be constructed on a lower standard than the following.
 - (i) Thatched roofs.
 - (ii) Mud floors and walls.
 - (iii) Planks spread over the mud floor and covered with mattings.

The site of the crèche or crèches should vary according to the number of women workers. The crèches should be properly maintained and necessary equipments like to-is etc., should be provided and the hut shall be provided with suitable and sufficient sweepers to keep satisfaction of the Health Officer of the area concerned.

- 7. **CANTEEN:** Cooked food canteen on a moderate scale shall be provided for the benefits of the workers.
- 8. **SHEDS FOR WORKMEN:** The contractor should provide at his own expense sheds for housing the workmen. The sheds shall be on a standard not less than the cheap shelter type to live in which the workers pertaining to the locality are accustomed to. A floor area of about 6'x5' for 2 persons shall be provided. The sheds are to being a row with a clear between and 80' clear space between rows if conditions permit. The work peoples camp shall be laid out in units of 400 persons/each unit to have a space of 40' all round.

Executive Officer Arulmigu Subramainiyaswamy Temple Chennimalai-638 051.

ADDITIONAL CONDITION NO. IV

Safety provision in the building industry, conditions in addition to clause 4 of preliminary specification of TNDSS.

PART -I

ARTICLE - I

Suitable scaffolds shall be provided for workmen for all works that cannot be safely done from a ladder or by other means.

A scaffold should not be constructed, taken down if subsequently altered except.

- a) Under the supervision of the competent and responsible person and
- b) By competent workers, possessing adequate experience in this kind of work. Scaffolds shall be so constructed that no part there of can be displaced in consequent of normal use.

Scaffolds shall not be overloaded and so far as practicable shall be evenly distributed.

- 5. Before installing lifting gear on scaffolding, special precaution may be taken.
- 6. Scaffolds shall be periodically inspected by competent persons.
- 7. Before allowing a scaffold to be used by his work men every employer shall, whether the scaffold has been executed by this workmen or not take workmen or not take steps to ensure that it functions full with the requirements of this article.

<u>ARTICLE - 2</u>

- 1. Working platforms, gateways, and stairways shall be so constructed that no part there of can be unduly unequal.
- 2. To be so constructed and maintained to obviate from risks of persons tripping or shidings and to be kept free from any unnecessary to obstruction.
- 3. Every working platform, gateway, working place and stairways shall be suitably tested.

ARTICLE - 3

Every opening in the floor of building or in a working platform shall, except for the time and to the extent period to allow the access of person or the transport of shifting of materials, be provided with suitable to prevent the fall on persons or materials.

When persons are employed on a roof, there is danger of falling from height exceeding than tot be prescribed by national laws or regulations suitable precautions shall be taken to prevent the fall on persons or materials.

Suitable precautions shall be taken to prevent persons from being struck by articles which might fall from scaffolds or other working places.

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ARTICLE - 4

- 1. Safe or 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 bolt at every position at which it is used.
- 3. Every place where work is carried out and the means approach there to shall be adequately lighted.
- 4. Adequate precautions shall be taken to prevent danger from electrical equipments.
- 5. No matter on the site shall be constructed or placed as to cause damage to any persons.

PART II (GENERAL RULES TO HOISTING APPLIANCES)

ARTICLE - 5

- a) Hoisting machines and their attachments and supports shall be of good mechanical construction, good materials and adequate strength free from patent defect and to be kept in good working order.
- b) 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 patent defects.

ARTICLE - 6

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

ARTICLE - 7

- 1. Every crane driver or holding appliance operator shall be properly qualified.
- 2. No person under an age to be prescribed by national laws regulations shall be in control of any hoisting machine including any scaffold which or give a signal to the operator.

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 gears referred to in the proceeding paragraphs shall be plainly marked with working load.

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- 3. In the case of hoisting machine having a variably safe working load, each safe working load and the condition under which it is applicable shall be clearly indicated.
- 4. No part of any hoisting machinery or any gear referred to in paragraph 1 of this article shall be loaded beyond the safe working loading load except for the purpose of testing.

ARTICLE - 9

Motors gearing, transmission electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguards.

- 2. Hoisting appliance shall be provided with such means as well reduce the risk of the accidents
- 3. Adequate precautions shall be taken to reduce the risk of any part of suspended load becoming accidentally display.

Part III. General rules to safety equipment and first aid

ARTICLE - 10

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

ARTICLE - 11

When work is carried on in proximity to any place where there is a risk of drowning, all necessary equipment shall be provided and kept ready for use and all necessary steps shall be taken for the prompt rescue of any persons in danger.

ARTICLE - 12

Adequate provision shall be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.

ARTICLE - 13

Where large work places are situated in cities, sub urban and no beds considered necessary owing to the proximity of city or town hospital, suitable transport shall be provided to facilitate removal of urgent cases to hospitals such as car shall be kept readily available to take injured persons or person suddenly ill to the hospital.

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ADDITIONAL CONDITION NO. V

WATER AND LIGHTING

- 1. The contractor shall pay all fees and provide water and light as required from municipal mains or other sources and shall pay charges therefore (including storage thanks meters etc), for the use of the work and workmen, unless otherwise arranged and decided on in writing with Executive Engineer. The water for the works shall be as far as practicable free from earthy, vegetable or organic matter and from salts of other substance likely to interfere with the setting of mortar otherwise prove harmful to the work.
- 2. All items of works shall be done in accordance with the relevant clause of T.N.B.P. and addenda volume to the TNBP or amended from time to time.
- 3. The contractor shall be responsible for the safe custody of all the department materials once they are handed over to the departmental stores. The cost of any materials in the custody of the contractor lost, stolen destroyed or damaged, will be recovered from the contractors at the issue rate.
- 4. For the testing of the concrete and aggregate, the contractor must procure the following equipments and make them available at site.
- i) Steel mould for making 5cm cubes of concrete. The mould will be in two halves for easy removal.
- ii) Slump cone for testing consistency (slump test) The cone will be 30cm height truncated cone with top and bottom diameter for 10cm and 20cm respectively. In addition, a steel rod 15cm dia and 50cm length and wide tamping and rounded is to be procured.
- iii) For finding fineness moulds, sand and coarse aggregate, hand operate sieve apparatus may be procured along weighing machine for weighing the aggregate sand.
- 5. In the case of any breach of the terms of the contract, contract will be closed at the risk and costs of the contractor in addition to the forfeiture of the Earnest Money Deposit, Security Deposit.
- 6. The testing is to be done at the contractors cost of building materials and also for concrete cubes.

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ADDITIONAL CONDITION NO VI

- 1. The work shall be executed and measured as per metric dimension given in the schedule of quantities, drawings etc., P.F., units wherever indicated are for quidance only.
- 2. Unless otherwise specified, all the rates quoted by the contractor shall be for works at all level of the building.
- 3. Rates for every item of work to be done under this contract shall be for all the lifts and leads, height, depths, lengths and width except when specifically mentioned in the item; otherwise nothing extra will be paid on this account.
- 4. The work shall be carried out as per drawings and designs supplied by department and as directed by the Engineer in charge.
- 5. The rate for all items in which use of cement is involved is inclusive of charge for curing.
- 6. 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 or deleterious materials. Potable waters are generally considered satisfactory for curing., mixing concrete and masonry. However, the water to be used should be periodically tested at contractors cost for its suitability for using in the construction work and got approved from department Engineers.

ELECTRICITY

- 7. The contractor should make his own arrangement for obtaining electricity for all types and use like lighting, welding, pumping, mosaic and marbles polishing etc.,
- 8. The contractor should submit the PERT chart for the program me of work on the date taking over site.
- 9. Any damage to work resulting from rains or from any other cause until those work is taken over by the department after completion will be made good by the contractor at his own cost.
- 10. The contractor shall have to work in co-operation with contractor for electrical works sanitary and water supply and other items of works.
- 11. The contractor shall work in co-operation with the Electrical contractor while laying the conduit pipes and other electrical items for concealed wiring in R.C.C. works.
- 12. The centering and form works shall be true rigid and adequately braced both horizontally and diagonally and leak proof. The form work should be sufficiently strong not only to withstand dead load and live load but also to withstand the efforts of vibration. In all these cases, the standards as per I.S. code and TNBP should be followed. It should be specifically ensured that it is leak proof in joints.

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ADDITIONAL CONDITION NO VII

SPECIFICATION FOR SANITARY FITTINGS, DRAINGES AND WATER SUPPLY ARRANGEMENTS

- 1. Water closets, basins, urinals, sinks and other sanitary ware shall be of approved make, as required in the relevant items. The fixing of these shall be in accordance with the special specifications.
- 2. The rates shall include all dismantling, making holes in walls or slabs and restoring the structure to the original condition after the completion of the work.
- 3. The work should be carried out with least hindrance to the adjoining building and the contractor shall be responsible for any damage caused to the exiting fixtures, electric fittings etc., in the course of execution, and the contractor shall make good any such damage without claims for extra.
- 4. The rate for laying stone ware pipes shall include necessary incidental charges during execution of work and making good any damages to roads and other structures.
- 5. Rates for laying cast iron pipes and galvanized iron pipes (or) PVC pipes shall include fixing with wooden plugs, G.I/C.I. clamps and screws where the pipes are fixed to walls.

The rates for C.I. pipe shall also include wrapping them with tarred straps where they are buried in earth, tarring the portion embedded in masonry and painting with white lead with two coats for portion above ground level.

- 6. The clause for G.I. Pipes fittings should be spaced at convenient places as directed. The wooden plugs for pipes and brackets fittings should be properly fixed in cement mortar 1:3 suitably in masonry with wide end of wedge shaped plugs inside and not hammered with them and into the walls the size of plug should be not less than 25mm square at one end 40mm at the other end with a depth of not less than 75 mm
- 7. painting with two coats of best white paint (or) any other colour approved by Executive Engineer over priming coat of red lead to all flushing tanks, brackets, clamps used for fixing pipes and all other connections.
- 8. The contractor should employ sufficient number of qualified licensed plumbers 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 works.
- 9. The contractor shall after laying of the pipes carry out the tests of the pipes, specials, joints and other fittings against leakage at his own cost according to the relevant. I.S.I. to the fullest satisfaction of the departmental officers.
- 10. In the case of reinforced cement concrete (or) masonry water retaining structures, the contractor shall ensure that there is no leakage (or) dampness on the external faces of the structure. In the event of any above being noticed, the same shall be rectified by the contractor at his own cost, adopting standards approved methods of rectification to the fullest satisfaction of the departmental officers.

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SUPPLYING AND FIXING INDIAN TYPE WATER CLOSETS

- 1. The Indian type water closet shall be fix in position at floor level in a bed concrete of brick jelly in lime mortar 1:2 so as to completely embed the closet, trap and footrests. The existing masonry structure after dismantling the foot making the holes etc., shall be restored to its original condition after completion of the work. The flooring around the closet shall be finished with cement mortar 1:3, 20mm thick with adequate slope all round for draining into the closets. The footrests should be fixed at an angles as per standards.
- 2. The P.V.S. Flushing thanks shall be of three gallons capacity of Indian make conforming to I.S.I. Specification supported on G.I. Brackets with necessary C.I. Chain and handle for pull float ball value of 2 PVC connection to the water main and closet including wiped with white glazed paint of 2" coats over a priming coat of red lead.
- 3. The fixing of water closet shall include the dismantling of existing floor wherever necessary and making necessary holes in walls etc., and restoring the 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 cement mortar 1:4

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ADDITIONAL CONDITION FOR CONTRACTORS SPECIAL ATTENTION: NO VIII

As per clause 64(1) the withheld amount of 21/2% from the final bill in respect of contract for construction of original building will be retained by the Government a total period of one year in lieu of two years period referred to in G.O.Ms.No. 1465 P.W. dated 22.07.82 and will be released either on the expiry of one year period on executing an indemnity bond by the contractor to the satisfaction of the Executive Engineer, for a further period of four years to ensure structural stability of the building under clause 20(1) () and as per G.O.Ms.No. 283 P.W.(G.2)Dept. dated 21.05.99

ADDITIONAL CONDITION FOR CONTRACTORS SPECIAL ATTENTION - IX

The contractor is bound for recovery under Revenue recovery act for any liabilities under this contract.

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 provisions in the articles of Agreements the Executive Engineer shall so advise the contractor in writing and at the same time demand compliance if the contractor neglects to comply with such demand within 7 days after the receipt of such notice it shall then or at any time there after be lawful for the Executive Engineer to terminate the contract which termination shall carry with the forfeiture of the security deposit and total of the amount with held from the final bill together with value of such work as may have been executed and not paid for such proportion of such total sum as shall be assessed by the Executive Engineer.

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Chennimalai-638 051.

SECTION - V

SCHEDULE A

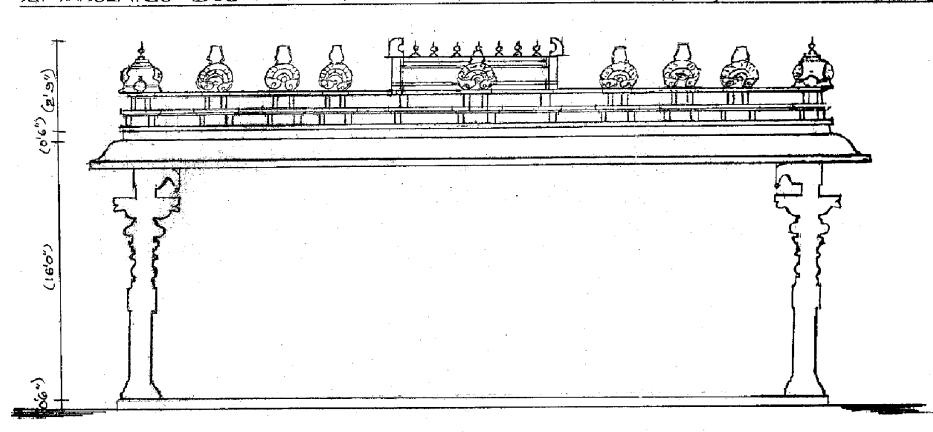
Executive Officer Arumighu Subramaniyaswamy Thirukovil, Chennimalai – 638 051, Perundurai (Tk.) Erode (Dt).

SCHEDULE OF RATES AND APPROXIMATE QUANTITIES

- a) The quantities given here are those upon which the lumpsum tender cost of the work is based but they are subject to alterations, omissions deductions or additions as provided for in the conditions of this contract and do not necessary show the actual quantities of work to be done. The unit rate noted below are the governing payment of extras or deductions or omissions according to the condition of the contract as set forth in the preliminary specification of the Tamilnadu Building Practice specifications of the contract.
- b) It is to be expressly understood that the measured works is to be taken that (not with standing any custom or practice to the contrary) according to the actual quantities when in places and finished according to the drawing or as may be ordered from time to time by the Executive Engineer and the cost calculated by measurement or by weight at the respective prices, without any necessary or contingent works connected therewith.

Executive Officer
Arulmigu Subramainiyaswamy Temple
Chennimalai-638 051.

AT ARULMIGU SUBRAMANIYA SWAMY THRUKOVIL, CHENNIMALAI, PERUNDURAI TALUK, ERODE DISTRICT.



FRONT ELEVATION

ெரும் செயல் அலுவலர்,

ஆகுள்மிகு சப்பிரமன்ற கவாமி தி**ருக்கோயில்**

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ASSISTANT ENGINEER
H.R. & C.E. DEPARTMENT,
ERODE.

