



GOVERNMENT OF TAMIL NADU
RURAL DEVELOPMENT AND PANCHAYAT RAJ DEPARTMENT
TENDER DOCUMENT

INVITATION FOR PREQUALIFICATION APPLICATION AND PRICE TENDER

Two Cover System

Part - A

PRICE BID
(Envelope A)

NAME OF WORK : Maintenance of roads Nos. in
Package No /block of
..... District under 12th FINANCE
COMMISSION FUNDED RURAL ROADS.....

E.M.D.AMOUNT : Rs.

DATE OF TENDER :

ISSUED TO : Thiru. M/s.

Project Officer, DRDA,

.....District.

Part - B
Price Bid
Envelope - B
Date :

Invitation for Bid No.

To:

The Project Officer,
District Rural Development Agency,
..... District

We, the undersigned, declare that :

- (a) We have examined and have no reservations to the Bidding Documents.
- (b) We offer to execute in conformity with the Bidding Documents for the work of Maintenance of under 12th FINANCE COMMISSION FUNDED RURAL ROADS.
- (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 expiration of that period.
- (g) If our Bid is accepted, we commit to obtain a performance security in accordance with the Bidding Documents with the stipulated time.

SCHEDULE OF RATES AND APPROXIMATE QUANTITIES

- (a)** The quantities given here are those upon which the lump sum 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 Preliminary specification of the standard specifications for roads and bridges with the MOST specifications and other condition of specifications of the contract.
- (b)** 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 Collector 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.
- (c)** 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.
- (d)** The Tenderers should quote their rates for the quantity and units specified under metric units under Schedule "A".
- (e)** 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.

**Project officer, DRDA,
..... District.**

LEAD STATEMENT Part No.

S.No	Details of Materials	Location of Quarry	Lead in Kilometer
1.	Bitumen 60/70		
2.	Emulsion RS-1		
3.	45 mm HBG metal		
4.	13.20 mm HBG metal		
5.	11.20 mm HBG metal		
6.	6.70 mm HBG metal		
7.	Gravel		

SCHEDULE 'A'

Package No. :

PART I

Name of the Work : Maintenance of

SI No.	Probable quantity	Description of work	MORD Specification	Rates in		Unit in words	Amount
				Figures	Words		
1		Clearing and grubbing road land including uprooting wild vegetation, grass, bushes, shrubs, saplings and trees of girth upto 300 mm, removal of stumps of such trees cut earlier and disposal of unserviceable materials and stacking of serviceable material to be used or auctioned, upto a lead of 1000 m including removal and disposal of top organic soil not exceeding 150 mm in thickness as per Technical Specification Clause 201.					
	Sq m	Km 0/0-1/0	201			Square Meter	
2		Excavation including removal and satisfactory disposal of all materials necessary for the Construction of roadway and side drains in accordance with the specifications and the lines, grades and cross sections shown in the drawings or as indicated by the Engineer as per Technical Specification Clause 303.1					
	cum	--- do --- Km 100% Compaction	300.2 303.1			Cubic Meter	
	No of Corrections : No of Over writings :						

SI No.	Probable quantity	Description of work	MORD Specification	Rates in		Unit in words	Amount
				Figures	Words		
3	Collection, Supply and spreading of Good Quality Gravel from approved sources for both sides of shoulder to required thickness as per Technical specification Clause 305.3.9						
	cum	--- do --- Km 0/0 - 1/0				Cubic Meter	
4	Providing WBM patches using 45 mm IRC metal including filling up of pot holes, ruts and rectifying corrugated surface, damaged edges and raveling filled with 75 mm thick WBM as per technical specification clause 1906.						
	cum	--- do --- Km 0/0 - 1/0	1906			Cubic Metre	
5	Providing Advance BT patches using 45 mm IRC metal premixed with 44 Kg of bitumen including removal of failed material, trimming the sides to vertical and leveling the bottom, cleaning the same with compressed air or any appropriate method, filled with 50 mm thick BM, after applying bitumen emulsion tack coat at the bottom and sides as per technical specifications clause 502, 503 and 504.						
	cum	--- do --- Km 0/0 - 1/0	1900			Cubic Metre	
	No of Corrections :						
	No of Over writings :						

6	Providing Advance BT patches using 13.2 mm IRC metal premixed with 44 Kg of bitumen including removal of failed material, trimming the sides to vertical and leveling the bottom, cleaning the same with compressed air or any appropriate method, filled with 25 mm thick BM, after applying bitumen emulsion tack coat at the bottom and sides as per technical specifications clause 502, 503 and 504.						
	cum	--- do --- Km 0/0 - 1/0	1900			Cubic Metre	
7	Providing and applying Tack coat with Bitumen emulsion (RS-1) using emulsion distributor at the rate of 4 kg per sqm on the prepared WBM surface cleaned with Hydraulic broom as per Technical Specification Clause 503 .						
	Sqm	--- do --- Km 0/0 - 1/0	503			Square Metre	
8	Providing and applying Tack coat with Bitumen emulsion (RS-1) using emulsion distributor at the rate of 3 kg per sqm on the prepared bituminous surface cleaned with Hydraulic broom as per Technical Specification Clause 503 .						
	Sqm	--- do --- Km 0/0 - 1/0	508			Square Metre	
9	Providing, laying and rolling of Open-graded premix carpet of 20 mm thickness composed of 13.2 mm to 5.6 mm aggregates either using penetration grade bitumen or emulsion to required line, grade and level to serve as wearing course on a previously prepared base, including mixing in a suitable plant, laying and rolling with a three wheel 80-100 kN static roller capacity, finished to required level and grades to be followed by seal coat sealing the voids in a bituminous surface laid to the specified levels, grade and cross fall using Type A as per Technical Specification Clause 503, 508 and 510 .						
	Sqm	--- do --- Km 0/0 - 1/0	508			Square Metre	
No of Corrections :							
No of Over writings :							

LEAD STATEMENTS PART - I

Name of the Work : **Maintenance of**

DESCRIPTION OF MATERIALS											
Sl. No.	Road Reach in Km	63; 53; 45; 26.50; 22.40; 13.20; 11.20; 6.7; 5.60; 2.8mm IRC Size HBG Metal & 20; 25; 12; 6mm ISS & IRC Size HBG Metals		60/70 Packed Bitumen Rapid Setting Emulsion Slow Setting Emulsion		U.S Gravel		Sand For Filling & Mortar		Country Bricks & Other Local Material	
		Source	Lead in Km	Source	Lead in Km	Source	Lead in Km	Source	Lead in Km	Source	Lead in Km
1				Panchayat Union @	-			Not Arise	-	Not Arise	-

SCHEDULE 'B'

Sl. No.,	Drawing No.,	Description	Date on which drawing was approved
1	2	3	4
1	Model	Cross section of plan	

Special Conditions of Contract:

The special conditions described hereunder shall have the meaning and intent out lined in clause 107-05 of Preliminary Specifications to SSRB. The contractor's quoted rate shall be inclusive of all the elements and costs required to comply with them. The special conditions comprise of two parts viz i). Technical Specification and ii). Commercial conditions.

1. TECHNICAL SPECIFICATION:

General Specifications

The entire works as described in the scope of work (General Conditions of Contract) shall be done in accordance with the specification for road and Bridge works' Fourth Revision-2001 and the corrigendum published at New Delhi by Indian Roads congress on behalf of Government of India. Ministry of Road transport and Highways, and shall be deemed to be bound into this document and becomes part and parcel of the agreement.

In the absence of any definite provisions on any particular issue in the aforesaid specification, reference may be made to the latest IRC codes of practice, I.S. Specifications and SSRB in that order. Where even these are silent, the construction and completion of the works shall conform to sound engineering practice and in case of any dispute arising out of the interpretation of the above, the decision of the Engineer-in-charge shall be final and binding on the contractor. These shall be deemed to be bound to this document and become part and partial of the agreement.

PART –II Supplementary Specifications

Part – II shall comprise various substitute, Modified and Additional clauses to the "specification for Road and Bridge Works' referred to in Part I (to cover specific aspects of the particular works not covered by the same) and accordingly, the said specification so amended shall form part of the contract.

A substitute clause as indicated by the suffix "S" is an amendment of a clause in Part –I General specification and superseded the whole of that clause. Then any reference to the superseded clause shall be deemed to refer to the substitute clause.

A Modified clause as indicated by the suffix 'M" shall be read as a partial amendment to the cited clause in Part-I General Specifications. Any provision in the said modified clause conflicting with those of Part – I General specification shall be deemed to supersede the relevant portion of Part – I General specification. Any other non-conflicting provisions shall apply and NOT deemed as substitute.

An Additional clause, as indicated by the suffix 'A' shall bear additional clause numbers not cited in part-I General specification and shall include provisions supplementing those of Part-I General specification.

In so far as any substitute, modified and additional clause may conflict or be inconsistent with any of the provisions of Part-I General Specification under

inconsistent with any of the provisions of part –I – General Specification under reference, the substitute, modified and additional clause shall always prevail.

Words like 'Contract', 'Contractor', Drawing, Works', 'Site', 'Provisional Sum' used in the above mentioned specification shall be deemed to have the same meaning as understood from the definition of these terms in and as included in the General Conditions of Contract.

In the absence of any definite provisions on any particular issue in the aforesaid specification, reference may be made to the latest IRC codes of practice, I.S. Specifications and SSRB, in that order. Where even these are silent, the construction and completion of the works shall conform to sound engineering practice and, in case of any dispute arising out of the interpretation of the above, the decision of the Engineer – in – charge shall be final and binding on the contractor. These shall be deemed to be bound to this document and becomes part and parcel of the agreement.

SUPPLEMENTARY SPECIFICATIONS FOR STRUCTURES:-

The following list shows the clauses of Part-I, which are either substituted or modified or added: -

Substitute clauses	112.1, 112.2, 112.3, 1006, 1009.3, 2901 to 2905, 2908 to 2911
Modified clauses	112.4, 112.5, 112.6, 1009.3, 1010, 1209, 1716.2.5(a) 2005.1, 2005.2, 2602 (c)
Added clauses	103, 109.8, 120.7, 304.3.7, 305.2.2.2, 305.3, 1012.1, 1507, 1710, 1712, 1714, 1716, 1802.1, 1802.2, 1807, 1809.5, 2005.1, 2501.2.3, 2600
New clauses	1816, 2211, 2912

II. COMMERCIAL CONDITIONS

1. Bitumen and Emulsion will be supplied by the Department at departmental stores at the cost specified below and the same will be recovered from the contractor's bill.

Contractor should make his own arrangements to take delivery of the materials at the departmental stores to worksite during office hours on all working days. The contractor should make necessary arrangements to protect the departmental materials in his custody from damage. If he fails to make such precautionary measure the cost of damaged materials shall be made good from the contractor.

a). Emulsion	-	Rs. / MT
b). Bitumen	-	Rs. / MT

For the quantity of Cement, Steel, Packed Bitumen and Bitumen emulsion issued to the contractor in excess of permissible limits (i.e.) more than 2½ % not yet returned by the contractor. Recovery cost will be **double** the rate plus storage charges or market rate whichever is higher which the supply of bitumen is agreed to for bonfide use in the work.

If the quantity of Packed bitumen and Bitumen emulsion issued is less by 2½ % of permissible quantity, the recovery will be made for the quantity of Packed bitumen and Bitumen emulsion calculated as per the original requirement despite the quantity noted in the unstamped receipt. The contractors' rates shall be inclusive of all sales tax if any which he has to pay to Government.

2. The quoted rate shall be inclusive of cost of Bitumen, Bitumen emulsion conveyance handling and storage charges, watering, barricading, lighting, watching safety arrangements in the intensity of traffic etc., and other requisites as contained in clause 103-04 of P.S. to S.S.R.B.

3. The Department will not undertake supply of water if it for plain pre-stressed and RCC Works. It is the responsibilities of the contractor to get from approved source. Water shall conform the specifications 108-12-212 and 1007.02 of SSRS. The rates quoted shall be inclusive of charges for procuring and transport of water to site whatsoever be the distance

4. All the Provisions contained in clause 106 & 107 of P.S. to SSRB in regard to quality of materials and control of work shall be applicable and enforced.

5.1 The contractor shall be responsible to make good and remedy at his own cost any defect which may develop or may be noticed and intimation of which has been sent to the contractor by a letter sent by hand delivery or by registered post before the expiry of a period of 60 (Sixty) months (herein after referred to as defects liability period) from the completion of whole of the work, for major works like formation of road including metalling and black topping.

5.2 In case of works like resurfacing of the existing roads and black topping, the defect liability period shall be 6 (six) months.

5.3 In the event of the contractor failing to rectify the defect or damages within the period specified by the Engineer-in-charge in his notice aforesaid, the Engineer-in-charge may rectify or remove and re-execute the work and/or remove and replace with other materials or articles complained of, as the case may be, by or other means at the risk and expense of the contractor.

5.4.1 If the time of making final payment for minor/major works likes formation of road including metalling and black topping 2 ½ % of the total value of work done shall be retained by the department. This amount will be refunded to the contractor on the expiry of **Two** year reckoned from the date of completion of work provided that the contractor execute an indemnity bond for a further period of three years indemnifying the Government against any loss or expenditure incurred to rectify any defect noticed due to faulty workmanship by the contractor (or) substandard materials used by the contractor.

5.4.2 In case of works like resurfacing of the existing roads and black topping the amount will be refunded to the contractor on the expiry of six months from the date of completion of work.

5.5 Making final payment shall not discharge or release the contractor from his responsibilities and liabilities under the contract.

6. In case, when the departmental tools and plants are hired to the contractors in places of work where the standard schedule of rates of Public works Department allow extra special tract percentage, the hire charges will be enhanced by the corresponding extra percentage and recovered from the contractor.

7. With out limiting his obligations and responsibilities under the contract, the contractor shall insure in the joint name of the Government and the contractor against all loss or damage from whatever cause (other than the excepted risks) for which he is responsible under the terms of contract and in such a manner that the Government and the contractor are covered during the period of construction of the works and defects liability period for.

- i) The works and temporary works to the full value of such works executed from time to time.
- ii) The materials, constructional plant and other things brought to site by the contractor to the full value such materials, constructional plants and other things.

8. Any amount due from the contractor, which he has failed to remit after the notice from the Engineer, shall be a caused to be recovered under Tamil Nadu Revenue Recovery Act as if it was an arrear of land revenue.

9. The tenderer who are themselves not professionally qualified shall under take to employ qualified technical men at their cost to look after the work according to the scale indicated below. In case, the tenderer is professionally qualified, he must employ technical men to meet the norms beside himself. The tenderers should state in clear terms whether they are professionally qualified or whether they undertake to employ Technical Assistants required by the department as specified in the schedule below for the work.

- a. In case of the contractor who is professionally qualified is not in position to remain always at the site of the work during working hours personally checking of all items of work and paying extra attention to the works as may demand extra special attention (e.g.) bituminous courses, RCC work etc he should employ technically qualified person as prescribed for the work.

Rs.10.00 Lakhs to 25.00 Lakhs. One B.E., (Civil) or equivalent Degree holder with three years experience in Civil Engineering works or not less than one Retired Sub- Divisional Officers plus one Diploma Holder in Civil Engineering or Two Diploma Holder in Civil Engineering with three and five years experience respectively

Rs.25.00 lakhs to Rs.50.00 lakhs: One B.E., (Civil) or equivalent Degree holder with three years experience or not less than one Retired Sub-Divisional Officer (Assistant Executive Engineer, Or Assistant Divisional Engineer) Plus two Diploma Holders in Civil Engineering or two Retired Junior Engineers.

Alternative: One B.E., (Civil) or equivalent degree holder with three years experience or not less than one Retired Sub Divisional Officer (AEE or ADE) plus one more BE (Civil) or equivalent Degree Holder (G.O.Ms.No.1645/PWD/dated 6.10.1981).

Rs. 50.00 Lakhs and above: Two B.E. Civil (or) equivalent Degree holder with three years experience or not less than Two Retired Sub-Divisional Officer (Assistant Executive Engineer, Or Assistant Divisional Engineer) Plus Four Diploma Holders in Civil Engineering or Four Retired Junior Engineers to supervise the work.

If the tenderer fails to employ the technical personnel as indicated above for the works, penalty shall be levied during the period of such non-employment of technical assistants.

- b. A penalty of Rs 2,000/- per month for diploma holders and Rs. 5,000/- per month for degree holder will be levied in case of default on the part of contractors in following the norms laid down above.
- c. The employment of technical personnel should be based on 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.
- d. It will not be incumbent on the part of the contractor to employ technical personnel when the work is kept in abeyance due to valid reasons and if during such period in the opinion of the Executive Engineers, the employment of Technical Personnel is not required or the due fulfillment of the contract.
- e. The Contractors who possess a degree in Mechanical or Electrical Engineering may also have to appoint Technical Personnel as in case of Registered Contractors with degree in Electrical Engineering when they are entrusted with civil works by the Department
- f. Engineers with Mechanical Engineering qualification and retired from Civil Engineering Department are also suitable for supervising the Civil Engineering works subject to condition that evidence for experience in Civil Engineering field is produced.
- g. One technical Assistant may be employed by the contractor for more than one work situated within one kilometer, provided that monetary limit prescribed for the nature of technical personnel to be employed is adhered to by one and the same contractor.

10. Income tax at 2% with SC of the bill amount will be recovered from all interim bills and final bill of the contractor or at such rates which the Government may be notification fix from time to time.

11. Recovery at 0.30 % of estimated value of the contract will be made from the contractors or at such rates the Government may be notification fix from time to time towards Tamil Nadu Manual Workers Welfare with reference to the Tamil Nadu Manual works (Regulation of employment and conditions of work) Act 1982.

12. Mobilization advance of machinery advance will not be granted for this work.

13. The contractors are not entitled for any price variation due to increase in cost of materials labour, Hire charges for machinery fuel and also for any other reasons etc.,

14. The Sub grade soil / sub base and WBM blindage materials should be tested for its suitability in accordance with cl. 401 of MORTH Rev. IV from any other reputed institute and get it approved by competent authority, before execution by the contractor at his cost, if there is any change in the materials on composition, No extra cost will be paid.

15 As soon as the contract is accepted the contractor should give programme of work in the shape of PERT duly indicating programme of activity to adopt for execution. The progress of work should be in conformity with the PERT as specified under clause 15 of this document. The Engineer in charge shall be entitled to suggest modifications in the PERT Chart if need be and the contractors shall comply with the suggested modification. The PERT chart after modifications if any shall be approved by the Engineer in charge and shall form part of the agreement. The PERT chart shall have the effect of progress schedule within the meaning of clause 103-06 of PS to SSRB and form the basis involving clause 109 of PS to SSRB.

16. Rate of progress and liquidity damages

16.1 The attention of the tenderers is drawn to the contract requirements as to the time of commencement of work. The rate of progress and the dates for the completion of the whole work and the several activities shall be as indicated below. The date of commencement of this programme will be the date on which the site (Premises) is handed over to the contractor. The time fixed for completion of the entire work shall be 4 months.

Programme for Completion of work:

SI No	Period (Cumulative from the date of handing over the site)	Milestone fixed for completion
1	1 st Month	Preparatory work and 20% of work should be completed
2	2 nd Month	50% of work should be completed
3	3 rd Month	75% of work should be completed
4	4 th Month	100% of works should be completed in all respects

16.2 If for any reason, which does not entitle the contractor to an extension of time the rate of progress of the works or any section is at any time, in the opinion of the Engineer, slow to ensure completion by the prescribed time or extended time for completion the engineer shall so notify the contractor in writing and the contractor shall there upon take suitable steps as are necessary and the Engineer may approve to expedite progress so as to complete the works or such section by the prescribed time or extended time. The contractor shall not be entitled to any additional payment for

baking such steps. If, as a result of any notice given by the Engineer under this clause, the contractor shall seek the Engineer's permission to do any work at or on Sundays, if locally recognized as days of test or their, locally recognized equivalent, such permission shall not be unreasonably refused.

- 16.3 If the contractor shall fail to achieve completion of the works within the time prescribed by clause 15.1 hereof, than the contractor shall pay to the employer the sum stated in the contract as liquidated damages for such default and not as a penalty for every day or part of a day which shall elapse between the time prescribed by clause 15.1 hereof and the date of certified completion of the works. The Employer may, without prejudice to any other method of recovery, deducts the amount of such damages from any moneys in his hand due or which may become due to the contractor. The payment or deduction of such damages shall not relieve the contractor from his obligation to complete the works or from any other of his obligations and liabilities under the contract.
- 16.4 If before the completion of the whole of the works any part of section of the works has been certified by the Engineer as completed, pursuant clause hereof, and occupied or used by the employer the liquidated damages for delay shall for any period of delay after such certificate and in the absence of alternative provisions in the contract be reduced in the proportion which the value of the part or section so certified bears to the value of the whole of the works.
- 16.5 Further to sub clause (2) above, if the contractor should fail to complete the separable portions of the works identified below or to complete the whole of the works within periods and dates specified under clause 23.10 the contractor shall pay to the employer, as fixed and agreed liquidated damages and not as penalty the such shown below for any calendar day or part of a calendar day of delay in the types and proportions of currencies as shall be payable to the contractor under the contract. However, if 95% of work is physically completed, it is constructed as fully completed only for enforcement of this clause.
- 16.6** In case of delay of 30 days beyond the stipulated 4 months period or further extended period, as mutually agreed for reasons recorded, **Rs. 500/-** per day will be levied and collected as penalty. In case of delay between 31-60 days, **Rs. 1,000/-** per day will be levied and collected as penalty. In case of delay beyond 60 days, **Rs. 2,000/-** per day will be levied and collected as penalty with option to cancel the work order, Security Deposit forfeited and contractor black listed in addition to the penalty.
- 16.7** The employer reserves the right to levy and collect penalty upto **Rs.2,000/-** per day for delays in achieving the milestones in the intermediate period as stipulated in the contract. The Employer also reserves the right to terminate the contract if the work is not executed as per condition of contract during the intermediate period

17. TERMINATION OF CONTRACT:

The contract can be terminated fully or partly, if the contractor fails either to follow the proportionate progress or fails to adhere to the quality prescription. In the event of termination, the work will be done thro' other agency at the risk and cost of the original contract this is as per TNBPC & MDSS 109.05.

18. CARE OF WORK AND RISKS:

18.1 From the commencement of the work until the date stated in the certificate of completion for the whole of the works including observation period of five year there from pursuant to clause hereof the contractor shall take full responsibility for the care thereof. Provided that if the Engineer shall issue a certificate of completion in respect of any part of the permanent works, the contractor shall cease to be liable for the care of that part of the permanent works from the date stated in the certificate of completion in respect of that part and the responsibility for the care of that part shall pass to the employer provided further that the contract shall take full responsibility for the care of any outstanding work which he shall have undertaken to finish during the period of maintenance until such outstanding work is completed. In case any damage loss or injury shall happen to the works, or to any part thereof from any cause whatsoever, save and accept the risks as defined in sub-clause while the contractor shall at his own cost repair and make good the same, so that at completion the permanent works shall be in good order and condition and informing every respect with the requirements of the contract and the Engineer's instructions. In the event of any such damage, loss or injury happening from any of the risks, the contractors shall, repair and make good the same as aforesaid at the cost of the Employer. The contractor shall also be liable for any outstanding work or complying with his obligations.

18.2 The risks are war, hostilities (whether war be declared or not) invasion act of foreign enemies rebellion, revolution, insurrection or military or usurped power civil war, unless solely restricted to employees of the contractor or of his sub-contractors arising from the conduct of the works, riot commotion or disorder, or use or occupation by the Employer of any part of the permanent works, or a cause solely due to the Engineer's design of the works, or ionizing radiation or contamination by radioactivity from an nuclear fuel or from any nuclear waste from the combustion of nuclear fuel radio-active toxic explosive, or other hazardous properties of any explosive nuclear assembly of a clear assembly or nuclear component thereof, pressure waves caused by aircraft or other arrival device traveling at sonic or supersonic speeds, or any such operation of the forces of nature as an experienced contractor could not foresee, or reasonably make provision for insure against all of which are herein collectively referred to as the risks.

19. FRUSTRATION:

If a war, or other circumstances outside the control of both parties, arises after the contract is made so that either party is prevented from fulfilling his contractual obligations or under the law governing the contract, the parties are released from further performance, then the sum payable by the Employer to the contractor in respect of the work executed by the contractor.

20. EXTENSION OF TIME FOR COMPLETION:

Time shall be considered as the essence of the contract, should the amount of extra or additional work of any kind or any cause or delay referred to in these conditions, on any cause of delay hereof or exceptional adverse climatic conditions, or other special circumstances of any kind whatsoever which may occur, other than through a default of the contractor be such as fairly to entitle the contractor to an extension of time for the completion of the works without any extra financial commitment.

21. SETTLEMENT OF DISPUTES:

If any dispute or difference of any kind whatsoever shall arise between the engineer of employer and the contractor in connection with, or arising out of the contract, of the execution of the works whether during the progress of the works or after their completion and whether before or after the termination, abandonment or breach of the contract, it shall in the first place, be referred to and settled by the Engineer who shall within a period of thirty days after being requested by the contractor to do so, give written notice of his decision to the contractor. Upon receipt of the written notice of decision of the Engineer the contractor shall promptly proceed without delay to comply with such notice of decision.

If the Engineer fails to give notice of his decision in writing within a period of thirty days after being requested or if the contractor is dissatisfied with the notice of decision of the Engineer, the contractor may within thirty days after receiving the notice of decision appeal to the employer who shall afford an opportunity to the contractor to be heard and to offer evidence in support of his appeal. The employer shall give notice of his decision within a period of thirty days after the contractor has given the said evidence in support of his appeal. Subject to arbitration, as hereinafter provided, such decision of the Employer in respect of every matter so referred shall be final and binding upon the contractor and shall forthwith be given effect to by the contractor who shall proceed with the execution of the works with all due diligence whether he requires arbitration, as hereinafter provided or not if the Employer has given written notice of his decision to the contractor and no claim to arbitration has been communicated by him by the contract within a period of thirty days from receipt of such notice the said decision shall remain final and binding upon the contractor. If the Employer shall fail to give notice of his decision, as aforesaid, within a period of thirty days after being requested, as aforesaid, or if the contractor be dissatisfied with any such decision then and in any such case the contractor within thirty days after the expiration of the first named period of thirty days at the case may be required that the matter or matters in dispute be referred to arbitration as hereinafter provided.

22. Quality Control

22.1 Contractor's facilities.

According to the contract, the contractor is responsible for the quality of the entire construction work and for this purpose he is required to have his own independent and adequate set-up to meet his requirements.

- a. The contractor shall set up his own laboratory at location (s) approved by the Engineer. The laboratory with sufficient stand byes suitable to carry out the tests prescribed for different materials and work according to the specifications. The Engineer shall be approved the list of equipment to be provided. The equipment should be maintained in a workable condition to the satisfaction of the Engineer.
- b. Sampling and testing procedure shall be in accordance with the relevant standards of BIS (Previously called (ISI) of IRC. Frequency of testing shall be as laid down in the Ministry's specifications for Roads and Bridge work IIIrd Revision). In the absence of relevant Indian Standard, sampling and testing procedures shall be as approved by the Engineer.
- c. The laboratory should be manned by a qualified materials Engineer and assisted by materials Inspectors/Technicians, and the Engineer should be approved the set-up.
- d. The contractor should prepare printed proforma for recording readings and results of each type of test, after getting the formats of the performance approved from the Engineer. He should keep a daily record of all the tests conducted by him. Two copies of the tests results should be submitted to the Engineer for his examinations and approval of which one copy will be returned to the contractor for being kept at site of work.
- e. The materials Engineer of the contractor should keep close liaison with the quality control unit of the Engineer and kept the latter informed of the sampling and testing Programme so that the Engineer's representative could be present during this activity, if considered necessary.

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

Tests

The contractor shall be solely responsible for:

- a. Carrying out the mandatory tests prescribed in the Rural Roads Manual, and
- b. For the correctness of the test results, whether preformed in his laboratory or elsewhere.

22.3 If the Engineer instructs the Contractor to carry out a test not specified in the Specification / Rural Roads Manual 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.

23. CONDITIONS FOR TRAINING OF APPRENTICES AS PER APPRENTICE ACT

1. The contractor shall comply with the provision of the apprentice 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 or invoke any of the parties or breach of contract provided in the agreement. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him on the provision of the act.
2. Contractor shall during the currency of the contract ensure engagement of the Apprentices in the categories mentioned below who may be assigned to him by Director of Employment and Training/State Apprenticeship Advisor, Tamil Nadu. 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 employer under the said item including the liability of make payment to the Apprentices as required under the said Act.

Value of contract	Category	To be appointed
1. Above Rs. 10.00 lakhs	1. Building Constructor	1
	2. Brick layer	1
	3. B.E. (civil)	1

3. Unless the contractor has been exempted from the engagement of apprentices by the Director of Employment and Training/State Apprenticeship Advisor, a certificate to the effect that the contractor has discharged his obligation under the said act satisfactory should be obtained from the Director of Employment and Training/State Apprentices Advisor and the same should be provided by the contractor, final payment in the settlement of the contractor.

(Authority: G.O. Ms. No. 866/Transport Department/dt. 02-08-1970)

SCHEDULE 'C'

1. SALES TAX REGISTRATION & DEDUCTION OF SALES TAX FROM BILLS

The Contractor should be required to indicate their registration number under the Tamil Nadu 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 of works contract in the TAMIL NADU GOVERNMENT GAZETTE CHENNAI. Dt 31.05.99, a new provision under 7F for deduction of tax at Sources is introduced in the Tamil Nadu General Sales Tax Act 1959, by Tami Nadu Act 15 of 1999 with effect from 10.06.99. As per this new section, 7F of this act, at the time of payment of such sum deduction @ 2% [Two Percent] in respect of civil works and 4% [Four Percent] in respect of all other works contract 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.

2. REVENUE RECOVERY ACT

Whenever any amount has to be paid by the contractor in lieu of determination of the contract by 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.

In the event of the work being transferred to any other office, Executive Engineer/ Assistant Executive Engineer who is having jurisdiction over the work shall be competent to exercise all the powers and privileges reserved in favour of the Government.

3. 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 Collector.

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.

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 of war) rebellion military.

4. ARBITRATION CLAUSE

(i) 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 Engineer 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 dispute or difference shall be and is hereby referred to the arbitration of the (Mentioned in the "Articles of agreement" (here in after called the Arbitrator)) in case where the value of claim is less than and up to Rs. 50,000/- (Rupees Fifty Thousand only).

In case where the value of the claim is more than Rs. 50,000/- the parties will seek remedy through the competent civil Court. (G.O. Ms. No.253 P.W.D Dt 24.2.1981).

(ii) 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 charged at the market value prevailing at the time of supply of stock or issue 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 finishing 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.

5. CONDITION ON ENGAGING CHILD LABOUR

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

6. EXECUTION OF WORK

If at any time the Collector shall be of the opinion that the contractor is delaying commencement of the work or violating any of the progress of work as defined by the tabular statement rate of progress in the article of agreement, the Collector shall so advice the contractor in writing and at the same time demand compliance. If the contractor neglects to comply with such demand within seven days after the receipt of such notice it shall be at any time thereafter be lawful for the Collector 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 total sums as shall be assessed by the Collector.

7. SPECIAL CONDITION FOR MINI HOT MIX PLANT

Premix carpet with seal coat/ without seal coat 20 mm thick is to be carried out using Mini Hot mix plant only according to M.O.S.T. specifications The contractor should make his own arrangements for Mini Hot Mix Plant and other required tools and plants connected with the work for satisfactory completion of the work and the department will not supply the same.

8. SPECIAL CONDITION FOR COLLECTION OF SAND

Sand to be collected should be perfectly dry clean of coarse variety; only river sand should be collected.

Payment to be made for the item of sand collected shall be only for net quantity, after deducting necessary percentage towards bulkage in case the collected sand contains any moisture or happen to be wet.

The bulkage of sand will be arrived by the following formula:

Gross stacked quantity x 100

100 + % of bulking

The exact percentage of voids which will be deducted from the stacked quantity of wet sand will be decided by the departmental officers by conducting necessary field tests and the decision of the same by the department shall be final and binding on the contractor.

SCHEDULE 'D'

Applicable to all cases of works other than those relating to roads channels and canals where a minimum of fifty workers are employed.

Rules for the provisions of health and sanitary arrangements for workers:

The contractor's special attention is invited to clause 3.3:39 and 51 of the P.S to TNBPSS, and he is requested to provide at his own expenses the following amenities to the satisfaction of Divisional Engineer.

1. FIRST AID

At the worksite, there shall be maintained at an accessible place first aid appliances and medicines including an adequate supply of sterilized dressing including sterilized cotton wool. The appliances shall be kept in 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 for drinking purpose shall be provided for the workers on the scale of not less than 3 gallons per head per day.
- b. Where drinking water is obtained from an intermittent public water supply each work site shall be provided with storage tank where such drinking water shall be stored.
- c. Every water supply storage shall be at a distance of not less than 50 M from any latrine drain or other sources of pollutions where a water has to be drawn from an existing well, which is within such proximity of any latrine drain or other sources of pollutions. The well shall be properly chlorinated before water is drained from it for drinking. All such wells shall be entirely closed in and provided with a trap door which shall be dust and water proof.
- d. A reliable pump shall be fitted to each inner well. The trap door shall be kept locked and opened duly for inspection and cleaning which shall be done at least once a month.

3. WASHING AND BATHING PLACES

Adequate washing and bathing places shall be provided separately for men and women. Such places shall be kept clean and well drained. Bathing and washing should not be allowed near any drinking water well.

4. LATRINES AND URINALS:

They shall provided within the premises of every worksite latrines and urinals in an accessible places and the accommodation separately for each of them shall be on the following scale or on the scale directed by the Divisional Engineer in any particular case.

a.	Where the no. of persons employed does not exceed 50	: 2 seats
b.	Where the no. of persons employed exceed 50 but does not exceed 100	: 3 seats
c.	For every additional hundred	: 3 seats

If women are employed separately latrine and urinals screened from those for man shall be provided on the same scales. Except in worksite provided with water flushed latrines connected with a water borne sewage system. All latrines shall be provided with receptacle on dry earth system which shall be cleaned at least four times daily and at least twice during working hours and kept in a strictly, sanitary condition, the excreta from the latrines shall be disposed off at the contractor expenses in out work pits approved by the local public health authority. The contractor shall also employ adequate number of scavengers and conservancy staff to keep the latrines and urinals in a clear condition.

5. SHELTERS DURING REST:

At the work site there shall be provided free of cost two suitable sheds one for means and other for rest for the use of workers.

6. CREACHES:

At every work site at which 50 or more workers are ordinarily employed there shall be provided two huts of suitable size for the use of children under the age of five year belonging to each women (one shall be used for infants, games and play and the other as their bed room). The huts shall not be constructed on a standard lower than the following: i) Thatched roofs ii) Bed rooms and walls iii) plants spread over the mud floor and covered with matting. The use of the huts shall be restricted to children, their attendance and mothers of the children.

7. CANTEENS:

A cooked food canteen on moderate scale shall be provided for the benefit of workers if it is considered expedient.

8. SHEDS FOR WORKERS:

The contractor should provide at his own expenses sheds for housing the workers. The shed shall be on a standard not less than cheap shelter type to live in which the workers in the locality are accustomed. A floor area at about 6'x5' for two person shall be provided. The sheds are to be in row with 5' clear space between shed and 50' clear space between roofs of condition permit. The workers shall be laid but in units of 400 persons each unit to are a clear space of 40' on each side. On completion of the work the contractor should dismantle the temporary but months and remove the same at his cost and no labour or huts allowed to continue.

(G.O. Ms No.783/PWD/Dt 20.6.1978)

9. TRAFFIC REGULATIONS:

Clause 10 of the TNDSS of 96 shall apply to the whole work under concrete rollers, water lorries.

Mixers where borrows when not actually in use shall be drawn clear off the road for the safety of the public all precautionary measures shall be taken by way of the lighting with bright lights watching and wearing.

Contractor shall maintain watchman to control and regulate traffic. Notice Boards, shall be placed in suitable portions bearing in large letters printed in conspicuous columns the following words as they may suit.

10. "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.