

SECTION XIX
GENERAL CONDITIONS OF CONTRACT

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TAMIL NADU BUILDING PRACTICE.
FOR USE IN THE PUBLIC WORKS DEPARTMENT AND HIGHWAYS AND RURAL WORKS DEPARTMENT
OF TAMIL NADU.

GENERAL CONDITIONS OF CONTRACT.

A PREFACE.

Intent and reference to Tamil Nadu Building Practice—

1. It is intended by these Tamil Nadu Building Practices to describe

(a) the character of the materials to be used ;

(b) the method of execution of work and

(c) the contractor's responsibilities and liabilities to the Public, Government and its workmen and general contract conditions which are to be accepted by every contractor who executes work entrusted to him by the Department.

1.2. Whenever the term 'Standard Specifications' or "Specifications" or the abbreviation "TNBP No." or "TNBP" is used in the specifications or in estimates or contract documents, it shall refer to the relevant specification in the Tamil Nadu Building Practice.

3. The abbreviation "I.S.", shall mean "Indian Standard".

2. Applicability of the Tamil Nadu Building Practice.

2.1. It shall be unnecessary to include in any contract documents a specification for any item of work which is defined in the tender notice in the contract schedule of work to be done by a Tamil Nadu Building Practice number (TNBP No.). The fact that the item is defined as specification, shall mean that the contractor is to execute the work according to such specification modified as may be necessary by an addendum specification for that particular item of work. In the absence of specification for any work or material in the T.N.B.P. such work should be carried out in accordance with the instruction given by the Executive Engineer.

2.2. THESE GENERAL CONDITIONS OF CONTRACT SHALL APPLY TO ALL AGREEMENTS ENTERED INTO BY CONTRACTORS WITH THE PUBLIC WORKS DEPARTMENT, OR HIGHWAYS AND RURAL WORKS DEPARTMENT AND shall form an inseparable condition of contract, and it shall not be necessary to append a copy of the same to the agreement.

3. Contractor to sign in the Divisional (or the sub-Divisional) copy of the T.N.B.P.

3.1. Every contractor who executes work for the Public Works Department of the Highways and Rural Works Department shall carefully study the specification for all items of work which are included in the schedule for work to be done and his obligation under the 'General Conditions of Contract' which apply to all agreements, and he shall sign in the Divisional Office copy of the T.N.B.P. (or the sub-Divisional copy if so arranged by the Executive Engineer) as evidence that he understands clearly the conditions of contract governing his agreement and accepts the same.

3.2. It shall not be necessary for the contractors to sign the Divisional Office copy of the T.N.B.P. for every contract awarded to him, but his signature therein will be evidence that he accepts the conditions of contract (which include the standard specifications) as detailed in the T.N.B.P. for every contract into which he enters. It shall also be the contractor's responsibility by frequent perusal of the Divisional Office (or the sub-Divisional Office) copy to become conversant with sanctioned alterations or additions made to the T.N.B.P. as soon as they are made. A separate volume of addenda to the T. N. B. P. will be maintained in each Division (or sub

division office as the case may be in which will be entered all sanctioned corrections and additions. This must also be studied and signed by every contractor before executing an agreement. Interleaving correction slips will not be made for this purpose. The contractor should purchase book of the T.N.B.P. for his reference while executing work.

4. Sub-specifications :—

4.1. Works of similar nature having many common clauses in their specifications are grouped under one specification number with a 'General' preface thereto, and the sub-specifications are therefore given an alphabetical suffix.

5. Additions and alterations to the T.N.B.P.

5.1. Additions and alterations to the T.N.B.P. will be incorporated in the addenda volume as authorised by the Chief Engineer.

6. Powers of Superintending Engineers and Executive Engineers to supplement or alter the T.N.B.P.

6.1. Superintending Engineer and Executive Engineer may alter the specification for any particular contract which is within their respective powers of sanction, when such alteration is found necessary by attachment of a correction sheet to the contract form, bearing the T.N.B.P. number, the corrections and the signature of the Superintending Engineer or the Executive Engineer as the case may be, together with the signature of the contractor. Similarly additional specifications for items for which there are no standard specifications will be made by attachment to the contract documents of addendum specifications sheets bearing the signature of the Superintending or the Executive Engineer as the case may be and the signature of the contractor.

A-1. DEFINITIONS AND INTERPRETATIONS.

7. Definition of terms.—

7.1. Wherever the words and expressions defined in this clause or pronouns used in their stated occur in contract documents (which includes the T.N.B.P.), they shall have the meanings hereby assigned to them except where the context otherwise requires.—

(a) 'Executive Engineer' means the Executive Engineer for the time being in charge of the concerned work under execution or such other departmental assistants or subordinates to whom the Executive Engineer may have delegated certain duties, acting severally within the scope of the particular duty entrusted to them.

(b) No delegation by Executive Engineer which affects agreements. It is however, to be distinctly understood that the Executive Engineer or the Superintending Engineer or the higher authority who is vested with the powers of acceptance of the particular agreement under reference will make no delegation of powers to such assistants or subordinates which in any way affects the agreement and its contract condition, when such agreement is to be or has been accepted by the Executive Engineer or by the other higher authority respectively. The duties of such assistants or subordinates will be solely duties of supervision to ensure compliance with contract conditions.

(c) 'Contractor' means the particular person, firm or corporation with whom an agreement has been made by the Executive Engineer or higher authority as the case may be, for executing work defined in the concerned agreement, and for purposes of instructions regarding compliance with contract conditions, it shall include the contractor's authorised agent, who is maintained on the work by the contractor.

(d) Works or work means the works by or by virtue of the contractor contracted to be executed whether temporary or permanent and whether original, altered substituted or additional or connected with the supply repairs or carriage of tools and plants and supply or manufacture of other stores.

7.2. Works importing the singular only also include the plural and vice-versa where the context requires.

NOTE. -The terms sub-divisional officer, Assistant Engineer, Executive Engineer, Superintending Engineer and Chief Engineer, used in the following clauses shall where the context so requires, be construed as also including officers of the corresponding grade in the Highways and Rural Works Department.

8. Evidence of experience.—Tenderer shall, if required, present satisfactory evidence to the Executive Engineer that they have been regularly engaged in constructing such works, as the proposed to execute and that they are fully prepared with the necessary capital, machinery and materials to begin the work promptly and to conduct it as required by the T.N.B.P. and the other specifications for the particular work it tendered for, in the event of their tender being accepted.

9. Legal address Notices:

9.1. Tenderers should give in their tender, their place of residence and postal address. The delivering at the above named place or posting in a post box regularly maintained by the Post Office Department or sending by letter registered for acknowledgement of any notice, letter or other communication to the contractor shall be deemed sufficient service thereof upon the contractor in writing as may be changed at any time by an instrument executed by the contractor, and delivered to the Executive Engineer.

9.2. Nothing contained in the agreement and its contract conditions shall be deemed to preclude or render inoperative the service of any notice, letter or other communications upon the contractor personally.

B. STATEMENT OF APPROXIMATE QUANTITIES IN SCHEDULE—A.

10.1. The quantities mentioned in tender notices and in agreement schedule A are worked out from the relevant drawings in office and may or may not be the actuals required for execution. The Executive Engineer does not expressly or by implication agree that the actual amount of work to be done will correspond therewith but reserves the right to increase or decrease the quantity of any class or portion of the work as he deems necessary.

10.2. Tenderers must satisfy themselves by a personal examination of the site of the proposed work, by examination of the plans and specifications and by other means as they prefer as to the accuracy and sufficiency of the statement of quantities and all conditions affecting the work and shall not any time after the submission of their tender, dispute or complain of such statement of quantities or assert, that there was any misunderstanding in regard to the nature or amount of the work to be done nor in consequence apply for extension of time for completion beyond the agreement date.

11. Approximate not to mean deviation from drawings and specification.—

11.1. This declaration of the approximate nature of the statement of quantities in Schedule-A does not, however, in any way imply that the quantities will be increased for departure by the contractor from strict compliance with sanctioned drawings and specifications to suit his own convenience or reduce his costs.

12. To compare tenders:

12.1. The quantities in Schedule-A are given for a uniform comparison of lump-sum tenders.

C. DRAWINGS AND SPECIFICATIONS.

13. Purpose:

13.1. The contract drawings if any, read together with the contract specifications are intended to show and explain the manner of executing the work and to indicate the type and class of materials to be used.

14. Conformance:

14.1. The works shall be carried out in accordance with the drawings and specifications which form part of the contract and in accordance with such further drawings, details and instructions, supplementing or explaining the same as may from time to time be given by the Executive Engineer.

14.2. If the work shown on any such further drawings or details, or other work necessary to comply with any such instructions, directions, or explanations, be in the opinion of the contractor, of a nature which the schedule rate in the contract does not legitimately cover he shall before proceeding with such work, give notice in writing to this effect to the Executive Engineer. In the event of the Executive Engineer and contractor failing to agree as to whether or not there is any excess rate to be fixed and the Executive Engineer deciding that the contractor is to carry out the said work, the contractor shall accordingly do so, and the question whether or not there is any excess and if so the amount thereof, shall failing agreement, be settled by an arbitrator as provided in the arbitration clause, unless the subject is one which is left to the sole discretion of the Executive Engineer under the clauses of these conditions of contract and the contractor shall be paid accordingly.

14.3. It shall be the responsibility of the contractor to give timely notice to the Executive Engineer regarding anything shown on the drawings and not mentioned in the specification, or mentioned in the specifications and not shown in the drawings or any error or discrepancy in drawings or specifications and obtain his orders thereon. Figure dimensions are to be taken and not those obtained from sealing the drawings. In any discrepancy between drawings and specifications, the latter shall prevail. In any such cases or in case any feature of the work is not fully described and set forth with the drawings and specifications, the contractor shall forthwith apply to the Executive Engineer for such further instructions, drawings or specifications as he requires it, being understood that the subject is to be dealt with under the building procedure of best modern practice. The Executive Engineer will furnish the further instructions, drawings or specifications if in his opinion, they are required by competent workmen, for the proper execution of the work.

15. *Variations by way of modifications, omissions or additions.*

15.1. For all modifications, omissions from or additions to the drawings and specifications, the Executive Engineer will issue revised plans, or written instructions or both, and no modifications, omissions or additions shall be made unless so authorised and directed by the Executive Engineer in writing.

15.2. The Executive Engineer shall have the privilege of ordering modifications, omissions or additions at any time before the completion of the work and such orders shall not operate to annul these portions of the specifications with which said charges do not conflict.

15.3. The contractor shall submit to the Executive Engineer a statement giving details of the claims for any additional work within 30 days of the order of the work and no claim for any such work will be considered which has not been included in the statement.

16. *Copies of drawings and specifications:*

16.1. One copy of the available drawings and specifications (apart from the T.N.B.P. a copy of reference) shall be furnished free of cost to the contractor for his own use. Such copies and copies of supplementary details furnished by the Executive Engineer shall be kept by the contractor on the work until the completion thereof, and the Executive Engineer shall at all times have access to them.

17. *Signed drawings*— No authority to the contractor.

17.1. No signed drawing shall be taken as in itself and order for variation, unless either it is entered in the agreement schedule of drawings under proper attestation of the contractor and the Executive Engineer, or unless it has been sent to the contractor by the Executive Engineer with a covering letter confirming that the drawing is an authority for variation of the contract under reference.

D. MATERIALS AND WORKMANSHIP .

18. *To be the best quality:*

18.1. All materials, articles and workmanship shall be the best of their respective kind for the class of work described in the contract specifications and schedule, materials being obtained from sources approved by the Executive Engineer. The word 'best' as used in these specifications shall mean, that in the opinion of the Executive Engineer there is no other superior quality of materials or finish of articles on the market and that there is no better class of workmanship available for the nature of the particular item described in the contract schedule. The contractor shall, upon the request of the Executive Engineer, furnish him with the vouchers to prove that the materials are such as are specified.

18.2. Samples of materials shall be furnished at the contractor's expense to the Executive Engineer when called for in the tender notice or ordered to be furnished by the Executive Engineer prior to execution of any work.

19. *Conventions for proportions :*

19.1. Wherever the proportions are written by figures without further description and where the meaning is otherwise clear as to which figure is intended to apply to each material, then the usual conventions will be understood to apply.

For example,

1:2. Means 1 lime (or cement in accordance with the context) and 2 sand ;

1:2:4. Means 1 lime (or cement in accordance with the context) 2 sand and 4 broken stone (or other aggregate in accordance with the context).

20. *Measurement and mixing:*

20.1. In the case of loose materials such as lime, sand, cement, broken stone, surki, mortar, etc. the proportions demanded by the specifications must be measured in properly constructed measuring boxes or weighed or in such other manner as shall be instructed by the Executive Engineer. Measurement is not to be done in loose heaps when intimate mixtures such as mortar, concrete, etc., are to be formed. The mixing must always be done on closely constructed platforms so that there will be no leakage of any of the materials through the floor of the platform and also that no foreign materials can be incorporated during the mixing. These platforms must be approved by the Executive Engineer. The cost of such measuring boxes and platforms and all the work referred to herein shall be borne by the contractor.

21. *Data :*

21.1. The materials and labour utilised in the execution of work by the contractor shall not be less than that given in the Tamil Nadu P.W.D. Standard Data for the relevant item.

NOTE.— In case the contractor considers that the materials and labour provided in the Madras P.W.D. Standard data for the execution of particular items of work are in excess, the contractor may furnish detailed data for such items along with tender with reasons for variations from P.W.D. Standard Data.

22. *Layout of materials stacks:*

22.1. The contractor shall deposit materials for the purpose of the work on such parts only on the ground as may be approved by the Executive Engineer. He shall submit for the approval of the Executive Engineer before starting work, a detailed site survey clearly indicating positions and areas where materials shall be stacked and sheds built.

23. *Source of purchase of materials and stores :*

23.1. The Executive Engineer shall, during the progress of the work, have power to cause the contractor to purchase and use such materials or supplies from Government brick fields, stores or other sources as may be specified in the contract for the purposes therein specified.

24. *Contractor liable for materials supplied by Government.*

24.1. The contractor shall be responsible for all materials and other articles and things which may be supplied by Government from the time he takes delivery thereof and shall use them only for the purposes of this contract and shall make good any loss, damage, wastage or undue wear and tear that may take place from whatever cause and pay to Government, for such loss, damage, wastage or undue wear and tear such sum as the Executive Engineer may determine.

24.2. If at any time subsequent to the execution of the agreement Government materials other than those specified in the Agreement are to be supplied to the contractor for use on the work they will be charged at the market value prevailing at the time of supply or stock issue rate whichever is greater. The contractor will be informed in writing of this change and he should intimate in writing the rate which he demands for finished work in view of the fact that he is to use Government materials.

24.3. For any excess issue of cement beyond the allowable limit of 5 per cent over the theoretical requirement of cement the recovery shall be made a double the issue rate from the contractor.

25. *Test inspection and refection of defective materials and works :—*

25.1. The contractor shall provide proper facilities at all for the testing of materials and inspection of the work by the Executive Engineer, and the Executive Engineer shall according by also have access at all times to the places of storage, or manufacture where materials are being made for use under the contract to determine that manufacture is proceeding in accordance with the drawings and specifications.

25.2. The contractor shall, upon demand, also forward for the Executive Engineer's inspection, test certificate supplied by the vendors, when he is purchasing consignments of cement, steel and other materials in respect of which such certificates are usually available.

25.3. The Executive Engineer shall have power to reject at any stage, any work which he considers to be defective in quality of material or workmanship and he shall not be debarred from rejecting rough materials by reasons of his having previously passed them in an unworked condition. Any portion of the work or materials rejected or pronounced to be inferior or not in accordance with the drawings and specifications, shall be taken down and removed from the work site at the contractor's expense, within 24 hours after written instructions to that effect have been given by the Executive Engineer. Replacement shall at once be made in accordance with the specifications and drawings at the contractor's expense.

25.4. In case of default on the part of the contractor to carry out such orders, the Executive Engineer shall have power to employ and pay other persons to carry out the orders at the contractor's risk and all expenses consequent thereon and incidental thereto shall be borne by the contractor.

25.5. In lieu of reworking not done in accordance with the contract, the Executive Engineer may allow such work to remain, and in that case shall make such allowance for the difference in value, as in his opinion may be reasonable.

25.6. *Works opened for inspection.*— The contractor shall, at the request of the Executive Engineer, within such time as the Executive Engineer shall name, open for inspection any work covered up; and should the contractor refuse or neglect to comply with such a request, the Executive Engineer may employ other workmen to open up the same. If the said work has been covered up in contravention of the Executive Engineer's instructions, or if on being opened up, it be found not in accordance with drawings and specifications or the written instructions of the Executive Engineer the expenses of opening it and covering it up again, whether done by the contractor or such other workmen, shall be borne by, or recovered from the contractors. If the work has not been covered up in contravention of such instructions or if on being opened up it be found to be in accordance with the drawings and specifications or the written instructions of the Executive Engineer, the expenses aforesaid shall be borne by Government and shall be added to the contract sum, provided always that in the case of foundations, or any other urgent works so covered up and requiring immediate attention the Executive Engineer shall, within reasonable time after the receipt of a notice from the contractor that the work has been opened, make or cause the inspection thereof to be made, and at the expiration of such time if such inspection shall not have been made, the contractor may cover up the same, and shall not be required to open it up again for inspection except at the expense of Government.

26. *Defects, shrinkages, etc., after completion:*

26.1. Any defects, shrinkage or other faults which may appear within six months from the completion of the works arising, in the opinion of the Executive Engineer from faulty materials or workmanship not in accordance with the drawings and specifications or the instructions of the Executive Engineer shall, upon the directions in writing of the Executive Engineer and within such reasonable time as shall be specified therein, be amended and made good by the contractor at his own cost, unless the Executive Engineer shall decide that the contractor ought to be paid for the same at the rates agreed on such reduced or other rates as the Executive Engineer may fix and in case of default, the Executive Engineer may employ and pay other persons to amend and make good such defects, shrinkage or other faults or damage, and all expenses consequent thereon and incidental thereto shall be borne by the contractor.

26.2. Provided that in the event of Government taking over portions of the works as and when they are completed the liability of the contractor under this clause shall extend to a period of six months from the date of final taking over of the work irrespective of the actual dates on which portions of the works were taken over.

27. *Executive Engineer's decision :*

27.1. To prevent disputes and litigation, it shall be accepted as an inseparable part of the contract that in matters regarding material, workmanship, removal of improper work, interpretation of the contract drawings and contract specifications, mode of procedure and the carrying out of the work, the decision of the Executive Engineer shall be final and binding on the contractor and in any technical question which may arise touching the contract, the Executive Engineer's decision shall be final and conclusive.

28. *Dismissal of workmen :*

28.1. The contractor shall employ in and about the execution of the works only such persons as are careful, skilled and experienced in their several trades and callings and the Executive Engineer shall be at liberty to object to and request the contractor to remove from the works any person employed by the contractor in or about the execution of the works who in the opinion of the Executive Engineer misconducts himself or incompetent or negligent in the proper performance of his duties and such persons shall not be again employed upon the works without the permission of the Executive Engineer.

D.I. GENERAL OBLIGATIONS.

29. *Contractors' maistri or agent and contractor's staff :*

29.1. The contractor shall in his own absence keep constantly on the job or a competent maistri or agent and any directions or explanations given by the Executive Engineer or his representatives to such maistri or agent shall be held to have been given to the contractor.

29.2. The contractor shall further provide all staff which is necessary for the proper supervision, execution and measurement of the work to ensure full compliance with the terms of the contract.

30. *Government Maistries or agents:*

30.1. The Government may be represented on the work by an agent clerk of the works, or maistri who is not borne on the Official list of officers and subordinates of the P.W.D. or Highways and Rural Works Department. He (if appointed) shall, in the absence of the

Executive Engineer, furnish the contractor with the Executive Engineer's or his representative's instructions of the works and the contractor shall duly comply with such instructions and directions and shall on the written requisition of the maistri clerk of works or agent, stay the further progress of any portion of the works which in his judgement is being constructed with unsound or improper material or workmanship, until the opinion and determination of the Executive Engineer shall be obtained thereon, but such maistri, clerk of works or agent is to have no power whether to order any extra works or deviation from the specifications and drawings.

E. INCLUDED IN CONTRACT RATES.

31. Defining contract schedule rates:

31.1. The rate entered in a contract schedule for any class of work shall be for finished work in site and shall include all contingent expenses whether direct construction expenses involved in the building in place in accordance with the drawings and specifications or whether they be expenses imposed by an outside authority such as a local body. Such contingent expenses shall not entitle the contractor to claim an extra in respect thereof.

32. Carriage :

32.1. Rates for finished work shall always include the cost of conveyance and all leads, lifts, loading, unloading and stacking in the manner and at the place ordered by the officer in immediate charge of the work, unless circumstances necessitate provisions for a separate schedule item, in which class such will be specified in the tender notice or schedule.

32.2. Wherever the term 'carriage' or 'conveyance' is used in a schedule item, it shall in the absence of other schedule provisions or modifying description in the specification, be taken to include all leads, lifts, loading, unloading and stacking in uniform stacks to the satisfaction of the Executive Engineer with careful attention to close packing in the case of materials which are to be measured in stacks as a basis of payment for finished work.

NOTE—1. In the case of important leads and lifts as may occur in river conservancy and other such works, where lifts over flood banks and long leads may be involved, it is usual to make separate schedule item provision with a specification defining the exact work to be done for each tendered rate.

NOTE—2. Payment for carriage will ordinarily be by bulk or weight at a rate between specified places and on the basis of the method adopted in the standard schedule of rates for carriage of materials. The distances will be measured by the nearest practicable and cheapest routes, whether metalled or unmetalled road or cart track.

32.3. When carts or vehicles of any sort are engaged by the day, the quantity of materials to be conveyed, the distance to be travelled and the number of trips to be made shall, if he considers necessary be fixed by the Executive Engineer.

32.4. The contractor is responsible for making good all loss in transporting materials entrusted to him or his agents, whether caused by wastage, breakage, theft or any other cause.

32.5. No payment shall, in any case, be made for the return trips with carts empty. Where there are loads also for the return trip, the agreement rates should allow for the reduced cost thereby on each set of materials so conveyed.

33. Construction plant:

33.1. The contractor shall include in his tendered price and shall provide and install all necessary construction plant and shall use such methods and appliances for the performances the operations connected with the work embraced under the contract as will secure a satisfactory quality of work and rate of progress which, in the opinion of the Executive Engineer will ensure the completion of the work within the time specified. If at any time before the commencement, or during the progress of the work, or any part of it such methods or appliances appear to the Executive Engineer to be insufficient or inappropriate for securing the quality of the work required or the said rates of progress, he may order the contractors to increase their efficiency or to improve their character, and the contractor shall comply with such orders, but the failure of the Executive Engineer to demand such increase of efficiency or improvement shall not relieve the contractor from his obligation to secure the quality of work and the rate of progress required by the contract and the contractor alone shall be responsible for the efficiency and safety of his plant, appliances and methods.

33.2. It is however, open to the Executive Engineer to lend or supply to the contractor any tools, implements, materials and machinery that the Executive Engineer may consider desirable but for any such tools, implements materials and machinery that may be lent or supplied to contractor by Government, the contractor shall pay such deposit and hire, or purchase price as may be determined by the Executive Engineer. All articles that may be so lent or hired to the contractor shall be returned in good serviceable condition by him to the Executive Engineer before the final bill for work is paid and any shortage or damage shall be recovered from the contractor in the final bill at such rate as may be determined by the Executive Engineer after making such allowance as he may consider suitable for fair wear and tear.

34. Scaffolding instructions:

34.1. All requisite scaffolding shall be provided at the contractor's expense and shall be double, i.e. it must have two sets of upright supports. Care must be taken to ensure the safety of the work people and the contractor must comply with such instructions as the Executive Engineer may issue to ensure such safety. The contractor will be entirely responsible for any damage or injuries to persons or property resulting from ill erected scaffolding, defective ladders, or otherwise arising out of his default in this respect. The contractor's attention is also invited to the 'safety code'.

35. Temporary structure:

35.1. The contractor shall erect and maintain at his own cost temporary weather proof sheds at such places and in a manner approved by the Executive Engineer for keeping materials under cover. The contractor shall also provide and maintain at his own expenses such temporary fences, guards, bridges and road as may be necessary for the execution of his contract work or for safeguarding or accommodating the public if the Executive Engineer shall order any departure, he shall comply with such orders as the Executive Engineer may issue to safeguard or accommodate the public. Sheds for housing workmen shall be provided at the contractor's expenses if, in the opinion of the Executive Engineer, such are necessary or desirable.

36. Water and lighting :

36.1. The contractor shall pay all fees and provide water and light as required from municipal mains or other sources and shall pay all charges therefor (including storage tanks, meters, etc.) for the use of the work and workmen unless otherwise arranged and decided on, in writing with the Executive Engineer. The water for the works

shall be, so far as practicable, free from earthy vegetable, or organic matter and from salts or other substances likely to interfere with the setting of mortar otherwise prove harmful to the work.

37. Sun protection, keeping dry and pumping :

37.1. The contractor shall at his own expense arrange all requisite protection of the work and materials against sun or rain effects and shall keep all portions of the work free from water to the satisfaction of the Executive Engineer and shall use his own plant for the purpose unless otherwise specifically provided in the contract specification.

38. Tools and Seigniorage :

38.1. The contractor shall, unless otherwise specifically stated in the tender notice and subsequently on this basis in the contract be responsible for the payment wherever payable of all import duties, tools, octroi duties seigniorages, quarry fees, etc., on all materials and articles that he may use.

38.2. The contractor shall be solely responsible for the payment of sales tax under the provision of the Madras General Sales Tax Act, 1939 (Madras Act IX of 1939) as in force for the time being and the rates for the various items of the work shall remain unaffected by any change that may be made from time to time in the rate at which such tax is payable.

38.3. Notwithstanding anything contained in section 10 of the Indian Traffic Act of 1894, the rates for items involving the use or supply of articles obtained by the contractor from outside India shall remain unaffected by any changes that may be introduced in Customs duties.

NOTE.—For works carried out on behalf of the Government of India, Seigniorage fees, etc., referred to in this clause will have to be levied in every case.

38.4. No seigniorage shall be charged where due for materials quarried, from the P.W.D. or other Government Quarters. Assistance as necessary will be given to the contractor by the department to obtain access to quarries approved by the Executive Engineer. No plot rent shall be charged for materials stacked on the Government land during the course of construction provided all such materials are removed within one month after the work is completed.

38.5. Seigniorage charges due for use of private quarries and private land shall be paid by the contractor.

38.6. The contractor shall form his own approach road to the work site for which no extra will be due to him. On completion 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 throughout the period of the contract.

39. Setting Out Works :

39.1. The contractor shall be responsible for the true and proper setting out of the works and for the correctness of the position, levels, dimension and alignment of all parts of the works and for the provision of all materials, staff and labour in connection herewith.

40. Cleaning up during progress and for delivery:

40.1. All rubbish shall be burnt or removed from the site, as it accumulates. All floors, stairs, landing windows, surface and soil drains shall be cleaned down and put in a thoroughly complete clean, sound and workman like state to the satisfaction of the Executive Engineer, before the work is finally handed over all rubbish and surplus materials not required by the Executive Engineer having first been

removed by the contractor. The contractor shall give notice in writing to the Executive Engineer when the work is so ready to be handed over, and shall be responsible for its maintenance until it is taken over by the Executive Engineer.

F. RESPONSIBILITIES AND LIABILITIES OF THE CONTRACTORS.

41. Observance of laws, local regulations and notices Attachments.

41.1. The contractor shall conform to the regulations and by-laws of any local authority and or of any water or lighting companies with those systems the structure is proposed to be connected and shall, before making any variations from the drawings or specification that may be necessitated, by so conforming, given to the Executive Engineer written notice, specifying the variations proposed to be made and the reasons for making them, and apply for instructions thereon. In case the contractor shall not receive such instructions within seven days, he shall proceed with the work conforming to the provisions regulating or by-law in question and any variation in the drawings or specifications so necessitated shall be dealt with under clause 59. The contractor shall give all notices required by the said Act, regulation or by-laws and pay all fees in connection therewith unless otherwise arranged and decided on in writing with the Executive Engineer. He shall also ensure that no attachments are made against materials of work forming part of or for the use of the contract. In every case referred to in this clause the contractor shall protect and indemnify Government against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order, decree, or attachment whether by himself or by his employees.

42. Accidents—Hoarding—Lighting observations—Watchmen.

42.1. When excavations have been made or obstacles have been put in public thorough fares or in places where there is any likelihood of accidents, the contractor shall comply with any requirement of law or the subject, and shall provide suitable hoarding lighting and watchmen as necessary.

42.2. It shall be the contractor's sole responsibility to protect the public and his employees against accident from any cause and he shall indemnify Government against any claims for damages for injury to person or property, resulting from any such accident and shall where the provisions of the Workmen's Compensation Act apply, take steps to properly insure against any claims there-under.

42.3. On the occurrence of accident which results in the death of any of the workmen employed by the contractor or which is so seriousness as to be likely to result in the death of any such workmen, the contractor shall, within 24 hours of the happening of such accident, intimate in writing to the concerned section officer of the Department the fact of such accident. The contractor shall indemnify Government against all loss or damage sustained by Government resulting directly or indirectly from his failure to give intimation in the manner aforesaid including the penalties of fines if any payable by Government as a consequence of Government's failure to give notice under the Workmen's Compensation Act or otherwise conform to the provisions of the said Act in regard to such accident.

42.4. In the event of an accident in respect of which compensation may become payable under the Workmen's Compensation Act VIII of 1923 whether by the contractor or by the Government as principal it shall be lawful for the Executive Engineer to retain out of money due to and payable to the Contractor such sum or sums of money as may, in the opinion of the said Executive Engineer be sufficient to meet such liability. The opinion of the Executive Engineer shall be final in regard to all matters arising under this clause.

42.5. The contractor shall indemnify Government from and against all claims and proceedings for or on account of infringement of any patent rights, design, trade mark, or name of other protected rights in respect of any constructional plant, machine work or material used for or in connection with the works or temporary works, or any of them and from and against all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in respect thereof in relation thereto.

42.6. In respect of all labour directly or indirectly employed in the works for the performance of the contractor's part of this agreement, the contractor shall comply with or cause to be complied with all the rules framed by the Government from time to time for the provision of health and sanitary arrangements to workers employed by P.W.D. and Highways and Rural Works Department and their contractors (*vide* Appendix). In case the contractor fails to make arrangements and provide necessary facilities as aforesaid the Executive Engineer shall be at liberty to make arrangements and provide facilities as aforesaid and recover the costs incurred in that behalf from the contractor.

42.7. In respect of all labour directly or indirectly employed in the works for the performance of the contractor's part of this agreement, the contractor at his own expense shall arrange for the safety provisions as per 'Safety Code' framed from time to time and shall at his own expense provide for all facilities in connection therewith. In case the contractor fails to make arrangements and provide facilities as aforesaid and recover the costs included in that behalf from the contractor.

42.8. In respect of all labour directly or indirectly employed in the work for the performance of the contractor's part of this agreement the contractor shall arrange to furnish in triplicate particulars for each work in the proforma *vide* Appendix XXXVIII by the end of every month to the Executive Engineer in charge of the work.

43. *Blasting:*

43.1. Blasting executed by contractors in connection with Government works shall be carried out in the manner described under 'Blasting operations—Instructions to Contractor' of the TNBP.

44. The contractor is to protect the whole of the adjoining and where necessary, the existing premises and all works and all fittings to all buildings on and adjoining the site against the structural and decorative damages caused by the execution of these works and make good in all respects all such damage done or occurring to the same, and leave such reinstatement in perfect order. He is also to make good any damage done to private footways or roadways.

45. *Permit other workmen—Co-operation—Afford facilities:*

45.1. The Executive Engineer shall have full power to send workmen upon the premises to execute fittings and other works not included in the contract, for whose operations the contractor is to afford every reasonable facility during ordinary working hours, provided that such operations shall be carried on in such a manner as not to impede the progress of the work included in the contract, but the contractor is not to be responsible for any damage which may happen to or be occasioned by any such fittings or other works, provided he complies with, the Executive Engineer's instructions in connection therewith, and provided that the damage is not caused by himself or his workmen.

45.2. The contractor shall, at all times, co-operate, assist, attend on, and afford facilities for such specialists as may be employed by the Executive Engineer on other works in connection with the building, allowing them free of charge the use of all plant, light and water installed in the works. The contractor shall cause such special work or protect it as instructed to avoid injury during progress of the works. For failure so to protect, the contractor must make good any damage caused.

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45.3. When two or more contractors are engaged on installation or construction work in the same vicinity, the Executive Engineer shall have authority to direct the manner in which each shall conduct the work so far as it affects other contractors.

46. *Holes for water services, gas, electrical and sanitary fittings:*

46.1. The contractor shall leave all holes in masonry and floors for the insertion of water services, gas and electrical connections and sanitary fittings in the exact positions indicated by the Executive Engineer during the progress of the work. These holes must be properly built up in a workman like manner at the contractor's cost, as soon as the fittings have been installed in cases, where the installations are made during the construction of the building and where in the opinion of the Executive Engineer, delays in settlement of accounts will not thereby occur.

47. *Contractor's risk and insurance:*

47.1. The work executed by the contractor under the contract shall be maintained at the contractor's risk until the work is taken over by the Executive Engineer. The contractor shall accordingly arrange his own insurance, against fire and other usual risk during such period unless otherwise specified.

47.2. Provided however, that the contractor, shall not be liable for all or any loss or damages occasioned by or arising out of acts of God, and in particular unprecedented flood, volcanic eruption, earth quake or other convulsion of nature, invasion, the act of foreign enemies, hostilities or warlike operations (before or after declaration of war) rebellion, military or usurped power.

48. *Holidays:*

48.1. Subject to any provision to the contrary contained in the contract none of the permanent work shall save as hereinafter provided be carried on during the night or on Sundays and other holidays without the permission in writing of the Executive Engineer or of the officer in charge of the work: save when the work is unavoidable or absolutely necessary for the sake of life or property or for the safety of the works in which case the contractor shall immediately advise the Executive Engineer.

G. MISCELLANEOUS.

49. *Sand and gravel:*

49.1. The contractor shall not make any excavations upon the site for the purpose of obtaining gravel, sand or soil other than that shown or implied by the drawings, except with the previous permission of the Executive Engineer.

50. *Old curiosities:*

50.1. All old curiosities, relics, coins, minerals, etc., found in excavating or pulling down, shall be the property of the Government and be handed over to the Executive Engineer. Should any ancient masonry, or other old work of interest be opened up, the Executive Engineer's attention shall be called to the same before demolition or removal.

51. *Assignment or sub-lettings:*

51.1. The contractor shall not without the written consent of the Executive Engineer, assign the contract nor sub-let any portion of the same. Ordinarily no sub-letting will be permitted, but in case such should be permitted by the Executive Engineer, it shall in no way free the contractor from any of his responsibilities under any clause of these "Conditions of Contract" or of the "Articles of agreement".

52. Specialists :

52.1. The Executive Engineer shall, during the progress of the work have powers to select, nominate or recommend tradesmen or specialists to supply material or execute such portion of the work as he may consider desirable in the interests of the Government.

53. Ratification of the orders of the Executive Engineer :

53.1. Should the acceptance of the tender be beyond the authorised powers of the Executive Engineer as laid down in the P.W.D. code, the orders and decisions of such Executive Engineer with regard to extension of time for completing the contract or the termination of the contract or of the employment of specialists for certain portion of the work as described in the previous clause will be subject to the ratification of the higher authority who accept the tender.

54. Order book:

54.1. An order book shall be kept at the P.W.D. office on the site of the work. As far as possible, all orders regarding the work are to be entered in this book. All entries shall be signed and dated by the P.W.D. officer in direct charge of the work and by the contractor or by his representative. In important cases, the Executive Engineer or the Superintending Engineer will countersign the entries, which have been made. The order book shall not be removed from the work except with the written permission of the Executive Engineer.

54.2. No photographs of the site or of the work of any part thereof shall be taken except with the permission in writing of the Executive Engineer and no such photographs shall be published or otherwise circulated without the permission of the Chief Engineer.

H. DATE OF COMMENCEMENT, COMPLETION, DELAYS, EXTENSION, SUSPENSION OF WORK AND FORFEITURE.

55. Date of commencement and completion :

55.1. On notification of possession of the site (or premises) being given to the contractor by letter registered for acknowledgement as provided in Clause 9.1. supra, he shall forthwith begin the work, shall regularly and continuously proceed with them, and shall complete the same (except for painting or other work which, in the opinion of the Executive Engineer, it may be desirable to delay) by the date of completion, as defined in the "Articles of Agreement" subject nevertheless, to the provisions of extension of time mentioned in the next clause. The contractor shall under no circumstances be entitled to claim any damages from Government if he incurs any expenses or liabilities to payment under the contract before the date of commencement defined above. The contractor shall have the right to withdraw from the contract and obtain refund of his security deposit if such intimation of handing over the site is delayed more than two months from the date of acceptance of the agreement by competent authority.

56. Delays and extension of time :

56.1. No claim for compensation on account of delays or hindrances to the work from any cause whatever shall be except as hereinafter defined.

Reasonable extension of time will be allowed by the Executive Engineer or by the officer competent to sanction the extension for unavoidable delays, such as may result from causes which in the opinion of the Executive Engineer are undoubtedly beyond the control of the contractor. The Executive Engineer shall assess the period of delay or hindrance caused by any written instruction issued by him at twenty-five percent in excess of the actual working

period so lost. If at any time the Executive Engineer is of the opinion that there has been avoidable delays and the contractor fails to maintain the rate of progress specified in the articles of agreement, it shall be lawful for the Executive Engineer to impose penalty or order forfeiture from the Deposit sanction the extension of time for such delays, provided however, the penalty and forfeiture shall be governed as per Clause 57.2. and 57.3.

56.2. In the event of the Executive Engineer failing to issue necessary instructions and thereby causing delay and hindrance to the contractor the latter shall have the right to claim an assessment of such delay by the Superintending Engineer of the Circle. The Contractor shall lodge in writing to the Executive Engineer a statement of claim for any delay or hindrance referred to above within fourteen days from its commencement, otherwise no extension of time will be allowed.

56.3. Whenever, authorised alterations or additions made during the progress of the work are of such nature in the opinion of the Executive Engineer as to justify an extension of time in consequence thereof, such extension of time will be granted in writing by the Executive Engineer or other competent authority when ordering such alterations or additions.

57. Delays in commencement, or progress or neglect of work or suspension of works by the contractor and forfeiture of Earnest Money, Security Deposit and withheld amounts.

57.1. Time shall be considered as the essence of the contract. If at any time, the Executive Engineer, shall be of the opinion that the contractor is delaying commencement of the work, neglecting or delaying the progress of work as defined in the tabular statement, Rate of Progress in the Articles of Agreement or the contractor fails to maintain the Rate of Progress in the Articles of Agreement plus any extension of time, or the contractor shall suspend the works, or sublet the work or a portion thereof without the sanction of the Executive Engineer or violates any of the provisions of the contract the Executive Engineer shall so advise the contractor and at the same time demand compliance. If the contractor neglects to comply with such demand within seven days after receipt of such notice, it shall then or at any time be lawful for the Executive Engineer to impose a penalty or forfeiture on this contractor from the deposit or to determine the contract.

57.2. The penalty or forfeiture referred to in Clause 57.1 shall not exceed 5% of the value of the work executed and is imposed in cases where the contractor is allowed to proceed with the whole or part and complete the whole or such part of the works. The penalty or forfeiture imposed by the Executive Engineer under this clause is however subject to modification or waiver at the absolute discretion of any authority higher in rank than the Executive Engineer.

57.3. It shall be a further right of the Executive Engineer to give any part of the work to any other contractor at his discretion or have it done departmentally in order to maintain the rate of progress and the contract shall then be determined for only that portion of the work given to the other contractor or done departmentally. The forfeiture under clause 57.2. will in these circumstances be applied and any excess expenditure incurred on this account shall be recovered from the original contractor.

57.4. Determination of the contract referred to in Clause 47.1 shall carry it the forfeiture of the Security Deposit. After determining the contract, the Executive Engineer shall have the right to give any part of the work to any other contractor in the unexecuted portion of the contract, in which case any expenses which may be incurred in excess of such amount which would have been paid to the original contractor if the whole work had been executed

deducted from any money due to him by Government under this contract or any other account what so ever. Provided, also that if the expenses incurred by the Government are less than the amount payable to the contractor at his agreement rates, the difference will not be paid to the contractor.

57.5. In the event of any of the above clauses being adopted by the Executive Engineer, the contractor shall have no compensation for any loss sustained by him by reason of his having purchased or processed any materials or entered into any engagements or made any advances on account or with a view to the execution of the work or the performance of contract, and in case action is taken under any of the provisions aforesaid, the contractor shall not be entitled to be paid any sum for any work actually performed under the contract unless and until the Executive Engineer has certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified.

57.6. In the event of the Executive Engineer putting in force all or any of the powers vested in him under the clause 57.4 he may if he so desires after giving a notice in writing to the contractor take possession of the works, and site and all such plants and materials thereon (or any ground contiguous thereof) and all such plant and materials as above mentioned shall thereupon be at the disposal of Government absolutely for the purpose of completing the work. After such notices shall have been given, the contractor shall not be at liberty to remove from the site of works or from the ground contiguous thereto any plant or materials belonging to him which shall have been placed thereon for the purpose of the above work. Government shall not be able to make any payment to the contractor on account of use of such plant for the completion of the works, under the provisions hereinbefore contained. On taking possession of the materials and stores belonging to the contractor or procured by the contractor and intended to be used for the execution of the work or any part thereof, the contractor shall be paid for the same in account, at the contract rates, to be certified thereof shall be final, otherwise, the Government may give notice in writing to the contractor to remove any of his plant or materials from the site and not required for any completion of the works, if such plant and or materials are not removed within fourteen days after notice, shall have been so given, Government may remove and sell the same, holding the proceeds less the cost of removal and sale, to the credit of the contractor. The certificate of the Executive Engineer as the expense of any such removal and sale, shall be final and binding on the contractor.

I. PARTICULARS OF PAYMENT.

58. Payment of lump sum basis or by final measurement at unit prices :

58.1. Final measurements need not be taken unless either the contractor or the Executive Engineer claims extras to or deductions from, the quantities of Schedule A.

58.2. In case final measurements are claimed, they shall be taken only for those items for which either the contractor or the Executive Engineer claims final measurements and the quantities of the remaining items in Schedule A shall be accepted as correct. The lump sum amount mentioned in the agreement will then be varied by adding thereto or deducting therefrom as the case may be, the difference (if any) between the amounts mentioned in Schedule A for such items and the amounts arrived at by calculation at contract rates based on the revised quantities for the same, obtained by the final measurements aforesaid.

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58.3. It shall be accepted as a condition of the contract that the payment of the final bill to the contractor less the withheld amounts and his acceptance thereof shall constitute a full and absolute release of Government from all further claims by the contractor under the contract.

59. *Payment for additions and deductions for omissions:*

59.1. No authorised variation shall vitiate the contract, but additions and omissions shall be measured up and dealt with in accordance with clause 58.2.

59.2. If there is no rate in Schedule A for additional work ordered to be carried out by the Executive Engineer, when prior to execution of the additional work, a rate for the additional work shall be worked out in accordance with the methods indicated in 59.3 and with the rate agreed upon a supplemental agreement shall be entered in the proper departmental form signed and dated by the contractor and the Executive Engineer and or any other officer for the time being authorised to accept such agreement and supplemental agreement shall on such acceptance form part of the original agreement. A copy of the supplemental slip shall be given to the contractor.

59.3.1. The rate for additional works shall be derived from the rate for similar items of work in the accepted agreement.

59.3.2. In the case of works for which supplemental agreement is to be entered into during the period when the schedule of rates has not changed from the date of execution of the original agreement, then the rates for supplemental agreements may be the prevailing schedule of rates plus or minus tender premium in case the rates cannot be derived from the items in the original agreement. In other case, where the schedule of rates has changed in the intervening period, the rates prevailing as per the schedule of rates at the time of execution of supplemental items will be adopted with no tender premium over this rate.

59.3.3. If the rate for a particular item of work is not in the schedule of rates, the prevailing market rate when the work was done shall be adopted.

59.3.4. If the rates cannot be determined as above, the rates shall be fixed on the cost of labour and materials plus 10 per cent thereon, provided the vouchers shall have been delivered to the Executive Engineer within 7 days after such work is completed. If the Executive Engineer considers that the vouchers are unduly high, the Executive Engineer can value the work as reasonable and fair and make payment if the value of payment is less than Rs. 1,000. If the value of additional payment exceeds Rs. 1,000 the contractor shall have the right to submit the matter to arbitration.

60. *No payment for unsanctioned extras:*

60.1. It shall be distinctly understood that no payment whatever will be made to the contractor for variations by way of extras, in cases where such variations have been made within the written sanction of the Executive Engineer.

61. *Accounts Receipts and Vouchers:*

The contractor shall at any time upon the request of the Executive Engineer furnish him with all invoices ; account, receipts and other vouchers that he may require in connection with the contract.

62. *Fraud, wilful neglect or default:*

62.1. No final or other certificate of payment of or completion, acceptance or settlement of account shall, in any circumstances, relieve the contractor from his liability for any fraud, or wilful

neglect or default in the execution of the contract or any wilful or unauthorised deviations from drawings, specifications, instructions and directions for the time being binding upon him.

63. Unfixed materials:

63.1. No payment or advance will be made for unfixed materials when the rates are for finished work in situ.

64. Payments and certificates:

64.1. Payments will be made to the contractor under the certificates to be issued at reasonably frequent intervals by the Executive Engineer or the Sub-Divisional Officer, within 14 days of the date of each certificate an intermediate payment will be made by the Executive Engineer or the Sub-Divisional Officer of a sum equal to 95 per cent of the value of work, as so certified and the balance of 5 per cent will be withheld and retained as security for the due fulfilment of the contract.

Under the certificate to be issued by the Executive Engineer or Sub-Divisional Officer on the completion of the entire works, the contractor will receive the final payment of all the moneys due or payable to him under or by virtue of the contract except security deposit and the withheld amount equal to 2½ per cent of the total value of the work done provided there is no recovery from or forfeiture by the contractor to be made under clause 57. The amount withheld from the final bill will be retained under 'Deposits' and paid to the contractor together with the Security Deposit after six months reckoned from the date of completion of work or as soon after the expiration of such period of six months as all defects shall have been made good according to the true intent and meaning hereof whichever shall last happen. In the event the final bill remains unpaid even after the period of six months afore-said, the Executive Engineer shall refund the security deposit which includes the E.M.D. and also the withheld amount on a separate bill if requested for by the contractor in writing. No certificate of Executive Engineer or Sub-Divisional Officer shall be considered conclusive evidence as to the sufficiency of any work or materials or correctness of measurements to which it relates, nor shall it relieve the contractor from his liability to make good defects as provided by the contract. The contractor when applying for a certificate, shall prepare a sufficiently detailed bill based on the original figures of quantities and rates in the contract schedule. To the satisfaction of the Executive Engineer, to enable the Executive Engineer or the Sub-Divisional Officer to check the claims and issue the certificate. The certificate as to such of the claims mentioned in the application as are allowed by the Executive Engineer or the Sub-Divisional Officer shall be issued within fourteen days of the application. No application for a certificate shall be made within fourteen days of a previous application.

64.2. When there are complaint from the Labour Department about non-payment of wages to the Labourers employed by the Contractors for the execution of works under agreement, the Executive Engineer, shall have full powers to withhold the bills claimed by the contractor pending clearance certificate from the Labour Department and to act as per the direction given by the Labour Department.

65. Interest on money due to the contractors:

65.1. No omission by the Executive Engineer or the Sub-Divisional Officer to pay the amount due upon certificates shall vitiate or make void the contract nor shall the contractor be entitled to interest upon any guarantee fund or payments in arrear, nor upon any balance which may, on the final settlement of his accounts, be found to be due to him.

65.2. Whenever the withheld amount reaches Rs. 1,000 or a multiple thereof, the contractor may, at his option, deposit with the Executive Engineer an equal amount in sums of Rs. 1,000 or a multiple thereof, in any of the forms of interest bearing securities recognized for the purpose by the Madras Public Works Account Code and subject to the provisions thereof contained in which case the equivalent withheld amount shall be paid to him forthwith. The Contractor will be permitted to exercise the option in this clause, subject only to the condition that the rates of progress contained in the Articles of Agreement is properly maintained.

66. Acceptance of final measurements:

66.1. The contractor agrees that before payment of the final bill shall be made on the contract, he will sign and deliver to the Executive Engineer either in the measurement book or otherwise as demanded a valid release and discharge from any and all claims and demands whatsoever for all matters arising out of or connected with the contract and also produce a certificate from the Income tax Authorities that all income tax payable by him upto date has been duly paid; provided that nothing in this clause shall discharge or release the contractor from his liabilities under the contract. It is further expressly agreed that Executive Engineer in supplying the final measurement certificate need not be bound by the preceding measurements and payments. The final measurements, if any of the Executive Engineer shall be final conclusive and binding on the contractor.

67. Recovery of money from contractor in certain cases.

67.1. In every case in which provision is made for recovery of money from the contractor, Government shall be entitled to retain or deduct the amount thereof from any money, that may be due or may become due to the contractor under these presents and or under any other contract or contracts or any other account whatsoever.

68. Contractor dying becoming insolvent, insane or imprisoned.

68.1. In the event of the death of insanity or insolvency or imprisonment of the contractor, or where the contractor being a partnership or firm becomes dissolved or being a corporation goes into liquidation, voluntary or otherwise, the contract may at the option of the Executive Engineer, be terminated by notice in writing posted at the site of the works and advertised in one issue of the local district Gazette and all accepted and acceptable works shall forthwith be measured up and paid for at the rates provided in the contract schedule where such apply, or otherwise, by the most recent schedule of rate of the division approved by competent authority to the person or persons entitled to receive and give a discharge for the payment.

J. SETTLEMENT OF DISPUTES.

69. Arbitrations:

69.1. In case of any dispute or difference between the parties to the contract either during the progress or after the completion of the works or after the determination, abandonment or breach of the contract, or as to any matter or thing arising thereunder except as to the matters left to the sole discretion of the Executive Engineer under clauses 18, 20, 25-3, 27, 34, 35 and 37 of 'General conditions of contract' or as to the with holding by the Executive Engineer of payment of any bill to which the contractor may claim to be entitled, the either party shall forthwith give to the other notice of such dispute

* as demanded a valid release and discharge from any and all claims.

of difference, and such dispute or difference shall be and is hereby referred to the arbitration of the Superintending Engineer of the nominated circle mentioned in the 'Articles of Agreement' (hereinafter called the 'Arbitrator').

Subject as aforesaid to the provisions of the arbitration Act, 1940, or any statutory modification or re-enactment thereof and the rules made thereunder and for the time being in force shall apply to the Arbitration Proceeding under this clause.

Upon every and any such reference, the costs of and incidental to the reference and award respectively shall be discretion of the arbitrator subject to the condition that the amount of such costs to be awarded to either party shall not, in respect of a monetary claim exceed the percentage set out below of any such award irrespective of the actual fees, costs and expense incurred by either party provided that where a monetary claim is disallowed in full the said percentage shall be calculated on the amount of the claim. The arbitrator may determine the amount of the costs to be awarded or direct the same to be taxed as between solicitor and client or as party and party and shall direct by whom and to whom and in what manner the same shall be borne and paid.

The percentage above referred to in this clause are 5 per cent on any such monetary award which does not exceed Rs.10,000, 3 per cent on the next Rs. 40,000 or any part thereof, 2 per cent on the next Rs. 50,000 or any part thereof and 1 per cent on any excess over Rs. 1,00,000.

Provided that the Government shall not be liable to any claim in respect of any such dispute or difference until the liability and the amount thereof shall have been referred to and decided by the Arbitrator and decreed by the court.

APPENDIX No. I.

PUBLIC WORKS DEPARTMENT SAFETY CODE.

General Rules as to Scaffolds.

1. Suitable scaffolds shall be provided for workmen for all works that cannot be safely done from a ladder or by other means. When a ladder is used an extra mazdoor shall be engaged for holding the ladder and the ladder shall be given an inclination not steeper than 0.25 to 1 (0.25 horizontal to 1 vertical). When the ladder is used for carrying materials as well, suitable foot holds and hand holds shall be provided on the ladder.

2. A scaffold shall not be constructed, taken down or substantially altered, except (a) under the supervision of a competent and responsible person; and (b) as far as possible by competent workers possessing adequate experience in such work.

All scaffolds and appliances connected therewith and all ladders shall—

- (a) be of sound material;
- (b) be of adequate strength having regard to the load strain to which they will be subjected; and
- (c) be maintained in proper condition.

4. Scaffolding or staging more than 3.5 metres above the ground or floor shall have a guard rail properly attached, bolt-braced and otherwise secured at least 0.6 metres above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such opening as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.

5. Scaffolds shall be so constructed that no part thereof can be displaced in consequence of normal use.

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

7. Before installing lifting gear or scaffolds special precautions shall be taken to ensure the strength and stability of the scaffolds.

8. Working platform, gangways and stairways should be so constructed that no part there can save unduly or unequally. If the height of the platform or the gangway or the stairway is more than 3.5 metres above ground level or floor level they should be closely boarded, should have adequate width and should be suitably fenced as described in (4) above.

9. Every opening in the floor of a building or in a working platform shall be provided with suitable fencing or railing for a minimum height of 0.9 metre to prevent the fall of persons or material.

10. Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9 metres in length while the width between side rails in rung ladder shall in no case be less than 30 cm. for ladder upto and including 3 metres in length. For longer ladders this width should be increased at least 20 mm. for each additional metre of length. Uniform step spacing should not exceed 30 cm. Adequate precautions should be taken to prevent danger from electrical equipment. No materials on the site of work shall be so stacked or placed as to cause danger or inconvenience to any person or the public. The Contractor shall provide all necessary fencing and lights to protect the Public from accidents and shall be bound to bear the expenses of defence of every suit, action or other proceedings at law that may be brought by any persons for injury sustained owing to neglect of the above precautions and to pay any damages and cost which may be awarded in any such suit, action or proceedings to any such persons or which may with the consent of the contractor be paid to compromise any claim by any such person.

Excavation and trenching :

11. Trenches.—1.2 metres or more in depth, shall at all times be supplied with at least one ladder for each 30 metres in length or fraction thereof. Ladder shall be extended from bottom of the trench to at least 0.8 metre above the surface of the ground. The sides of the trenches which are 1.5 metres or more in depth shall be stepped back to give suitable slope or hold securely by timber bracing, so as to avoid the danger of sides to collapse.

12. Demolition.—Before any demolition is commenced and also during the process of the work,—

(a) All roads and open areas adjacent to the work site shall either be closed or suitably protected;

(b) No electric cable or apparatus which is liable to be a source of danger over a cable or apparatus used by the operator shall remain electrically charged.

(c) All practical steps shall be taken to prevent danger to persons employed from risk of fire or explosion or flooding. No floor, roof or other part of the building shall be so overloaded with debris or materials as to render it unsafe.

13. All necessary personal safety equipment as considered adequate by the Executive Engineer shall be kept available for the use of the person employed on the site and maintained in a condition suitable for immediate use, and the contractor should take adequate steps to ensure proper use of equipment by those concerned.

(a) Works employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective goggles.

(b) Those engaged in white-washing and mining or stacking of cement bags or any material which is injurious to the eyes shall be provided with protective goggles.

(c) Those engaged in welding works shall have protective goggles and protective clothing and seated at sufficiently safe intervals.

(d) Those engaged in welding works shall be provided with welder's protective sight ligs.

(e) When workers are employed in sewers and man holes, which are in use, the contractor shall ensure that the manholes covers are opened and are ventilated atleast for an hour before the workers are allowed to get into the manholes, and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to the public.

(f) The contractor shall not employ men below the age of 18 years and women on the work of painting with products containing lead in any form. Wherever men above the age of 18 are employed on the work of lead painting, the following precautions shall be taken

(i) No paint containing lead and lead products shall be used except in the form of paste or ready-made paint.

(ii) Suitable face masks should be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint dry rubbed and scrapped.

(iii) Overalls shall be supplied by the contractors to the workmen and adequate facilities shall be provided to enable the working painters to wash during the cessation of work.

(iv) When workers are employed in dangerous occupations like work with hot bitumen, drilling operations, etc., which are likely to prove dangerous resulting in physical damage and casualty, adequate protection of the workers should be provided.

14. When the work is done near any place where there is risk of drawing all necessary equipments should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision should be made for prompt first aid treatments of all injuries likely to be sustained during the course of the works.

15. (a) Hoisting machines and tackle including their attachments anchorages and supports shall be good mechanical construction, sound materials and adequate strength and free from patent defect and shall be kept in good repair and in good working order. 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 defect.

(b) Every crane driver or hoisting appliance operator shall be properly qualified and no person under the age of 21 years should be in control of any hoisting machine, including the scaffold winch or give signals to the operator.

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

16. Motors, gearing, transmissions, electric wiring and other dangerous parts of hoisting appliance shall be provided with efficient safeguards. Hoisting appliances shall be provided with such means as will reduce to a minimum the risk of the accidental descent of the load. Adequate precautions shall be taken to reduce to a minimum the risk of any part of a suspended load becoming accidentally displaced.

When workers are employed on electrical installations which are already energised, insulating mats, wearing apparel such as gloves, sleeves and boots as may be necessary should be provided. The workers shall not carry keys or other materials which are good conductors of electricity.

17. These safety provisions should be brought to the notice of all concerned by display on a notice board at a prominent place at workshop. The person responsible for the compliance of the safety code shall be named by the contractor.

18. To ensure effective enforcement of the rules and regulations relating to safety precautions, the arrangements made by the contractor shall be open to inspection by the Labour Officer, Executive Engineer of the Department or other representative.

19. Notwithstanding the above clauses (1) to (18) there is nothing in these to exempt the contractor from the operations of any other Act of rules in force in the Republic of India.

Model Rules for the provision of Health and Sanitary arrangements for workers employed by the P.W.D. and Highways and Rural Works Department and their contractors.

The contractor's special attention is invited to relevant clauses of the "General conditions of contract" in the Tamil Nadu Building Practice and he is requested to provide at his own expense the following amenities to the satisfaction of the Executive Engineer.

1. *Application.*—These rules shall apply to all building and construction works in charge of P.W.D.

2. *Definitions.*—(i) "Work place" means a place at which an average fifty or more workers are employed in connection with construction work.

(ii) "Large work place" means a place at which, an average 500 or more workers are employed in connection with construction work.

3. *First-aid.*—(a) At the work site there shall be maintained in a readily accessible place, first aid appliances and medicines including an adequate supply of sterilised dressing and sterilised cotton wool. The appliances shall be kept in good order. They shall be placed under the charge of a responsible person who shall be readily available during working hours.

(b) At large work places, where hospital facilities are not available within easy distance of the works, first-aid posts shall be established and be run by a trained compounder.

(c) Where large work places are remote from regular hospitals an in-door ward shall be provided with one bed for every 250 employees.

(d) Where large work places are situated in cities, towns or in their suburbs and no beds are considered necessary owing to the proximity of city or town hospitals, suitable transport shall be provided to facilitate removal of urgent cases to these hospitals. At other work places, some conveyance facilities, such as a car shall be kept readily available to take injured persons or persons suddenly taken seriously ill to the nearest hospital.

4. *Drinking Water.*—(a) Water of good quality fit for drinking purposes shall be provided for the work people on a scale of not less than 15 litres per head per day.

(b) Where drinking water is obtained from an intermittent public water supply each work place 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 15 metres from any latrine, drain or other source of pollution. Where water has to be drawn from an existing well, which is within such proximity of latrine, drain or any other source of pollution, the well shall be properly chlorinated before water is drawn from it for drinking. All such wells shall be entirely closed in and be provided with a trap door which shall be dust and water proof.

(d) A reliable pump shall be fitted to each covered well, the trap door shall be kept locked and opened only for cleaning or inspection which shall be done atleast once a month.

5. *Washing and bathing places.*—Adequate washing and bathing places should be provided, separately for men and women. Such places shall be kept in clean and drained condition. Bathing or washing should not be allowed in or near any drinking water well.

6. *Latrines and Urinals.*—There shall be provided within the precincts of every work place, latrines and urinals in an accessible place and the accommodation, separately for each of them, shall be on the following scale or on the scale so directed by the Executive Engineer in any particular cases.

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

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

Except in work places provided with water flushed 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 the working hours and kept in strictly sanitary conditions. The receptacles shall be tarred inside and outside atleast once a year.

The excreta from the latrines shall be disposed off at the contractor's expense, in outway 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 clean condition.

7. *Shelters during rest :* At every work site there shall be provided, free of cost, two suitable sheds one for meals and the other for rest separately for men and women for the use of labourers.

8. *Creches :* (a) At every work place at which 50 or more women workers are ordinarily employed there shall be provided two huts of suitable size for the use of children under the age of 6 years, belonging to such women, one hut shall be used for infants, games and play and the other as their bed room. The huts shall not 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 matting.

The huts shall be provided with suitable and sufficient opening for light and ventilation. There shall be adequate provision of sweepers to keep the places clean. There shall be two Dais in attendance. Sanitary utensils shall be provided to the satisfaction of the Health Officer of the area concerned ; The use of the huts shall be restricted to children, their attendants and mothers of the children.

(b) Where the number of Women workers is more than 25 but less than 50, the contractor shall provide atleast one hut and one Dai to look after the children of women workers.

(c) The size of creche or creches shall vary according to number of women workers.

(d) The creche or creches shall be properly maintained and necessary equipment like toys, etc. shall be provided.

9. *Canteens :*—A cooked food canteen on a moderate scale shall be provided for the benefits of workers if it is considered expedient.

10. *Sheds for Workmen :*—The contractor should provide at his own expense sheds for housing his workmen. The sheds shall be on a standard not less than the cheap shelter type, to live in which the work people in the locality are accustomed to.

A floor area of about 1.8 metres x 1.5 metres for two persons shall be provided. The sheds to be in rows with 1.3 metres clear space between sheds and 9 metres clear space between rows if conditions permit. The work people's camp shall be laid out in units of 400 persons, each, each unit to have a clear space of 12 metres around.

APPENDIX IX. XXXVIII.

MONTHLY REPORT OF CONSTRUCTION EMPLOYEES UNDER CONTRACTORS.

Return for the Month Ending .

1. Name, location and Type of work.
2. Name of contractor
3. Works engaged in—
 - (i) P.W.D. work
 - (ii) Government work other than P.W.D.
 - (iii) Other works
4. Name and address of Manager (s) of works.
5. Value of contract

6. Employment earnings—

Instructions to complete the Proforma.

| Category. | Employees. | | | |
|--|------------|--------|-------|--------|
| | Men. | Women. | Boys. | Girls. |
| (1) | (2) | (3) | (4) | (5) |
| (i) Total number of employees during the month. | | | | |
| (ii) Number of employees in the work on the last working day of the month. | | | | |
| (iii) Total wages paid for the | | | | |
| (iv) Total number of working days during the month. | | | | |
| (v) Length of normal wage period. | | | | |

Date :

Place :

To

- 1 The Employment Officer,
District Employment Office.
2. The Executive Engineer,
Division.

Signature of Contractor or
Manager.

1. Contractor means the person who has contracted to execute the works.

2. Manager means any person who manages, supervises the work(s) or behalf of the contractor.

3. Item 6—(i) The cumulative total of daily employment on all days in a calendar month, if the last day of the calendar month is a holiday, the working day immediately previous to the holiday.

Item 6 (ii)—Wages means basic wage, dearness allowance, project allowances etc. including work benefits paid in cash or kind.

Item 6 (iii)—Columns 2 and 3 refer to adults who are 17 years of age or over.

Item 6—Columns 4 and 5 refer to others not covered by columns 2 and 3.

4. Returns should cover a calendar month.

5. Completed returns to reach the employment exchanges concerned on or before the 5th of the month succeeding the month to which the return relates.