SECTION – 1

PART-I

CONDITIONS OF CONTRACT

(GENERAL CONDITIONS OF CONTRACT)

Table of Clauses

SI.	Description	Sl. No.	Description	
No. A.	General	32.	Correction of Defects	
1.	Definitions	33.	Uncorrected Defects	
2.	Interpretations	D.	Cost Control	
3.	Language and Law	34.	Bill of Quantities& Measurements	
4.	Engineer's Decisions	35.	Variations	
5.	Delegation	36.	Payments for Variations	
6.	Communications	37.	Cash Flow Forecasts	
7.	Subcontracting	38.	Payment Certificates	
8.	Other Contractors	39.	Payments	
9.	Personnel	40.	Compensation Events	
10.	Employer's and Contractor's Risks	41.	Tax	
11.	Employer's Risks	42.	Currencies	
12.	Contractor's Risks	43.	Security Deposit	
13.	Insurance	44.	Liquidated Damages	
14.	Site Investigation Reports	45.	Advance Payments	
15.	Queries about the Contract data	46.	Securities	
16.	Contractor to Construct the works	47.	Cost of Repairs	
17.	The Works to Be Completed by the Intended Completion Date	Е.	Finishing the Contract	
18.	Approval by the Engineer	48.	Completion	
19.	Safety	49.	Inspection & Handing Over	
20.	Discoveries	50.	Final Account	
21.	Possession of the Site	51.	Submission of As Built Drawings	
22.	Access to the Site	52.	Rights of Breach of Contract:	
23.	Instructions	53.	Payment upon Rescission	
			/Determination of the Contract	
24.	Dispute Redressal System	54.	Property	
25.	Arbitration	55.	Release from Performance	
		56.	Escalation	
В.	Time Control	F.	Other Conditions of contract	
26.	Programme	57.	Labour	
27.	Extension of the Intended Completion Date	58.	Compliance with Labour Regulations	
28.	Delays Ordered be the Engineer	59.	Drawings and Photographs of the Works	
29.	Management Meetings	60.	The Apprenticeship Act, 1961	
C.	Quality Control	61.	Prohibition of Criminals	
30.	Identifying Defects	62.	Prohibition of Members of Bar Council.	
31.	Tests	63.	Prohibition on near relatives.	

General Conditions Of Contract

A. GENERAL:

1. Definition

1.1. Terms, which are defined in the Contract Data, are not also defined in the Conditions of Contract but keep their defined meanings. Capital initials are used to identify defined terms.

Approved means approved in writing, including subsequent written information of previous verbal approval and "Approval" means approval in writing including as aforesaid.

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

Client means the administrative department on whose behalf the Employers has agreed to execute under this contract.

Compensation Events are those defined in Clause 40 hereunder.

The Completion Date is the date of completion of the Works as certified by the Engineer, in accordance with Clause 48.1.

The Consultant shall mean consultant appointed by the department for preparation of comprehensive detailed project report of the project.

The Contract is the Contract between the Employer and the Contractor to execute, complete, and maintain the Works. It consists of the documents listed in Clause 2.3.

The Contract Data defines the documents and other information, which comprise the Contract.

The Contractor is a person or corporate body who's Bid to carry out the Works has been accepted by the Employer.

The Contractor's Bid is the completed bidding document submitted by the Contractor to the Employer.

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

Days are calendar days; months are calendar months.

A **Defect** is any part of the Works not executed in accordance with the specifications and/or Contract.

The Defects Liability Certificate is the certificate issued by Engineer, after the Defect Liability Period has ended and upon correction of Defects by the Contractor.

The Defects Liability Period is one year calculated from the Completion and Handing over Date of the Works including at least one rainy season. Provided that, in event of different Defects Liability Periods being applicable to different sections or parts of the permanent works, the expression Defects Liability Period shall, for the purposes of this contract, be deemed to mean the expiration of the latest of such periods.

Drawings means the drawings prepared and issued by the Consultant and referred to in the tender and specifications and any modifications of such drawings and such other drawings, calculations and technical information of a like nature as may, from time to time, be issued by the consultant.

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

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

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

GST shall mean Goods and Service Tax- Central, State and Inter State.

The Initial Contract Price is the Contract Price listed in the Employer's Letter of Acceptance.

The Intended Completion Date is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is specified in the Contract Data. The Intended Completion Date may be revised only by the engineer by issuing an extension of time.

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

Market Rate shall be the rate as decided by the Engineer on the basis of the cost of materials and labour at the site where the work is to be executed plus 10% to cover, all overheads and profits etc. Provided that no extra overheads and profits shall be payable on the part(s) of work assigned to other agency(s) by the contractor as per terms of contract

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

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

Site Investigation Reports are those that are available with the Detailed Project Report (DPR).

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

The Start Date is given in the Contract Data. It is the date when the Contractor shall commence execution of the Works. It does not necessarily coincide with any of the Site Possession Dates.

A Sub-Contractor is a person or corporate body who has a Contract with the Contractor to carry out specialized part of the construction work under the Contract.

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

A Variation is an instruction given by the Engineer, which varies the Works. The Works, as defined in the Contract Data, are what the Contract quires the Contractor to construct &hand over to the Client.

The Works shall, unless there be something either in the subject or context repugnant to such construction, be construed and taken to mean the works by or by virtue of the contract contracted to be executed whether temporary or permanent and whether original, altered, substituted or additional.

2. Interpretation:

- 2.1. In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Engineer will provide instructions clarifying queries about these Conditions of Contract.
- 2.2. If component wise completion is specified in the Contract Data, references in the Conditions of Contract to the Works, the Completion Date, and the Intended Completion Date apply to any component of the Works (other than references to the Completion Date and Intended Completion Date for whole of the Works).
- 2.3. The several documents forming the Contract are to be taken as mutually explanatory of one another, detailed drawings being followed in preference to small scale drawing and figured dimensions in preference to scale. The documents forming the Contract shall be interpreted in the following order of priority:
 - (1) Agreement,
 - (2) Notice to Proceed with the Work,
 - (3) Letter of Acceptance,
 - (4) Contractor's Bid,
 - (5) Contract Data,
 - (6) Special Conditions of Contract Part II,
 - (7) General Conditions of Contract Part I,
 - (8) Specifications,
 - (9) Drawings,
 - (10) Bill of Quantities, and
 - (11)Any other document listed in the Contract Data.
- 2.4. In the case of discrepancy between the schedule of Quantities, the Specifications and/ or the Drawings, the following order of preference shall be observed:
 - i. Description of Schedule of Quantities.
 - ii. Particular Specification and Special Condition, if any.
 - iii. Drawings.
 - iv. PWD Specifications.
 - v. CPWD Specifications.

- vi. Indian Standard Specifications of B.I.S.
- 2.5. If there are varying or conflicting provisions made in any one document forming part of the contract, the Tender Accepting Authority shall be the deciding authority with regard to the intention of the document and his decision shall be final and binding on the contractor.
- 2.6. Any error in description, quantity or rate in Schedule of Quantities or any omission there from shall not vitiate the Contract or release the Contractor from the execution of the whole or any part of the works comprised there in according to drawings and specifications or from any of his obligations under the contract.
- 2.7. In case of errors, omissions and / or disagreement between written and scaled dimensions on the drawings or between the drawings and specifications, etc. the following order of precedence shall apply:
 - (i) Between scaled and written dimension (or description) on drawing, written dimension shall be adopted.
 - (ii) Between the written or shown description or dimensions in the drawings and the corresponding one in the specification, the former shall be taken as correct.
 - (iii) Between the written description of the item in the specifications and descriptions in the bill of Quantities of the same item, the latter shall be adopted.
- 2.8. Between the duplicate / subsequent copies of the tender and original tender, the original tender shall be taken as correct.
- 2.9. All documents forming the Contract are to be taken as mutually explanatory of one another. But in case of ambiguity or discrepancies in conditions or specifications the same shall be explained and adjusted by Engineer. In case the Contractor does not agree with the explanation given by the Engineer, then the matter, on his written notice, will be referred to the Employer and his decision shall be final and binding to the contractor.
- 2.10. In all cases of omissions and for doubts or discrepancies in any of the items or specifications, a reference shall be made to the Engineer. Elucidation, elaboration or decision of the engineer shall be considered as authentic. The Contractor shall be held responsible for any error that may occur in the work through lack of such reference and precaution.
- 2.11. Any dispute arising due to typing mistakes/ omissions in the document shall be mutually discussed between Contractor and Engineer and the decision of the Engineer will be final and binding on the contractor in the matter.

3. Language and Law:

3.1. The language of the Contract and the law governing the Contract are stated in the Contract Data.

4. Engineer's Decisions:

4.1. Except where otherwise specifically stated, the Engineer will decide contractual matters between the Employer and the Contractor in the role representing the Employer. However, if the Engineer is required under the rules and regulations and orders of the Employer to obtain approval of some other authorities for specific actions, he will so obtain the approval.

5. Delegation:

5.1. The Engineer, with the approval of the Employer, may delegate any of his duties and responsibilities to other people, after notifying the Contractor, and may cancel any delegation after notifying the Contractor.

6. Communications:

6.1. All Certificate, notices or instructions to be given to the contractor by Employer / Engineer shall be sent on the address or contact details given by the contractor in Section 3- Form IX of Bid. The address and contact details for communication with the Employer/ Engineer shall be as per the details given Contract Data to GCC. Communications between parties that are referred to in the conditions shall be in writing. The Notice sent by Facsimile (fax) or other electronic means shall be effective on confirmation of the transmission. The Notice sent by Registered post or Speed post shall be effective on delivery or at the expiry of the normal delivery period as undertaken by the postal service.

7. Subcontracting:

- 7.1. The contractor may, on written approval of Engineer, subcontract specialized part of the construction work with the approval of the Engineer in writing, up to total of 25% of the contract price but will not assign the Contract. Subcontracting shall not alter the contractor's obligations. Payments for such sub-contracted works will be made to the Contractor as per terms of the contract.
- 7.2. Beyond what has been stated in clause 7.1, if the contractor proposes sub-contracting any part of the work during execution of the works, because of some unforeseen circumstances to enable him to complete the work as per terms of the contract, the Engineer will consider the following before according approval:
 - a) The Contractor shall not sub-contract the whole of the works.
 - b) The Contractor shall not sub-contract any part of the work without prior consent of the Engineer. Any such consent shall not relieve the contractor from any liability or obligation under the contract and he shall be responsible for the acts, defaults and neglects of any his sub-contractor, his agents or workmen as fully as if they were the acts, defaults or neglects of the Contractor, his agents and workmen.
- 7.3. The Engineer will satisfy himself before approving sub-contracting of specialized part of the work whether
 - a) The nature of specialized work warrants such sub-contracting: and

b) The sub-contractor so proposed for the work possess the experience, qualification and equipment necessary for the job proposed to be entrusted to him in proportion of the Quantum of works to be sub-contracted.

8. Other Contractors:

- 8.1. If in a particular site more than one contractor is working, the contractor shall, in a most harmonious way, co-operate and share the site with other contractors, public authorities and the employer.
- 8.2. The contractor should take up the work in a manner as decided by the Engineer to ensure there is least hindrance to the smooth flow of materials including movement of vehicles and equipment of other contractors till the completion of the works.

9. Personnel:

- 9.1. The Contractor shall employ for the construction work technical personnel named in the Contract Data or other technical persons approved by the Engineer. The Engineer will approve any proposed replacement of technical personnel only if their relevant qualifications and abilities are substantially equal to or better than those of the personnel stated in the Contract Data.
- 9.2. If the Engineer asks the Contractor to remove a person who is a member of the Contractor's staff or work force, stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the Works in the Contract.
- 9.3. The Contractor shall not employ any retired Govt. officer who has worked in any Engineering Department/PSU/Nigam of the State Government and has either not completed two years after the date of retirement or has not obtained appropriate permission for employment with the Contractor.
- 9.4. The contractor shall not be permitted to bid for works under supervisory control of Ex. Engineer concerned who is responsible for execution of contracts, in which his near relative is posted. He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any officer in the U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd and make him liable for black listing.
- 9.5. If the contractor fails to employ personnel as specified in the Contract Data, recovery shall be made at the rates specified in the Contract Data.

10. Employer's and Contractor's Risks:

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

11. Employer's Risks:

11.1. The Employer is responsible for the excepted risks which are in so far as they directly affect the execution of the Works in the Employer's country, the risks of war, invasion, act of foreign enemies, rebellion, revolution, insurrection or military or usurped power, civil war, riot commotion or disorder (unless restricted to the Contractor's employees), natural calamities and contamination from any nuclear fuel or nuclear waste or radioactive toxic explosive.

12. Contractor's Risks:

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

13. Insurance: (Applicable for cost of work put to bid being more than Rs. 40.00 Lacs)

13.1. The Contractor at his cost shall provide insurance cover issued by a public sector general insurance company, in the joint names of the Employer and the

Contractor, valid from the Start Date to the end of defect liability period, for the following events which are due to the Contractor's risks:

- a) Contractor's All Risk Insurance: The Contractor shall insure the work for a sum equivalent to the Contract value together with materials and plants for incorporation therein, to the full replacement cost and it being understood that such insurance shall provide for compensation to be payble to rectify the loss or damage incurred and an additional sum of 15% of such replacement cost to cover any additional costs of and incidental to rectification of loss or damage including professional fees and the cost of demolishing and removing any part of the work and of removing debris of whatever nature and it being understood that such insurance shall provide for compensation being payble to rectify loss or damage incurred or such additional sums as specified and interests of the U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd /Client against all Risks, claims, proceedings, losses or damages, costs, charges and expenses from whatsoever arising out of in consequence of the execution and maintenance of the work for which the contractor is reponsible under the Contract.
- b) Workmen Compensation & Employer's Liability Insurance: This insurance shall be effected for all the Contractor's employess engaged in performance of the contract. The U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd /Employer/Client shall not be liable in respect of any damages or compensation payble at law in respect of or in consequence of any accident or injury to any workman or any other person employed by the cotractor and the Contractor shall indemnify and keep indemnified the U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd /Employer/Client against all such damages and compensation and against all claims, demands, proceedings, costs, charges & expenses, whatsover in respect of or in relation thereof.
- c) Third Party Insurance. The Contractor shall be responsible for making good to the satisfaction of the Engineer any loss or any damage to all structures and properties belonging to the U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd / Client or being executed or procured or being procured by the U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd / Client Department or of the other agencies within the premises of all work of the U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd / Client if such loss or damage is due to fault and or the negligence or willful acts or omissions of the contractor, his employees, agents, representatives.
- d) The contractor shall take sufficient care in moving his plants, equipment and materials from one place to another so that they do not cause any damage to any person or to the property of the U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd / Client Department or any third party including overhead and underground cables and in the event of any damage resulting to the property of the U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd / Client Department or to a third party during the movement of the aforesaid plant, equipment or materials, the cost of such damages including eventual loss of production, operation or services in any plant or establishment as estimated by the U.P. Rajya

Nirman Evam Sharam Vikas Sahakari Sangh Ltd / Client Department or ascertained or demanded by the third party, shall be borne by the contractor.

- e) Before commencing the execution of the work, the contractor, shall insure and indemnify and keep the U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd / Client Department harmless of all claims, against the contractor's liability for any materials or physical damage, loss or injury which may occur to any property, including that of the U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd / Client Department or to any person including any employee of U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd / Client Department, or arising out of the execution of the work or in the carrying out of the contract, otherwise than due to the matters referred to in the provision to (a) above. Such insurance shall be affected for an amount sufficient to cover such risks. The terms shall include a provision whereby, in the event of any claim in respect of which the contractor, would be entitled to receive/indemnify under the policy being brought or made against the U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd, Client Department, the insurer shall willfully indemnify U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd / Client Department against such claims and any costs, charges and expenses in respect thereof.
- f) The contractor shall also at all times indemnify the U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd / Client Department against all claims, damages or compensation under the provisions of Payment or Wages Act, 1936, Minimum Wages Act, 1948, Employer's Liability Act, 1938, the Workman's Compensation Act, 1947, Industrial Disputes Act, 1947 and Maternity Benefit Act, 1961, or any modification thereof or any other law relating thereof and rules made there under from time to time.
- g) The Contractor shall also at his own cost carry and maintain any and all other insurance(s) which may be required for the Contractor's Equipment and other things brought onto the Site by the Contractor, for a sum sufficient to provide for their replacement at the Site
- h) The Contractor shall also at his own cost carry and maintain any and all other insurance(s) which he may be required to take out under any law or regulation from time to time. He shall also carry and maintain any other insurance, which may be required by the Engineer.
- i) **Cross liabilities:-** The insurance policy shall include a cross liability clause such that the insurance shall apply to the contractor and to the U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd / Client Department as separate insured.
- 13.2. The Contractor shall prove to the Engineer-in- charge from time to time he has taken out all the insurance policies referred to above and has paid the necessary premiums for keeping the policies alive till expiry of the Defects Liability Period;

13.3. Evidence and Ter`ms of Insurance:

The Contractor shall provide evidence to the Engineer as soon as practicable after the respective insurance have been taken out but in any case prior to the start of work at the Site that insurance required under the Contract have been effected and shall, within 84 days of the Commencement Date, provide the insurance policies to the U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd /Client Department. When providing such evidence and such policies to the U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd /Client Department, the Contractor shall notify to the Engineer also. Such insurance policies shall be consistent with the general terms agreed prior to the issue of the Letter of Acceptance. The Contractor shall effect all insurance for which he is responsible with insurers and in terms approved by U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd.

13.4. Adequacy of Insurance:

The Contractor shall notify the insurers of changes in the nature, extent or programme for the execution of the Works and ensure the continuity and adequacy of the insurance at all times in accordance with the terms of the Contract and shall, when required, produce to the Consultant the insurance policies in force and the receipts for payment of the current premiums.

13.5. The aforesaid insurance policies shall provide that they shall not be cancelled till the Engineer-in-charge has agreed for cancellation.

13.6. **Remedy on the contractor's failure to insure:**

If the contractor shall fail to effect and keep in force the insurance referred to above or any other insurance which he/they may be required to effect under the terms of the contract then and in any such case Engineer may without being bound to, effect and keep in force any such insurance and pay such premium or premiums, as may be necessary for that purpose and from time to time deduct the amount so paid by the Engineer from any moneys due or which may become due to the contractor or recover the same as a debt due from the contractor.

13.7. Compliance with Policy Conditions:

In the event that the Contractor fails to comply with conditions imposed by the insurance policies effected pursuant to the Contract, the Contractor indemnifies the U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd /Client Department against all losses and claims arising from such failure.

- 13.8. Insurance policies and certificates for insurance shall be delivered by the Contractor to the Engineer for the Engineer's approval before the Start Date. All such insurance shall provide for compensation to be payable in Indian Rupees.
- 13.9. The Alterations to the terms of insurance shall not be made without the approval of the Engineer. Both parties shall comply with any conditions of the insurance policies.

14. Site Investigation Reports:

14.1. The Contractor, in preparing the Bid, may rely on any Site Investigation Reports referred to in the Contract Data, supplemented by any other information available to him, before submitting the bid.

15. Queries about the Contract Data:

15.1. The Engineer will clarify queries on the Contract Data.

16. Contractor to Construct the Works:

- 16.1. The Contractor shall construct commission & hand over the Works in accordance with the Specifications and Drawings.
- 16.2. The contractor shall construct the works by adopting latest and environment friendly technology required to ensure the quality of works as per specifications. The contactor shall deploy the equipment and machinery as given in Contract Data.
- 16.3. The contractor shall supply at his own cost all labour, skilled and un-skilled and all things necessary (except such special things, if any, as may in accordance with the specifications be supplied from the Engineer's stores) such as plants, tools, appliance, implements, ladders, cordage, tackle, scaffolding, shoring, strutting, pumps boilers, fuel oils, packing, derricks, boring tools winches and power as well as all other apparatus and temporary works requisite or proper for the proper execution of the work, whether original, altered or substituted and whether included in the specification or other documents forming part of the contract or referred to in those conditions or not which may be necessary for the purpose of satisfying or complying with the requirements of the Engineer as to any matter as of which under these conditions he is entitled to be satisfied, or which he is entitled to require together with carriage here to for and from the works. The contractor shall also supply without charge the requisite number of persons and things necessary for the purpose of setting out the works, and counting, weighing and assisting in the measurement and examination at any time and from time to time, the work done, or materials, supplied by him. Failing his doing so the same may be provided by the Engineer at the expense and risk of the contractor and the expense (of which the certificate of the Engineer shall be final) may be deducted from any money due to contractor under this contract or from his security deposit. The contractor shall also provide at his own expense all necessary fencing and lights required to protect the public from accident and shall assume all liability for and indemnify the Employer against all actions or suits arising out of or in connection with the carrying out the works whether such actions are brought by members of the public neighboring owners or workman employed on the works save only actions for permanent interference with casements to which the site may be subject at law or inequity or otherwise arising out of the Employer's title to the site. The contractor shall carrying out the works other legal enactments applicable to them and gives all notice and pay all fees payable to local authorities and others in respect of them. The contractor shall be responsible for the adequacy, strength and safety of all shoring, strutting, curbing, bonding, brick work, masonry, concrete, permanent or temporary, appliances, matters and things furnished by him for the purpose of this contract.
- 16.4. The description given in the schedule of quantities shall, unless otherwise stated, be held to include wastage of materials, cartage and carriage, carrying and return of empties, hoistings, shaping, fitting and fixing in position and all other labour necessary in and for the full execution and completion of the works as aforesaid and in accordance with good practice and recognized principles.

17. The Works to Be Completed by the Intended Completion Date:

17.1. Time is essence of the Contract. The Contractor shall commence execution of the Works on the Start Date and shall carry out the Works in accordance with the

Programme submitted by the Contractor, as updated with the approval of the Engineer, and complete them by the Intended Completion Date.

18. Approval by the Engineer:

- 18.1. The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Engineer, who is to approve them.
- 18.2. The Contractor shall be responsible for design of Temporary Works.
- 18.3. The Engineer's approval shall not alter the Contractor's responsibility for design of the Temporary Works.
- 18.4. The Contractor shall obtain approval of third parties to the design of the Temporary Works, where required.
- 18.5. All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Engineer before their use.

19. Safety:

19.1. The Contractor shall be responsible for the safety of all materials and activities on the Site.

20. Discoveries:

20.1. Anything of historical or other interest or of significant value unexpectedly discovered on the Site shall be the property of the Employer. The Contractor shall notify the Engineer of such discoveries and carry out the Engineer's instructions for dealing with them.

21. Possession of the Site:

21.1. The Employer shall handover complete or part possession of the site to the Contractor,7 days in advance of construction programme.

22. Access to the Site:

- 22.1. The Contractor shall allow access to the Site and to any place where work in connection with the Contract is being carried out, or is intended to be carried out to the engineer and any person/persons/agency authorized by:
 - a) The Engineer
 - b) The Employer
 - c) The Client.

23. Instructions:

23.1. The Contractor shall carry out all instructions of the Engineer, which comply with the applicable laws where the Site is located.

24. Dispute Redressal System:

24.1. If any dispute or difference of any kind what-so-ever shall arise in connection with or arising out of this Contract or the execution of Works there under, whether before its commencement or during the progress of Works or after the termination, abandonment or breach of the Contract, it shall, in the first instance, be referred for settlement to the competent authority, described along with their powers in the Contract Data, above the

rank of the Engineer. The competent authority shall, within a period of forty-five days after being requested in writing by the Contractor to do so, convey his decision to the Contractor. Such decision in respect of every matter so referred shall, subject to review as hereinafter provided, be final and binding upon the Contractor. In case the Work is already in progress, the Contractor shall proceed with the execution of the Works pending receipt of the decision of the competent authority as aforesaid, with all due diligence.

24.2. Either party will have the right of appeal, against the decision of the competent authority, to the arbitration if the amount appealed exceeds rupees one lakh.

25. Procedure for Resolution of Disputes:

- 25.1. The Competent Authority mentioned in clause 24.1 shall give a decision in writing within 45 days of receipt of a notification of a dispute.
- 25.2. Either party may refer a decision of the Competent Authority to Arbitration within 28 days of the Competent Authority's written decision. Arbitration shall be under the Arbitration and Conciliation Act 1996. Parties, before or at the time of appointment of Arbitral Tribunal may agree in writing for fast track arbitration as per the Arbitration and Conciliation Act, 1996 (26 of 1996) as amended in 2015.
- 25.3. If neither party refers the dispute to Arbitration within the above 28 days, the Competent Authority's decision will be final and binding.

25.3.1. It is a term of this contract that the party invoking arbitration shall give a list of disputes with amounts claimed, if any, in respect of each such dispute along with the notice for appointment of arbitrator and giving reference to the decision of the Competent Authority.

25.3.2. It is also a term of this contract that member (s) of the Arbitration Tribunal shall be a working/retired Chief Engineer Level with experience in handling public works engineering contracts. This shall be treated as a mandatory qualification to be appointed as arbitrator.

25.4.

- a) If one of the parties fails to appoint its arbitrator in pursuance of sub-clause
 (a) above within 30 days after receipt of the notice of the appointment of its arbitrator by the other party, then he shall be appointed by Chief Engineer U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd.
- b) The decision of the majority of arbitrators shall be final and binding upon both parties. The cost and expenses of Arbitration proceedings will be paid as determined by the Arbitral Tribunal. However, the expenses incurred by each party in connection with the preparation, presentation etc. of its proceedings as also the fees and expenses paid to the arbitrator appointed by such party or on its behalf shall be borne by each party itself.

B. TIMECONTROL:

26. Programme:

- 26.1. Within the time stated in the Contract Data, the Contractor shall submit to the Engineer for approval a Programme showing the general methods, arrangements, order, and timing for all the activities in the Works, along with monthly cash flow forecasts for the construction of works.
- 26.2. The Contractor shall submit the list of equipment and machinery being brought to site, the list of key personnel being deployed, the list of machinery/ equipments being placed in field laboratory and the location of field laboratory along with the Programme. The Engineer shall cause these details to be verified at each appropriate stage of the programme.
- 26.3. An update of the Programme shall be a programme showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining works, including any changes to the sequence of the activities.
- 26.4. The Contractor shall submit to the Engineer for approval an updated Programme at intervals of 60 Days or no longer than the period stated in the Contract Data. If the Contractor does not submit an updated Programme within this period, the Engineer may withhold the amount stated in the Contract Data from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Programme has been submitted.
- 26.5. The Engineer's approval of the Programme shall not alter the Contractor's obligations. The Contractor may revise the Programme and submit it to the Engineer again at any time. A revised Programme shall show the effect of Variations and Compensation Events.
- 26.6. **Record of Hindrance-** Contractor shall be liable to inform within seven day from the event of any hindrance in work due to the circumstances beyond his control, delay in issue of stores with regard to materials needed immediately during the progress of work, or hindrance in work by Client department /any other department. Engineer shall receive and may allow the record of hindrance to the extent as considered justifiable by Engineer in the following form prescribed below which will become the part of agreement.

Date & Letter No. of contractor on starting the hindrance	Date of start of hindrance	Date of end of hindrance	Nature and details of hindrance	Remarks and recommendation	Sign. of Ex. Engineer allowing the hindrance
					hindrance

Contractor should note that the above record of hindrance shall not entitle him for any claim or increase in rates but shall only verify and record his eligibility considerations with regard to extension of time if he at all applies.

27. Extension of the Intended Completion Date:

- 27.1. The Engineer shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining Works, which would cause the Contractor to incur additional cost.
- 27.2. The Engineer shall decide whether and by how much time to extend the Intended Completion Date within 60 days of the Contractor asking the Engineer for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information. If the Contractor has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended Completion Date. Non application by the contractor for extension of time shall not be a bar for giving fair and reasonable extension by the Employer and his decision shall be binding on the contractor.
- 27.3. However, such extension/extensions of the Intended Completion Date may, at the discretion of the Employer, be subject to approval by Client Department.
- 27.4. The time available for completion of work, as determined by such extended completion date under clauses 27.1 to 27.3 shall be of essence and shall be adhered religiously.

28. Delays Ordered by the Engineer:

28.1. The Engineer may instruct the Contractor to delay the start or progress of any activity within the Works. Delay/delays totaling more than 30 days will require prior written approval of the Employer.

29. Management Meetings:

- 29.1. The Engineer may require the Contractor to attend a management meeting. The business of a management meeting shall be to review the plans for the Works.
- 29.2. The Engineer shall record the business of management meetings and provide copies of the record to those attending the meeting. The responsibility of the parties for actions to be taken shall be decided by the Engineer either at the management meeting or after the management meeting and stated in writing to all those who attended the meeting.

C. QUALITY CONTROL:-

30. Identifying Defects:

- 30.1. The Engineer shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Engineer may instruct the Contractor to search for a Defect and to uncover and test any work that the Engineer considers may have a Defect.
- 30.2. If during construction or after construction, Client/ Government orders inspection by TAC or any other agency of the works and the final bills of the contractor including all supporting vouchers, abstract, etc., and if as a result of such audit and technical examination any sum is found to have been overpaid in respect of any work done by the contractor under the contract or any work claimed to have been done by him under

the contract and found not to have been executed, the contractor shall be liable to refund the amount of over-payment and it shall be lawful for Employer to recover the same from him in the manner prescribed in this contract or in any other manner legally permissible; and if it is found that the contractor was paid less than what was due to him under the contract in respect of any work executed by him under it, the amount of such under payment shall be duly paid by Employer to the contractor, without any interest thereon whatsoever.

Provided that the Employer shall not be entitled to recover any sum over paid, nor the contractor shall be entitled to payment of any sum paid short where such payment has been agreed upon between the Engineer on the one hand and the contractor on the other under any term of the contract permitting payment for work after assessment by the Engineer.

- 30.3. Contractor Liable for Damages, Defects during defect liability period: If the contractor or his working people or servants shall break, deface, injure or destroy any part of building in which they may be working, or any building, road, road kerb, fence, enclosure, water pipe, cables, drains, electric or telephone post or wires, trees, grass or grassland, or cultivated ground contiguous to the premises on which the work or any part is being executed, or if any damage shall happen to the work while in progress, from any cause whatsoever or if any defect, shrinkage or other faults appear in the work within twelve months of handing over of the project arising out of defect or improper materials or workmanship the contractor shall upon receipt of a notice in writing on that behalf make the same good at his own expense or in default the Engineer may cause the same to be made good by other workmen and deduct the expense from any sums that may be due or at any time thereafter may become due to the contractor, or from his security deposit or the proceeds of sale thereof or of a sufficient portion thereof. If any amount still remains unrecovered the same shall be treated as a debt due and will be recovered as per law. The security deposit of the contractor shall not be refunded before the expiry of defect liability period of twelve months after handing over of work to Client/ Government, or till the final bill has been prepared and passed whichever is later.
- 30.4. The Contractor shall be responsible for safety of assets so created till the completed work has been duly handed over to the Client.
- **31. Tests:**
 - 31.1. For Carrying out mandatory tests as prescribed in the specification. The Contractor shall establish field laboratory at the location decided by Engineer. The field laboratory will have minimum equipments as specified in the Contract Data. The contractor shall be solely responsible for :
 - a. Carrying out the mandatory tests prescribed in the latest CPWD Specifications, Volume-I & II and UPPWD Scheduled Specifications.
 - b. For the correctness of the test results, whether preformed in his laboratory or elsewhere.
 - 31.2. If the Engineer instructs the Contractor to carry out a test not specified in the Specification or to carry out these tests from independent laboratories (NABL Accredited / Govt. Technical Institutes or otherwise) to ensure proper quality control,

the Contractor shall pay for the test including transportation costs thereon and any samples.

- 31.3. The contractor shall ensure quality control measures on different aspects of construction including materials, workmanship and correct construction methodologies to be adopted. He shall have to submit quality assurance programme within two weeks of the award of work. The quality assurance programme should include method statement for various items of work to be executed along with check lists to enforce quality control.
- 31.4. The contractor shall get the source of all other materials, not specified elsewhere in the document, approved from the Engineer. The contractor shall stick to the approved source unless it is absolutely unavoidable. Any change shall be done with the prior approval of the Engineer for which tests etc. shall be done by the contractor at his own cost. Similarly, the contractor shall submit brand/ make of various materials as specified in list of preferred makes and which are proposed to be used for work, for the approval of the Engineer along with samples and once approved, he shall stick to it.
- 31.5. The contractor shall submit shop drawings of staging and shuttering arrangement, aluminum work, fabrication work, electrical work and other works as desired by Engineer for his/ Architect's/consultant's approval at least one month before execution. The contractor shall also submit bar bending schedule for approval of Engineer before execution.
- 31.6. Third Party Quality Control/Assurance: Third part quality control/assurance may be conducted by Employer by IIT/NIT/ Government Engineering College/Government Institutes or any other Empanelled agency at least once in three months. The contractor has to provide all necessary assistance and has to submit compliance report within targeted time frame. All expenditure for Third part quality control/assurance shall be borne by the contractor unless specifically reimbursed by the Client Department separately.

32. Correction of Defects noticed during the Defect Liability Period:

- 32.1. The Engineer shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins after Completion & Handing over of the Works to the Client. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.
 - 32.1.1.1. Every time notice of Defect/Defects is given, the Contractor shall correct the notified Defect/Defects within the duration of time specified by the Engineer's notice.
 - 32.1.1.2. The Defect rectification shall be considered as addressed properly subject to Engineer's as well as Client's satisfaction.
- 32.2. The Engineer may at his discretion follow RFI (Request for Inspection) system for execution of work.

33. Uncorrected Defects:

33.1. If it shall appear to the Engineer or his subordinate in charge of the work that any work or part has been executed with imperfect or unskilled workmanship or with materials of any inferior description or that any materials or articles provided by the contractor for the execution of the works are unsound or of a quality inferior to that contracted for or otherwise not in accordance with the contract the contractor shall on

demand in writing from the Engineer specifying the work, materials or articles complained of, forth-with rectify, remove demolish and reconstruct the work so specified, in whole or in part as the case may require, or as the case may be, remove the materials, or articles so specified and provide other proper and suitable materials or articles at his own proper charge and cost, and in the event of his failing to do so within a period to be specified by the Engineer in his demand aforesaid, then the contractor shall be liable to pay compensation at the rate of one percent or such smaller amount as the Employer (whose decision in writing shall be final) may decide on the amount of the cost of the whole work for every day not exceeding ten days, while his failure to do so shall continue, and in case of any such failure the Engineer may rectify remove, demolish and reconstruct the works, or remove and replace with others, the material or articles complained of as the case may be at the risk and expense in all respects of the contractor and such expenses may be deducted from such sum as may be due to the contractor or may become due to him and from his security deposit. A certificate by the Engineer as to the amount of the expenses incurred shall be final and binding upon the contractor.

D. COST CONTROL:-

34. Bill of Quantities and Measurement of Work Done:

- 34.1. The Bill of Quantities shall contain items for the construction, installation, testing, and commissioning, to be done by the Contractor.
- 34.2. The Bill of Quantities is used to calculate the Contract Price. The Contractor is paid for the quantity of the work done at the rate in the Bill of Quantities for each item for the construction of Works subject to the adjustment as per quoted percentage rates. The quantites mentioned in Schedule 'G' may vary on either side upto any extent for which no claim whatsoever shall be entertained.
- 34.3. All measurements and levels shall be taken jointly by Engineer or his authorized representative and by the contractor or his authorized representative from time to time during the progress of the work and such measurements shall be signed and dated by the Engineer and the contractor or their representatives, in token of their acceptance. If the contractor objects to any of the measurements recorded, a note shall be made to that effect with reason and signed by both the parties.
- 34.4. If for any reason the contractor or his authorized representative is not available and the work of recording measurements is suspended by the Engineer or his representative, the Engineer and the Department shall not entertain any claim from contractor for any loss or damages on this account. If the contractor or his authorized representative does not remain present at the time of such measurements after the contractor or his authorized representative has been given a notice in writing three (3) days in advance or fails to countersign or to record objection within a week from the date of the measurement, then such measurements recorded in his absence by the Engineer or his representative shall be deemed to be accepted by the Contractor.
- 34.5. The contractor shall, without extra charge, provide all assistance with every appliance, Labour and other things necessary for measurements and recording levels.

- 34.6. Except where any general or detailed description of the work expressly shows to the contrary, measurements shall be taken in accordance with the procedure set forth in the specifications notwithstanding any provision in the relevant Standard Method of measurement or any general or local custom. In the case of items which are not covered by specifications, measurements shall be taken in accordance with the relevant standard method of measurement issued by the Bureau of Indian Standards and if for any item no such standard is available, then a mutually agreed method shall be followed.
- 34.7. The Engineer or his authorised representative may cause either themselves or through another officer of the department to check the measurements recorded jointly or otherwise as aforesaid and all provisions stipulated herein above shall be applicable to such checking of measurements or levels.
- 34.8. It is also a term of this contract that recording of measurements of any item of work in the measurement book and/or its payment in the interim, on account or final bill shall not be considered as conclusive evidence as to the sufficiency of any work or material to which it relates nor shall it relieve the contractor from liabilities from any over measurement or defects noticed till completion of the defects liability period.
- 34.9. Notice to be given before work in covered up: The contractor shall give not less than seven days' notice in writing to the Engineer, or his duly authorized person for recording the measurement of any work, in order that the same may be measured, and correct dimensions thereof be taken before the same is so cover up or place beyond the reach of measurement. If any work shall be covered up or placed beyond the reach of measurement without such notice having been given or consent obtained, the same shall be uncovered at the contractor's expenses and no payment or allowance shall be made for such work or the materials with which the same was executed.

35. Variations:

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

36. Payments for Variations:

- 36.1. If rates for variation/supplement items are specified in Bill of Quantity, the contactor shall carry out such work at the same rate. This shall apply for variation only up to the limit prescribed in the contract data. If the variation exceeds this limit, the rates shall be derived under the provision of clause 36.3 for quantities (higher or lower) exceeding the deviation limit.
- 36.2. If the rates for Variation/Supplement items are not specified in the Bill of Quantities, the Engineer shall derive the rate from similar items in the Bill of Quantities.
- 36.3. If the rate for Variation/Supplement items cannot be determined in the manner specified in Clause 36.1 or 36.2, the Contractor shall, within 14 days of the issue of order of variation work, inform the Engineer the rate which he proposes to claim, supported by analysis of the rates, which shall included invoices, vouchers etc. and manufacturer's specifications for the work failing which the rate approved by Engineer

shall binding. The Engineer shall assess the quotation and determine the rate based on prevailing market rates within one month of the submission of the claim by the Contractor. As far as possible, the rate analysis shall be based on the standard engineering practices and the current schedule of rates of the district public works department/DSR. The decision of the Engineer on the rate so determined shall be final and binding on the Contractor.

36.4. Lump Sum Provisions in Tender: When the estimate on which a tender is made includes lump sum in respect of parts of the work, the contractor shall be entitled to payment in respect of the items of work involved or the part of the work in question at the same rates as are payable under this contract for such items, or if the part of the work in question is not, in the opinion of the Engineer capable of measurement, the Engineer may at his discretion pay the lump-sum amount entered in the estimate, and the certificate in writing of the Engineer shall be final and conclusive against the contractor with regard to any sum or sums payable to him under the provisions of the clause.

37. Cash Flow Forecasts:

37.1. When the Programme is updated, the Contractor shall provide the Engineer with an updated cash flow forecast.

38. Payment Certificates:

- 38.1. The payment to the contractor will be as follows for construction work:
 - (a) The Contractor shall submit to the Engineer fortnightly/ monthly statements of the value of the work executed less the cumulative amount certified previously supported with detailed measurement of the items of work executed in measurement books authorised by Employer. For the purpose of payment the Contractor has to submit invoice prescribed under the GST act/rules showing incidence of GST as applicable on the date of invoice separately, failing which the Engineer may refuse to make payment.
 - (b) The Engineer shall check the Contractor's fortnightly/monthly statement within 14 days and certify the amount to be paid to the Contractor.
 - (c) The value of work executed shall be determined, based on measurements by the Engineer.
 - (d) The value of work executed shall comprise the value of the quantities of the items in the Bill of Quantities completed.
 - (e) The value of work executed shall also include the valuation of Variations and Compensation Events.
 - (f) The Engineer may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.
 - (g) The Payment of final bill shall be governed by the provisions of clause 50 of GCC.

39. Payments

39.1. Payments shall be adjusted for deductions for advance payments, security deposit, other recoveries in terms of the Contract and taxes at source, as applicable under the

law. The Engineer shall endeavour to pay the Contractor the amounts he has certified within forty five days of the date of each certificate.

- 39.2. The Employer may appoint another authority, as specified in the Contract Data (or any other competent person appointed by the Employer and notified to the contractor) to make payment certified by the Engineer.
- 39.3. Items of the Works for which no rate or price has been entered in the Bill of Quantities, will not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.
- 39.4. The interim or running account bills shall be submitted by the contractor for the work executed on the basis of recorded measurements on the format as approved by the Engineer in triplicate along with soft copy of the bill on or before the date of every month fixed for the same by the Engineer. Engineer shall arrange to have the bill verified by taking or causing to be taken, where necessary, the requisite measurements of the work. In the event of the failure of the contractor to submit the bills, Engineer shall prepare or cause to be prepared such bills in which event no claims whatsoever due to delays on payment including that of interest shall be payable to the contractor. Payment on account of amount admissible shall be made by the Engineer certifying the sum to which the contractor is considered entitled by way of interim payment at such rates as decided by the Engineer. The amount admissible shall be paid within **forty five days** after the day of certification of the bill by the Engineer or his authorized representative together with the account of the material issued by the department, or dismantled materials, if any along with all required supporting documents.
- 39.5. All such interim payments shall be regarded as payment by way of advances against final payment only and shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be rejected, removed, taken away and reconstructed or re-erected. Any certificate given by the Engineer relating to the work done or materials delivered forming part of such payment, may be modified or corrected by any subsequent such certificate(s) or by the final certificate and shall not by itself be conclusive evidence that any work or materials to which it relates is/ are in accordance with the contract and specifications. Any such interim payment, or any part thereof shall not in any respect conclude, determine or affect in any way powers of the Engineer under the contract or any of such payments be treated as final settlement and adjustment of accounts or in any way vary or affect the contract.
- 39.6. Pending consideration of extension of date of completion, interim payments shall continue to be made as herein provided without prejudice to the right of the department to take action under the terms of this contract for delay in the completion of work, if the extension of Intended Completion Date is not granted by the competent authority.
- 39.7. The contractor shall, after receiving his interim payment, clear all the dues of his labour/ material suppliers & produce a certificate/receipt on this account with next running bill, if the contractor does not clear these dues or unnecessarily delays the same, the Engineer at his discretion can make payments to these labour/ material suppliers directly. Any such payment shall be recovered from the contractor's bill.

40. Compensation Events:

40.1. The following shall be Compensation Events unless they are caused by the Contractor:(a) The Engineer orders a delay or delays exceeding a total of 30 days.

- (b) The effects on the Contractor of any of the Employer's Risks.
- 40.2. If a Compensation Event would prevent the Works being completed before the Intended Completion Date, the Intended Completion Date shall be extended. The Engineer shall decide whether and by how much the Intended Completion Date shall be extended.

41. Tax

41.1. The rates quoted by the Contractor shall be deemed to be **exclusive of GST**, but shall be inclusive of all other levies, duties, royalties, octroi, cess (including labour cess), toll, taxes of Central and State Governments, local bodies and authorities as applicable on last stipulated date of receipt of tender including extensions if any. The Employer will perform such duties in regard to the deduction of such taxes at source as per applicable law.

The Contractor shall, while quoting his rates, take into account the Input Tax Credit available under the GST Act relevant to the input services/goods required for proper execution of the work under contract.

- 41.2. No adjustment i.e. increase or decrease shall be made for any variation in the rate of Labour Cess, or any other tax, levy or cess applicable on inputs.
- 41.3. The contractor shall deposit royalty and obtain necessary permit for supply of earth, sand, stones, kankar etc; from local authorities as per prevalent laws.
- 41.4. Conditions for reimbursement of levy taxes if levied after receipt of tenders:
- 41.4.1. Effect of variation in rates of Labour Cess or imposition or repeal of any other tax, levy or cess applicable on output of the works contract shall be adjusted on either side, increase or decrease. Provided for Labour Cess, or any other tax, levy or cess varied or imposed after the last date of receipt of tender including extensions if any, any increase shall be reimbursed to the contractor only if the contractor necessarily and properly pays such increased amount of taxes/levies/cess, provides copies of original deposit receipt **and** such increased amount is received by the Employer from Client/Govt. Provided further that such adjustment including any increase in GST shall not be made in the extended period of contract for which the contractor alone is responsible for delay as determined by the Employer.
- 41.4.2. The contractor shall keep necessary books of accounts and other documents for the purpose of this condition as may be necessary and shall allow inspection of the same by a duly authorized representative of the Employer and/or the Engineer and further, shall furnish such other information/document as the Engineer may require from time to time.
- 41.4.3. The contractor shall within a period of 30 days of the imposition of any such further tax or levy or cess give a written notice thereof to the Engineer that the same is given pursuant to this condition, together with all necessary information relating thereto.

42. Currencies

42.1. All payments will be made in Indian Rupees.

43. Security Deposit/ Retention and Release of Performance Security and Security Deposit/ Retention.

- 43.1. In addition to the performance security of 10%, the Employer shall retain security deposit of 5% of the amount from each payment due to the Contractor until completion of the whole of the construction Work¹.
- 43.2. On the completion of the whole of the construction work & handing over of the project, half the total amount retained as Security Deposit will be repaid to the contractor without interest and half when the defect liability period has passed and the Engineer and Client have certified that all defects notified by the Engineer to the contractor before the end of this period have been corrected.
- 43.3. The additional performance security for unbalanced bids will be repaid to the contractor when the construction work is completed as certified by the Engineer.
- 43.4. The performance security equal to the five percent of the contract price will be repaid to the contractor when the period of defect liability period is over and the Engineer has certified that the contractor has satisfactorily carried out the Works.
- 43.5. If the contractor so desires then the Security Deposit can be converted into any interest bearing security of a *Nationalised Bank/ IDBI/AXIS/ICICI/HDFC Banks* in the name of the Employer or National Saving Certificates duly pledged in favour of the Employer or in the shape of Bank Guarantee substantially as per format annexed with the bid document and issued by a Nationalised Bank, SBI, IDBI, HDFC, AXIS & ICICI Banks and valid till 45 days from the end of the Defect Liability Period on accumulations to a minimum of 2 percent of value of contract (not more than 3 installments) unless it is the last installment which may be lesser than 2 percent. *However conversion in the shape of Bank Guarantee shall be permissible only when the amount to be converted is more than Rs. 5.00 Lacs (Rs. Five Lacs).*

44. Liquidated Damages:

- 44.1. The Contractor shall pay liquidated damages to the Employer at the rate per week stated in the Contract Data for the period that the Completion Date is later than the Intended Completion Date. Liquidated damages at the same rate shall be withheld if the Contractor fails to achieve the milestones prescribed in the Contract Data. However, in case the Contractor achieves the next milestone the amount of the liquidated damages already withheld shall be restored to the Contractor by adjustment in the next payment certificate. The total amount of liquidated damages shall not exceed the amount defined in the Contractor. Payment of liquidated damages shall not affect the Contractor's other liabilities.
- 44.2. If the Intended Completion Date is extended after liquidated damages have been paid, the Engineer shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate.
- 44.3. In case the contractor fails to make up for the delay even at the time of completion of work all withheld amounts shall be deducted from the bill against work actually done.
- 44.4. All compensations or the other sums of money payable by the contractor under the terms of this contract may be deducted from, or paid by the sale of a sufficient part of

¹ For value of contract upto and including Rs. 40.00 Lacs full value of performance security and security depost i.e. 10% of value of contract shall be deposited upfront in which case no deductions shall be made from bills.

his security deposit or from the interest arising there from, or from any sums which may be due to or may become due to the contractor under the terms of this contract, on any account whatsoever and in the event of his Security deposit being reduced by reason of any such deductions or sale as aforesaid the contractor shall within 10 days make good in fixed deposit receipt tendered by a scheduled commercial bank and endorsed in favour of the Employer, any sum or sums which may have been deducted from, or raised by sale of his security deposit or any part thereof.

45. No advance payment will be made under the contract

46. Securities including Performance Security :

- 46.1. The Performance Security equal to five percent of the contract price (for value of contract being up to and including Rs. 40.00 Lacs it shall be ten percent (which will also include security deposit) in such case deduction of security deposit/retention money shall not be made from bills) and additional security for unbalanced bids shall be provided to the Employer no later than the date specified in the Letter of Acceptance/Award. It will be in the shape of a FDR issued by a Nationalised Bank/ IDBI/AXIS/ICICI/HDFC Banks or NSC (National Savings Certificate) pledged in favour of Employer if the amount is less than or equal to Rs. 5.00 Lacs. In case amount of performance security/additional performance security is more than Rs. 5.00 Lacs it may in the form of a Bank Guarantee substantially as per format annexed with the bid document and issued by a Nationalised Bank, SBI, IDBI, HDFC, AXIS & ICICI Bank. The Performance Security shall be valid until 45 days from the date of expiry of Defect Liability Period and the additional security for unbalanced bids shall be valid until date of issue of the certificate of completion. For avoidance of doubt it is clarified that a performance bank guarantee of a lesser period shall not be accepted.
- 46.2. Further, if the amount of work exceeds the tendered amount, due to change in scope of work or any other reason additional Performance Guarantee of 5% (Five Percent) (or as applicable) of the excess amount shall be provided by the contractor.
- 46.3. The performance security as well as security deposit in the shape of N.S.C.s, FD.R.s, Bank Guarantees etc. will be accepted on the conditions that Employer will hold the deposit at the risk of the depositor and will not be liable in the event of the loss of the security due to failure of the bank or to any other cause and that the loss will fall on the depositor who will have to deposit fresh security.
- 46.4. Failure of the successful Bidder to comply with the requirements of Clause 46.1 shall constitute sufficient grounds for cancellation of the award and forfeiture of the Earnest Money. He will also be debarred from participating future bids under U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd for one year.

47. Cost of Repairs:

47.1. Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Liability period shall be remedied by the Contractor at his cost if the loss or damage arises from the Contractor's acts or omissions.

If the contractor or his workmen or servants shall break, deface, injure or destroy any part of a building in which they may be working or any building, road, fence, enclosure or grassland or cultivated ground continuous to the premises on which the work or any part of it is being executed, or if any damage shall happen to the work while in progress from any cause whatsoever or any imperfections become apparent in it within defect liability period shall have been given by the Engineer as aforesaid, the contractor shall make the same good at his own expense or in default the Engineer may correct the same and make good by other workmen and deduct the expense (for which the certificate of the Engineer shall be final) from any sums that may be then or at any time thereafter may become due to the contractor or from his security deposit.

E. FINISHING THE CONTRACT:-

48. Completion of Construction::

48.1. The contractor shall request the Engineer to issue a certificate of completion of the construction of the works, and the Engineer will do so upon deciding that the work is completed.

49. Inspection & Handing Over:

- 49.1. **Handing Over:** The Contractor shall be responsible for handing over the completed works to the Client. The Contractor must note that in the process of handing over, the Client may require the works to be inspected by a committee, by whatever name called. The Contractor shall promptly or within such time as may be communicated by the Engineer, rectify all the defects/ shortcomings pointed out by the said committee to enable speedy handing over. The defect liability period shall start only after handing over of the works.
- 49.2. **Inspection:** All works under or in course of execution or executed in pursuance of this contract shall at all times be open to the inspection of the Engineer or his subordinate and the contractor shall all times during the usual working hours and at all other times of which reasonable notice of the intention of the Engineer or his subordinate to visit the works shall have been given to the contractor, either him- self be present to receive instructions or have a responsible agent duly accredited in writing , present for that purpose. Orders given to the contractor's agent shall be considered to have the same force as if they have been given to the contractor directly and will be considered as binding on the contractor.

50. Final Account:

- 50.1. The contractor shall supply to the Engineer with a detailed account of the total amount that the Contractor considers payable for works under the contract within 21 days of issue of certificate of completion of construction of works or date of handing over of the project which ever is later. The Engineer shall issue a defect liability certificate and certify any payment that is due, to be correct and complete. If the account is not correct or complete, the engineer shall issue within 42 days a schedule that states the scope of the corrections or additions that are necessary. If the account is still unsatisfactory after it has been resubmitted, the Engineer shall decide on the amount payable to the contractor and issue a payment certificate within 28 days of receiving the Contractor's revised account. The payment of final bill for construction of works will be made within 30 (Thirty) days thereafter.
- 50.2. In case the account is not received within the period as provided in clause 50.1 above, the engineer shall proceed to finalise the account and issue a payment certificate within

28 days. The payment of final bill for construction of works will be made within 30 (Thirty) days thereafter.

- 50.3. The final bill shall be submitted by the contractor in the same manner as specified in interim bills. No further claims shall be made by the contractor after submission of the final bill and these shall be deemed to have been waived and extinguished. Payment of those items of the bill in respect of which there is no dispute for quantities and rates as approved by Engineer will as far as possible be made within the period of six months reckoned from the date of receipt of the bill by the Engineer or his authorised representative, complete with account of materials issued by the Department and dismantled materials along with all supporting documents.
- 50.4. Employer shall have the right to cause an audit and technical examination of the works and the final bills of the contractor including all supporting vouchers, abstract, etc., to be made after payment of the final bill and if as a result of such audit and technical examination any sum is found to have been overpaid in respect of any work done by the contractor under the contract or any work claimed to have been done by him under the contract and found not to have been executed, the contractor shall be liable to refund the amount of over-payment and it shall be lawful for Employer to recover the same from him in the manner prescribed in this contract or in any other manner legally permissible; and if it is found that the contractor was paid less than what was due to him under the contract in respect of any work executed by him under it, the amount of such under payment shall be duly paid by Employer to the contractor, without any interest thereon whatsoever.

Provided that the Employer shall not be entitled to recover any sum over paid, nor the contractor shall be entitled to payment of any sum paid short where such payment has been agreed upon between the Engineer on the one hand and the contractor on the other under any term of the contract permitting payment for work after assessment by the Engineer.

51. As Built Drawings:

- 51.1. The Contractor shall supply "as built" Drawings by the dates stated in the Contract Data.
- 51.2. If the Contractor does not supply the Drawings by the dates stated in the Contract Data, or they do not receive the Engineer's approval, the Engineer shall withhold the amount stated in the Contract Data from payments due to the Contractor.

52. Rights of Breach of Contract:

- 52.1. The Employer may rescind/determine the Contract if the Contractor causes a fundamental breach of the Contract.
- 52.2. Fundamental breaches of Contract shall include, but shall not be limited to, the following:
 - 52.2.1. if the contactor has, without reasonable cause, suspended the progress of the work or has failed to proceed with the work with due diligence so that in the opinion of the Engineer (which shall be final and binding) he will be unable to secure completion of the work by the date for

completion and continues to do so after a notice in writing of seven days from the Engineer.

- 52.2.2. the Contractor is declared as bankrupt or goes into liquidation other than for approved reconstruction or amalgamation;
- 52.2.3. the Engineer gives Notice that failure to correct/reconstruct or replace a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Engineer;
- 52.2.4. the Contractor does not maintain a Security, which is required;
- 52.2.5. the Contractor has delayed the completion of the Works by the number of days for which the maximum amount of compensation/ liquidated damages can be paid, as defined in **clause 44.1**;
- 52.2.6. the Contractor fails to provide insurance cover as required under clause 13;
- 52.2.7. If the Contractor, in the judgment of the Employer, has engaged in the corrupt or fraudulent practice in competing for or in executing the Contract. For the purpose of this clause, "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official in the procurement process or in Contract execution. "Fraudulent Practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Employer and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid process at artificial non-competitive levels and to deprive the Employer of the benefits of free and open competition.
- 52.2.8. If the Contractor has not completed at least thirty percent of the value of construction Work required to be completed after half of the completion period has elapsed;
- 52.2.9. If the Contractor fails to set up a field laboratory with the prescribed equipment, within the period specified in the Contract Data;
- 52.2.10. If the Contractor fails to deploy machinery and equipment or personnel as specified in the contract Data at the appropriate time;
- 52.2.11. if the contractor fails to complete the work within the stipulated date or items of work with individual date of completion, if any stipulated, on or before such date(s) of completion and does not complete them within the period specified in a notice given in writing in that behalf by the Engineer;
- 52.2.12. If the Contractor persistently neglects to carry out his obligations under the contract and / or commits default in complying with any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him in that behalf by the Engineer.
- 52.2.13. If the contractor shall offer or give or agree to give to any person in U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd or to any other person on his behalf any gift or consideration of any kind as

an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this or any other contract with U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd;

- 52.2.14. If the contractor being a company shall pass a resolution or the court shall make an order that the company shall be wound up or if a receiver or a manager on behalf of a creditor shall be appointed or if circumstances shall arise which entitle the court or the creditor to appoint a receiver or a manager or which entitle the court to make a winding up order;
- 52.2.15. If the contractor assigns, transfers, sublets (engagement of labour on a piece work basis or of labour with materials not to be incorporated in the work, shall not be deemed to be subletting) or otherwise parts with or attempts to assign, transfer, sublet or otherwise parts with the entire works or any portion thereof without the prior written approval of the Engineer;
- 52.2.16. Any other fundamental breaches as specified in the Contract Data
- 52.3. Notwithstanding the above, the Employer may determine the Contract for convenience.
- 52.4. If the Contract is rescinded /determined, the Contractor shall stop work immediately, make the Site safe and secure, and leave the Site as soon as reasonably possible.
- 52.5. Foreclosure of Contract due to abandonment or reduction in scope of the work: If at any time after acceptance of the tender or during the progress of work, the purpose or object for which the work is being done changes due to any supervening cause and as a result of which the work has to be abandoned or reduced in scope the Engineer shall give notice in writing to that effect to the contractor stating the decision as well as the cause for such decision and the contractor shall act accordingly in the matter. The contractor shall have no claim to any payment of compensation or otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the works in full but which he did not derive in consequence of the foreclosure of the whole or part of the works.

The contractor shall be paid at contract rates, full amount for work executed at site. Nothing extra shall be paid to contractor by the Engineer for any expenditure incurred on preliminary site work e.g. temporary access roads, temporary labour huts, staff quarters and site office; storage accommodation and water storage tanks which could not be utilised on the work to the full extent in the view of foreclosure;

Employer shall have the option to take over contractor's materials or any part of thereof brought to site. For materials taken over by Employer, cost of such materials as detailed by Engineer shall be paid. The cost shall, however, take in to account purchase price, cost of transportation and deterioration or damage which may have been caused to materials whilst in the custody of the contractor.

Any new item (not covered under this tender document) introduced & sanctioned by Government as new or as replacement of existing item due to technical reason (or any other reason) may or may not be included in the scope of work of this tender/contract.

Employer reserves the full right, without being liable for any damages or obligation, to get it executed separately.

- 52.6. **Termination of Contract on the Death of the Contractor:** Without prejudice to any of the rights or remedies under this contract, if the contractor dies, the Employer shall have the option of terminating the contract without compensation to the contractor.
- 52.7. Without prejudice to any of the rights or remedies under this contract, if the client/ Government withdraw the work from Employer due to any reason, at any stage of construction, the Employer shall have the option of terminating the contract without compensation to the contractor.

53. Payment upon Rescission /Determination of the Contract:

- 53.1. If the contract is rescinded (of which rescission notice in writing to the contractor under the hand of the Engineer shall be conclusive evidence) and in which case the security deposit of the contractor together with such sum or sums due to him under the contract shall stand forfeited and be absolutely at the disposal of the Employer.
- 53.2. If the Contract is determined at the Employer's convenience, the Engineer shall issue a certificate for the value of the work done, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the Contract, and less taxes due to be deducted at source as per applicable law.
- 53.3. If the contract is Determined due to breach of contract the Engineer may call in other contractor, or employ daily labour to dismantle bad work if necessary (the bad work to be certified by the Engineer whose decision shall be final) and to renew and complete the said works and pay the cost of such contractor for daily labour and price of materials required for such dismantling, renewing and completion out of the said security deposit or such sum or sums as may be due to the contractor under this contract, and if such cost be more than the amount made up the security money and the sum or sums due to the contractor under this contract the difference between it and the sum made up by the security money and the balance due to the contractor as aforesaid shall be a debt due from the said contractor.

In the event of either of the above courses (under sub-clauses 53.1 or 53.3) being adopted by the Engineer, the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials, or entered into any agreements, or made any advance on account of, or with a view to the execution of the work or the performance of the contract. And in case the contract shall be rescinded under the provision aforesaid, the contractor shall not be entitled to recover or be paid any sum for any work therefore actually performed under this contract, unless and until the Engineer shall have 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.

54. Non-Exercise of Contractor Liability to Pay Compensation:

54.1. In any case in which any of the powers conferred upon the Engineer by clause 53 thereof shall have become exercisable, the same shall not constitute a waiver of any of the conditions hereof, and such power shall notwithstanding be exercisable in the event of any future case of default by the contractor for which by any clause or clauses hereof he is declared liable to pay compensation amounting to the whole of his security deposit and the liability of the contractor for past and future compensation shall remain unaffected. In the event of the Engineer putting in force either of the powers (Clause 53.1) or (Clause 53.3) vested in him under the preceding clauses, he may, if he so desires, take possession of all or any tools, plant, materials and store in or upon the or site thereof or belonging to the contractor or procured by him intended to be used for the execution of the work or any part thereof, paying or allowing for the same in account at prevailing market rates, such rates to be certified by the Engineer whose certificates thereof shall be final otherwise the Engineer may issue notice in writing to the contractor or his other authorized agents to remove such tools, plants, materials or stores from the premises (within a time to be specified in such notice, and) in the event of the contractor failing to comply with any such requisition, the Engineer may remove them at the contractor's expenses or sell them by auction or private sale on account of the contractor and at his risk in all respects, and the certificate of the Engineer as the expenses of any such removal, and the amount of the proceeds and expense of any such sale shall be final and conclusive against the contractor

55. Releases from Performance:

- 55.1. If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of the Employer or the Contractor, the Engineer shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which a commitment was made.
- 55.2. In case, the work cannot be started due to reasons not within the control of the contractor within 1/6th of the stipulated time for completion of work or six months, whichever is later, either party may close the contract. In such eventuality, the Performance Guarantee of the contractor shall be refunded, but no payment on account of interest, loss or damages or any compensation for the work remaining unexecuted etc. shall be payable at all.

56. Escalation:

56.1. Payments shall be made subject to revision of the project and availability of funds received from the client (funds may be released in a phased manner) in no case expenditure will be made in the excess of 95% of funds received from client less contingencies, centage and other charges (till balance 5% fund withheld on account of completion of project is released by the Govt.). **However, in case of non-availability of fund from client,** if the completion of the project is delayed beyond the date as specified in the contract and due to this reason the cost revision is sanctioned and released by the government to U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh

Ltd, the claim of contractor (if any) may be considered by Engineer on work done/work to be done basis. Such compensation for escalation shall not be more than sanctioned by the government.

56.2. However if such escalation is not found to be justified by the Govt. the contractor shall be liable to complete the whole work without any compensation whatsoever.

F. OTHER CONDITIONS OF CONTRACT:-

57. Labour:

- 57.1. The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.
- 57.2. The Contractor shall, if required by the Engineer, deliver to the Engineer a return in detail, in such form and at such intervals as the Engineer may prescribe, showing the staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such other information as the Engineer may require.

58. Compliance With Labour Regulations

- 58.1. During continuance of the Contract, the Contractor and his Sub Contractors shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications and bye laws of the State or Central Government or local authority and any other labour law (including rules), regulations, by laws that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or the local authority. Salient features of some of the major labour laws that are applicable to construction industry are given in Appendix to Part I General Condition of Contract. The Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made there under, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for nonof stipulated in observance the provisions the notifications/bye laws/Acts/Rules/regulations including amendments, if any, on the part of the Contractor, the Engineer/Employer shall have the right to deduct any money due to the Contractor including his amount of performance security. The Employer/Engineer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer.
- 58.2. The employees of the Contractor and the Sub-Contractor in no case shall be treated as the employees of the Employer at any point of time.
- 58.3. Security Deposit of the work shall not be refunded till the contractor produces a clearance certificate from the Labour Officer. As soon as the work is virtually complete the contractor shall apply for the clearance certificate to the Labour Officer under intimation to the Engineer. The Engineer on receipt of the said communication shall write to the Labour Officer to intimate if any complaint is pending against the contractor in respect of the work. If no complaint is pending, on record till after 3 months after completion of the work and/or no communication is received from the Labour Officer to this effect till six months after the date of completion, it will be

deemed to have received the clearance certificate and the Security Deposit may be released if otherwise due.

59. Drawings and Photographs of the Works:

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

60. The Apprentices Act 1961:

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

61. Criminals are prohibited from bidding:

- 61.1. Any bidders having **criminal record** is not allowed to participate in the bidding process. Any person who is having criminal cases against him or involved in the **organised crime or gangster activities or Mafia or Goonda or Anti-social activity** are strictly prohibited to participate in the bidding process. If it is established that any bidder has **criminal record**, his bid shall be automatically cancelled.
- 61.2. The bidder has to produce Solvency certificate, self-declaration affidavit (on the prescribed proforma which is attached with the bid document) etc., issued by the competent authority in original with bid document.
- **62.** Any bidder who is an Advocate and Registered with any State Bar Council shall not be allowed to participate in the bidding. If it is established that the contractor is registered with the state bar council, **his bid shall be automatically cancelled.**

Appendix to Part I

General Condition of Contract

SALIENT FEATURES OF SOME MAJOR LABOUR LAWS APPLICABLE TO ESTABLISHMENTS ENGAGED IN BUILDING AND OTHER CONSTRUCTION WORK.

a) Workmen Compensation Act 1923: - The Act provides for compensation in case of injury by accident arising out of and during the course of employment.

b) Payment of Gratuity Act 1972: - Gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if an employee has completed the prescribed minimum years (say, five years) of service or more or on death the rate of prescribed minimum days'(say, 15 days) wages for every completed year of service. The Act is applicable to all establishments employing the prescribed minimum number (say, 10) or more employees.

c) Employees P.F. and Miscellaneous Provision Act 1952: The Act Provides for monthly contributions by the Employer plus workers at the rate prescribed (say, 10% or 8.33%). The benefits payable under the Act are:

i. Pension or family pension on retirement or death as the case may be.

ii. Deposit linked insurance on the death in harness of the worker.

iii. Payment of P.F. accumulation on retirement/death etc.

d) Maternity Benefit Act 1951: - The Act provides for leave and some other benefits to women employees in case of confinement or miscarriage etc.

e) Contract Labour (Regulation & Abolition) Act 1970: - The Act provides for certain welfare measures to be provided by the Contractor to contract labour and in case the Contractor fails to provide, the same are required to be provided, by the Principal Employer by Law. The principal Employer is required to take Certificate of Registration and the Contractor is required to take license from the designated Officer. The Act is applicable to the establishments or Contractor of Principal Employer if they employ prescribed minimum (say 20) or more contract labour.

f) Minimum Wages Act 1948: - The Employer is to pay not less than the Minimum Wages fixed by appropriate Government as per provisions of the Act if the employment is a scheduled employment. Construction of buildings, roads, runways are scheduled employment.

g) Payment of Wages Act 1936: - It lays down as to by what date the wages are to be paid, when it will be paid and what deductions can be made from the wages of the workers.

h) Equal Remuneration Act 1979: - The Act provides for payment of equal wages for work of equal nature to male and female workers and for not making discrimination against female employees in the matters of transfers, training and promotions etc.

i) Payment of Bonus Act 1965: - The Act is applicable to all establishments employing prescribed minimum (say, 20) or more workmen. The Act provides for payments of annual bonus within the prescribed range of percentage of wages to employees drawing up to the prescribed amount of wages, calculated in the prescribed manner. The Act does not apply to certain establishments. The

newly set-up establishments are exempted for five years in certain circumstances. States may have different number of employment size.

j) Industrial Disputes Act 1947: - The Act lays down the machinery and procedure for resolution of industrial disputes, in what situations a strike or lock-out becomes illegal and what are the requirements for laying off or retrenching the employees or closing down the establishment.

k) Industrial Employment (Standing Orders) Act 1946: - It is applicable to all establishments employing prescribed minimum (say, 100, or 50). The Act provides for laying down rules governing the conditions of employment by the Employer on matters provided in the Act and get these certified by the designated Authority.

I) Trade Unions Act 1926: - The Act lays down the procedure for registration of trade unions of workmen and Employers. The Trade Unions registered under the Act have been given certain immunities from civil and criminal liabilities.

m) Child Labour (Prohibition & Regulation) Act 1986: - The Act prohibits employment of children below 14 years of age in certain occupations and processes and provides for regulations of employment of children in all other occupations and processes. Employment of child labour is prohibited in building and construction industry.

n) Inter-State Migrant Workmen's (Regulation of Employment & Conditions of Service) Act 1979: -The Act is applicable to an establishment which employs prescribed minimum (say, five) or more inter-state migrant workmen through an intermediary (who has recruited workmen in one state for employment in the establishment situated in another state). The Inter-State migrant workmen, in an establishment to which this Act becomes applicable, are required to be provided certain facilities such as Housing, Medical-Aid, Travelling expenses from home up to the establishment and back etc.

o) The Building and Other Construction workers (Regulation of Employment and Conditions of Service) Act 1996 and the Cess Act of 1996: - All the establishments who carry on any building or other construction work and employs the prescribed minimum (say, 10) or more workers are covered under this Act. All such establishments are required to pay cosset the rate not exceeding 2% of the cost of construction as may be modified by the Government. The Employer of the establishment is required to provide safety measures at the building or construction work and other welfare measures, such as canteens, first-aid facilities, ambulance, housing accommodations for workers near the work place etc. The Employer to whom the Act applies has to obtain a registration certificate from the Registering Officer appointed by the Government.

p) Factories Act 1948: - The Act lays down the procedure for approval of plans before setting up a factory, health and safety provisions, welfare provisions, working hours, annual earned leave and rendering information regarding accidents or dangerous occurrences to designated authorities. It is applicable to premises employing the prescribed minimum (say, 10) persons or more with aid of power or another prescribed minimum (say, 20) or more persons without the aid of power engaged in manufacturing process.

q) Arbitration and Conciliation Act, 1996: - The Act lays down the procedure for appointment of Arbitrator, Arbitration and conciliation, Jurisdiction of Arbitral Tribunals, Recourse against Arbitral award appeals.

<u>SECTION – 1</u>

PART-II

CONDITIONS OF CONTRACT

SPECIAL CONDITIONS OF CONTRACT

Conditions of Contract Part – II Special Conditions of Contract
SPECIAL CONDITIONS OF CONTRACT

1. Contractor to indemnify Employer against Patent Rights:

The contractor shall fully indemnify and keep indemnified the Employer against any action, claim or proceedings relating to infringement or use of any patent or design or any alleged patent or design rights and shall pay any royalties which may be payable in respect of any article or part thereof included in the contract. In the event of any claims made under or action brought against Department/Government in respect of any such matters as aforesaid, the contractor shall be immediately notified thereof and the contractor shall be at liberty, at his own expense, to settle any dispute or to conduct any litigation that may arise there from, provided that the contractor shall not be liable to indemnify the Employer if the infringement of the patent or design or any alleged patent or design right is the direct result of an order passed by the Engineer in this behalf.

2. **Unfiltered water supply:**

The contractor(s) shall make his/their own arrangements for water required for the work and nothing extra will be paid for the same. This will be subject to the following conditions.

- i. That the water used by the contractor(s) shall be fit for construction purposes to the satisfaction of the Engineer.
- ii. The Engineer shall make alternative arrangements for supply of water at the risk and cost of contractor(s) if the arrangements made by the contractor(s) for procurement of water are in the opinion of the Engineer, unsatisfactory.

3. **Departmental water supply, if available:**

Water if available may be supplied to the contractor by the Department subject to the following conditions: -

- i. The water charges @ 1% shall be recovered on gross amount of the work done.
- ii. The contractor(s) shall make his/their own arrangement of water connection and lying of pipelines from existing main of source of supply.
- iii. The Department does not guarantee to maintain uninterrupted supply of water and it will be incumbent on the contractor(s) to make alternative arrangements for water at his/their own cost in the event of any temporary break down in the water main so that the progress of his/their work is not held up for want of water. No claim of damage or refund of water charges will be entertained on account of such break down.

4. **Changes in firm's Constitution to be intimated:**

Where the contractor is a partnership firm, the prior approval in writing of the Engineer shall be obtained before any change is made in the constitution of the firm. Where the contractor is an individual or a Hindu undivided family business concern, such approval as aforesaid shall likewise be obtained before the contractor enters into any partnership agreement where under the partnership firm would have the right to carry out the works hereby undertaken by the contractor. If previous approval as aforesaid is not obtained, the contract shall be deemed to have been assigned in contravention of the terms of the agreement and action may be taken at the risk and the cost of the Contractor.

5. **Recovery of Compensation paid to workmen:**

In every case in which by virtue of the provision sub-section (1) of Section 12, of the Workmen's Compensation Act.1 923, Employer is obliged to pay compensation to a workman employed by the contractor, in execution of the works, Employer will recover from the contractor, the amount of the compensation so paid, and, without prejudice to the rights of the Employer under sub-section (2) of Section 12, of the said Act, Employer shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by Employer to the contractor whether under this contract or otherwise. Employer shall not be bound to contest any claim made against it under sub-section (1) of Section 12, of the said Act, except on the written request of the contractor and upon his giving to Employer full security for all costs for which Employer might become liable in consequence of contesting such claim.

5.1 In respect of all labour directly or indirectly employed in the work for the performance of the contractors part of this contract, the contractor shall at his own expense 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 arrangement and provide necessary facilities as aforesaid, he shall be liable to pay a penalty of Rs. 2000/- for each default and in addition, the Engineer shall be at liberty to make arrangement and provide facilities as aforesaid and recover the costs incurred in that behalf from the contractor. The contractor shall be completely held responsible for any mishap at site due to insufficient safety measures.

6. **Building to Remain free from unauthorised Occupation:**

It shall be the responsibility of the contractor to see that the building under construction is not occupied by anybody unauthorised during construction, and is handed over to the Client with vacant possession of complete building. If such building though completed is occupied illegally, then the Engineer shall have the option to refuse to accept the said building I buildings in that position. Any delay in acceptance on this account will be treated as the delay in completion and for such delay, a levy up to 5% of tendered value of work may be imposed by the Employer whose decision shall be final both with regard to the justification and quantum and be binding on the contractor. However, Engineer, through a notice, may require the contractor to remove the illegal occupation any time on or before construction and delivery.

7. Engagement of agency for specialized works:

Contractor has to **engage specialized agencies** for specialised items of works as mentioned in **Clause 2.20** of ITB. Only those specialised agencies/firms who have satisfactorily executed works as per following criteria during last 10 (Ten) years are eligible for the specialized works-

(a) Three similar works each costing not less than 30% of cost of this job in tender

Or

(b) Two similar works each costing not less than 40% of cost of this job in tender.

Or

(c) One similar work costing not less than 60% of cost of this job in tender.

Approval of the specialised agencies for each specialised work shall be obtained from the Engineer within one month of award of work. Even if, such specialised items of work shall be executed by the specialised agencies, the work shall be deemed to be executed by the tenderer for all purposes and the responsibility of the quality of items of works executed shall continue to be that of the tenderer only.

8. Contractor has to provide reinforcement cover blocks made of approved proprietary pre packed free flowing mortars as per approved make by Employer.

9. Security of Assets:

The contractor shall place a private security agency on the site of work for safety & security of materials, personnel's, vehicles and machinery etc. at his own cost. The security agency shall also regulate movement of materials, personnel's, vehicles and machinery. This agency shall follow the guidelines given by the Engineer. Nothing extra shall be paid on this account.

10. Site Office:

- 11. The contractor shall produce all original documents of Custom & other clearances of all the materials imported (if any) up to the quantity to be used for tendered work before use.
- 12. The contractor shall procure TMT bars of appropriate grade, as per design, from primary steel producers such as SAIL, Tata Steel Ltd, RINL, Jindal Steel & Power Ltd and JSW Steel Ltd or any other producer as approved by the Employer who are using iron ore as the basic raw material/input.
- 13. The contractor shall have to obtain vouchers and furnish test certificates to the Engineer in respect of all supplies of steel brought by him to the site of work.
- 14. The steel reinforcement bars shall be stored by the contractor at site of work in such a way as to prevent distortion & corrosion, and nothing extra shall be paid on this account. Bars of different sizes and lengths shall be stored separately to facilitate easy counting and checking.
- 15. Reinforcement including authorised spacer bars and lap lengths shall be measured in length of different diameters, as actually (not more than as specified in the drawing) used in the work, nearest to a centimeter. Wastage and unauthorised overlaps shall not be measured.
- 16. The tenderer shall see the approaches to the site. In case any approach from main road is required by the contractor, the same shall be made good, improved and maintained by the contractor at his own cost. No payment shall be made on this account.
- 17. The contractor (s) shall give to the Municipality, Police and other authorities all necessary notices etc. that may be required by law and obtain all requisite Licenses for temporary obstructions, enclosures etc. and pay all fee, taxes and charges which may be leviable on account of these operations in executing the contract. He shall make good any damage to the adjoining property whether public or private and shall supply and maintain light and other for cautioning the public at night.
- 18. Contractor shall provide permanent bench marks and other reference points for the proper execution of work and these shall be preserved till the end of work. All such reference points shall be in relation to the levels and locations, given in the drawings.
- 19. The contractor shall make his own arrangement for obtaining electric connection and make necessary payments directly to the department concerned.
- 20. Other agencies doing works related with this project may also simultaneously execute their works and the contractor shall afford necessary facilities for the same. The contractor shall leave such necessary holes, openings etc. for laying/burying in the work, pipes cables,

conduits, clamps, boxes and hooks for fan clamps etc. as may be required for the other agencies. Nothing extra over the Agreement rates shall be paid for doing these.

- 21. The building work shall be carried out in the manner complying in all respects with the requirements of the relevant bylaws and regulations of the local body under the jurisdiction of which the work is to be executed or as directed by the Engineer and nothing extra shall be paid on this account.
- 22. The contractor shall give a performance test of the entire installation(s) as per standing specifications before the work is finally accepted by making his own arrangements for water supply, electricity etc. and nothing extra whatsoever shall be payable for the same.
- 23. It shall be ensured by the contractor that no electric live wire is left exposed or unattended to avoid any accidents in this regard.
- 24. The structural and architectural drawings shall at all times be properly co-related before executing any work. However, in case of any discrepancy in the item given in the schedule of quantities appended with the tender and Architectural drawings relating to the relevant item, the former shall prevail unless otherwise given in writing by the Engineer.
- 25. The contractor shall maintain in perfect condition, all portions executed till completion of the entire work allotted to him. Where however phased delivery of work is contemplated these provisions shall apply separately to each phase.
- 26. If the work is carried out in more than one shift or during night, no claim on this accounts shall be entertained.
- 27. The contractor shall be responsible for the watch and ward/guard of the buildings, safety of all fittings and fixtures including sanitary and water supply fittings and fixtures provided by him against pilferage and breakage during the period of installations and thereafter till the building is physically handed over to the department. No extra payment shall be made on this account.
- 28. The contractor shall take instructions from the Engineer for stacking of materials. No excavated earth or building materials etc. shall be stacked/collected in areas where other buildings, roads, services, compound walls etc. are to be constructed. Any trenching and digging for laying sewer line/water lines/cable etc. shall be commenced by the contractor only when all men, machinery and materials have been arranged and closing of the trenches shall thereafter be ensured within least possible time.
- 29. The works shall be carried out in accordance with the Architectural drawings and structural drawings, to be issued from time to time by the Engineer. Before commencement of any item of work, the contractor shall correlate all the relevant architectural and structural drawings issued for the work and satisfy himself that the information available thereof is complete and unambiguous. The discrepancy, if any shall be brought to the notice of the Engineer before execution of the work. The contractor alone shall be responsible for any loss or damage executing by the commencement of work on the basis of any erroneous and or incomplete information.
- 30. The contractor shall take all precautions to avoid accidents, exhibiting caution boards day and night, speed limit boards, red flags, red light and providing necessary barriers and other measures required from time to time. The contractor shall be responsible for all damages and accidents due to negligence on his part.
- 31. Other agencies may also simultaneously execute and install the works of electrification, air conditioning, lifts, fire-fighting etc. for this work and the contractor shall provide necessary

facilities for the same. The contractor shall leave such recesses, holes openings etc. as may be required for the electric, air-conditioning and other related works (for which inserts, sleeves, brackets, conduits base pinion, clamps etc. shall be got arranged free of cost by the department unless otherwise specifically mentioned) and the contractor shall fix the same at time of casting of concrete, stone work & brick work, if required and nothing extra shall be payable on this account.

- 32. The contractor shall conduct work so as not to interfere with or hinder the progress or completion of the work being performed by other contractor(s) or by the Engineer and shall as far as possible arrange his work and shall place and dispose of the materials being used or removed so as not to interfere with the operations of other contractor or he shall arrange his work with that of the others in an acceptable and coordinated manner and shall perform it in proper sequence to the complete satisfaction of others.
- 33. All Architectural drawings given in the tender other than those indicated in nomenclature of items are only indicative of the nature of the work and materials/fixings involved unless and otherwise specifically mentioned. However, the work shall be executed in accordance with the drawings duly approved by the Engineer.
- 34. Samples of all materials and fittings to be used in the work in respect of brand manufacturer and quality shall be got approved from the Engineer, and shall be preserved till the completion of the work. Articles bearing BIS certifications mark shall only be used unless no manufacturer has got BIS mark for the particular material. Any material/fitting whose sample has not been approved and any other unapproved material brought by the contractor shall be immediately removed as soon as directed.

Unless otherwise specified in the schedule of quantities the rates for all items shall be considered as inclusive of pumping/baling out water, if necessary, for which no extra payment shall be made. Those conditions shall be considered to include water from any source such as inflow of flood, surface and sub-soil water etc. and shall apply to the execution in any season.

35. Environmental Compliance:

All essential environmental measures including but not limited to the following are to be taken to control pollution.

35.1 Construction Vehicles, Equipment and Machinery:

- 35.1.1 All vehicles, equipment and machinery to be procured for construction shall conform to the relevant Bureau of India Standard (BIS) norms.
- 35.1.2 Emission from the vehicles must conform to environmental norms.
- 35.1.3 Dust produced from the vehicular movement and other site activities is to be mitigated by sprinkling of water.
- 35.1.4 Noise limits for construction equipments shall not exceed 75dB(A), measured at one meter from the edge of the equipment in free area, as specified in the Environment Protection Act, 1986, schedule VI part E, as amended till date, The maximum noise levels near the construction site should be limited to 65dB (A) Leq (5 min) in project area.

35.2 Construction Wastes Disposal:

35.2.1 The pre-identified dump locations will be a part of solid waste management plan to be prepared by the Contractor in consultation with Engineer.

- 35.2.2 Contractor shall get approved the location of disposal site prior to commencement of the excavation on any section of the project location.
- 35.2.3 Contractor shall ensure that any spoils of material/construction waste will not be disposed of in any municipality solid waste collection bins.

35.3 **Procurement of Construction Materials:**

- 35.3.1 All vehicles delivering construction materials to the site shall be covered to avoid spillage of materials and maintain cleanliness of the roads.
- 35.3.2 Wheel Tires of all vehicles used by of the contractor, or any of his subcontractor or materials suppliers shall be cleaned and washed clear of all dust/mud before leaving the project premises. This shall be done by routing the vehicles through tire washing tracks.
- 35.3.3 Contractor shall arrange for regular water sprinkling at least twice a day (i.e. morning and evening) for dust suppression of the construction sites and unpaved roads used by his construction vehicles.

35.4 Water Pollution:

- 35.4.1 The Contractor shall take all precautionary measures to prevent the wastewater during construction to accumulate anywhere.
- 35.4.2 The wastewater arising from the project is to be disposed of in the manner that is acceptable to the Engineer.

35.5 Air and Noise Pollution

Contractor shall use dust screens and sprinkle water around the construction site to arrest spreading of dust in the air and surrounding areas.

- 35.5.1 Contractor shall ensure that all vehicles, equipment and machinery used for construction are regularly maintained and confirm that emission levels comply with environmental emission standards/norms.
- 35.5.2 For controlling the noise from Vehicles, Plants and Equipments, the Contractor shall confirm the following:
 - 35.5.2.1 All vehicles and equipment used in construction will be fitted with exhaust silencers.
 - 35.5.2.2 Servicing of all construction vehicles and machinery will be done regularly and during routine servicing operations, the effectiveness of exhaust silencers will be checked and if found defective must be replaced by the contractor immediately.
 - 35.5.2.3 Noise emission from compactors (rollers) front loaders, concrete mixers, cranes (movable), vibrators and saws should be less than 75 dB(A).
 - 35.5.2.4 As per the standards/guidelines for control of Noise Pollution from Stationary Diesel Generator (DG) sets, noise emission in dB(A) from DG Set (15-500 KVA) should be less than 94+10 log 10 (KVA).
- 35.6 Adequate drinking water facility should be provided at site, adequate number of decentralized latrines and urinals to be provided for construction workers.
- 35.7 Full time workers residing on site should be provided with clean and adequate temporary hutment.

- 35.8 Adopt measures to prevent air pollution in the vicinity of the site due to construction activities. The best practices should be followed (as adopted from international best practice documents and codes).
- 35.9 Identify roads on-site that would be used for vehicular traffic. Update vehicular roads (if these are unpaved) by increasing the surface strength by improving particle size, shape and mineral type that make up the surface base. Add surface gravel to reduce source of dust emission. Limit amount of fine particles (smaller than 0.075mm) to 10-20%. Limit vehicular speed on site 10 km/h. Nothing extra will be payable for this.
- 35.10 All material storages should be adequately covered and contained so that they are not exposed to situations where winds on site could lead to dust/particulate emissions.
- 35.11 Spills of dirt or dusty materials shall be cleaned up promptly so the spilled material does not become a source of fugitive dust and also to prevent seepage of pollutant laden water into the ground aquifers. When cleaning up the spill, ensure that the clean up process does not generate additional dust. Similarly, spilled concrete slurries or liquid wastes should be contained/cleaned up immediately before they can infiltrate into the soil/ground or runoff in nearby areas.
- 35.12 Ensure that water spraying is carried out by wetting the surface by spraying water on:
 - 35.12.1 Any dusty material.
 - 35.12.2 Areas where demolition work is carried out.
 - 35.12.3 Any unpaved main-haul road and.
 - 35.12.4 Areas where excavation or earth moving activities are to be carried out.
- 35.13 The contractor shall ensure the following:
 - 35.13.1 Cover and enclose the site by providing dust screen, sheeting or netting to scaffold along the perimeter of a building.
 - 35.13.2 Covering stockpiles of dusty material with impervious sheeting.
 - 35.13.3 Covering dusty load on vehicles by impervious sheeting before they leave the site.
 - 35.13.4 Transferring, handling/storing dry loose materials like bulk cement and dry pulverized fly ash inside a totally enclosed system.
- 35.14 Clear vegetation only from areas where work will start right away
- 35.15 Provide sheet covering/barricading of site of not less than 3m height along the site boundary, next to a road or other public area. Nothing extra will be paid for this.
- 35.16 The contractor shall provide experienced personnel with suitable training to ensure that these methods are implemented. Prior to the commencement of any work, the method of working, plant equipment and air pollution control system to be used on site should be made available for the inspection and approval of the Engineer to ensure that these are suitable for the project.
- 35.17 Employ measures to segregate the waste on-site into inert, chemical or hazardous wastes. Recycle the unused chemical/hazardous wastes such as oil, paint, batteries and asbestos. The inert waste is to be disposed of to Municipal Corporation/local bodies dump yard and landfill sites.
- 35.18 To preserve the existing landscape and protect it from degradation during the process of construction. Select proper timing for construction activity to minimize the

disturbance such as soil pollution due to spilling of the construction material and its mixing with rainwater. The construction management plan including soil erosion control management plan shall be prepared accordingly. The application of soil erosion control measures includes construction of gravel pits and tire washing bays of approved size and specification for all vehicular site entry/exits, protection of slopes greater than 10%. Sedimentation Collection System and run-off diversion systems shall be in place before the commencement of construction activity. Preserve and protect the existing vegetation by not-disturbing or damaging the specified site areas during construction.

- 35.19 The Contractor should follow the construction plan as proposed by the Engineer/landscape consultant to minimize the site disturbance such as soil pollution due to spilling. Use staging and spill prevention and control plan to restrict the spilling of the contaminating material on site.
- 35.20 Spill prevention and control plans should clearly state measures to stop the source of the spill, measures to contain the spill and measures to dispose the contaminated material and hazardous wastes. It should also state the designation of personnel trained to prevent and control spills, hazardous wastes include pesticides, paints, cleaners and petroleum products.
- 35.21 A soil Erosion and Sedimentation Control Plan (ESCP) should be prepared prior to construction and should be applied effectively.
- 35.22 Hazardous wastes include pesticides, paints, cleaners, and petroleum products.
- 35.23 The contractor shall ensure that no construction leaches (Ex: cement slurry) is allowed to percolate into the ground. Adequate precautions are to be taken to safeguard against this including reduction of wasteful curing processes, collection, basic filtering and reuse. The contractor shall follow requisite measures for collecting drainage water run-off from construction areas and material storage sites and diverting water flow away from such polluted areas. Temporary drainage channels, perimeter dike/swale, etc. shall be constructed to carry the pollutant-laden water directly to the treatment device or facility (municipal sewer line).
- 35.24 All lighting installed by the contractor around the site and at the labour quarters during construction shall be LED bulbs of the appropriate illumination levels. This condition is a must, unless specifically prescribed otherwise.

36. Safety Measures to be followed:

- 36.1 Suitable scaffolds should be provided for workmen for all works that cannot safely be done from the ground, or from solid construction except such short period work as can be done safely from ladders. When a ladder is used, an extra mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well, suitable footholds and hand-hold shall be provided on the ladder and the ladder shall be given an inclination not steeper than 1/4 to 1 (1/4 horizontal and 1 vertical.)
- 36.2 Scaffolding of staging more than 3.6 m (12ft.) above the ground or floor, swung or suspended from an overhead support or erected with stationary support shall have a guard rail properly attached or bolted, braced and otherwise secured at least 90 cm. (3ft.) high 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.

- 36.3 Working platforms, gangways and stairways should be so constructed that they should not sag unduly or unequally, and if the height of the platform or the gangway or the stairway is more than 3.6 m (12ft.) above ground level or floor level, they should be closely boarded, should have adequate width and should be suitably fastened as described in 37.2 above.
- 36.4 Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent the fall of person or materials by providing suitable fencing or railing whose minimum height shall be 90 cm. (3ft.)
- Safe means of access shall be provided to all working platforms and other working 36.5 places. Every ladder shall be securely fixed. No portable single ladder shall be over 9m. (30ft.) in length while the width between side rails in rung ladder shall in no case be less than 29 cm. for ladder up to and including 3 m. (10 ft.) in length. For longer ladders, this width should be increased at least 1/4 for each additional 30 cm. (1 foot) of length. Uniform step spacing of not more than 30 cm shall be kept. Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites or 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 accident and shall be bound to bear the expenses of defense of every suit, action or other proceedings at law that may be brought by any person 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 person or which may, with the consent of the contractor, be paid to compensate any claim by any such person.
 - 36.5.1 **Excavation and Trenching** All trenches 1.2 m. (4ft.) or more in depth, shall at all times be supplied with at least one ladder for each 30 m. (100 ft.) in length or fraction thereof, Ladder shall extend from bottom of the trench to at least 90 cm. (3ft.) above the surface of the ground. The side of the trenches which are 1.5 m. (5ft.) or more in depth shall be stepped back to give suitable slope or securely held by timber bracing, so as to avoid the danger of sides collapsing. The excavated materials shall not be placed within 1.5 m. (5ft.) of the edges of the trench or half of the depth of the trench whichever is more. Cutting shall be done from top to bottom. Under no circumstances, undermining or undercutting shall be done.

36.5.2 Safety Measures for digging bore holes:-

- 36.5.2.1 If the bore well is successful, it should be safely capped to avoid caving and collapse of the bore well. The failed and the abandoned ones should be completely refilled to avoid caving and collapse;
- 36.5.2.2 During drilling, Sign boards should be erected near the site with the address of the drilling contractor and the Engineer of the work;

- 36.5.2.3 Suitable fencing should be erected around the well during the drilling and after the installation of the rig on the point of drilling, flags shall be put 50 m around the point of drilling to avoid entry of people;
- 36.5.2.4 After the completion of the borewell, the contractor should cap the bore well properly by welding steel plate, cover the bore well with the drilled wet soil and fix thorny shrubs over the soil. This should be done even while repairing the pump;
- 36.5.2.5 After the borewell is drilled the entire site should be brought to the ground level.
- 36.6 **Demolition** Before any demolition work is commenced and also during the progress of the work,
 - 36.6.1 All roads and open areas adjacent to the work site shall either be closed or suitably protected.
 - 36.6.2 No electric cable or apparatus which is liable to be a source of danger or a cable or apparatus used by the operator shall remain electrically charged.
 - 36.6.3 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.
- 36.7 All necessary personal safety equipment as considered adequate by the Engineer should 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: The following safety equipment shall invariably be provided.
 - 36.7.1 Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective goggles.
 - 36.7.2 Those engaged in white washing and mixing or stacking of cement bags or any material which is injurious to the eyes, shall be provided with protective goggles.
 - 36.7.3 Those engaged in welding works shall be provided with welder's protective eye shields.
 - 36.7.4 Stone breaker shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
- 36.8 When the work is done near any place where there is risk of drowning, 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 treatment of all injuries likely to be obtained during the course of the work.
- 36.9 Use of hoisting machines and tackle including their attachments, anchorage and supports shall conform to the following standards or conditions: 36.9.1
 - 36.9.1.1 These shall be of good mechanical construction, sound materials and adequate strength and free from patent defects and shall be kept repaired and in good working order.

- 36.9.1.2 Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength, and free from patent defects.
- 36.9.1.3 Use of durable and reusable formwork systems to replace timber formwork and ensure that formwork where used is properly maintained.
- 36.9.2 Every crane driver or hoisting appliance operator shall be properly qualified and no person under the age of 21 years should be in charge of any hoisting machine including any scaffolding winch or give signals to operator.
- 36.9.3 In case of every hoisting machine and of every chain ring hook, shackle swivel and pulley block used in hoisting or as 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 case of a hoisting machine having a variable safe working load each safe working load and the condition under which it is applicable shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.
- 36.9.4 The contractors shall notify the safe working load of the machine to the Engineer whenever he brings any machinery to site of work and get it verified by Engineer.
- 36.10 Motors, gearing, transmission, electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguards. Hoisting appliances should be provided with such means as will reduce to the minimum the risk of accidental descent of the load. Adequate precautions should be taken to reduce to the minimum the risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations which are already energized, insulating mats, wearing apparel, such as gloves, sleeves and boots as may be necessary should be provided. The worker should not wear any rings, watches and carry keys or other materials which are good conductors of electricity.
- 36.11 All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided at or near places of work.
- 36.12 These safety provisions should be brought to the notice of all concerned by display on a notice board at a prominent place at work spot. The person responsible for compliance of the safety code shall be named therein by the contractor.
- 36.13 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 or Engineer or their representatives.
- 36.14 Notwithstanding the above clauses as above there is nothing in these to exempt the contractor from the operations of any other Act or Rule in force in the Republic of India.

37. FIRST-AID FACILITIES

- 37.1 At every work place, there shall be provided and maintained, so as to be easily accessible during working hours, first-aid boxes at the rate of not less than one box for 150 contract labour or part thereof ordinarily employed.
- 37.2 The first-aid box shall be distinctly marked with a red cross on white back ground and shall contain the following equipment:-
 - 37.2.1 For work places in which the number of contract labour employed does not exceed 50-

Each first-aid box shall contain the following equipments :-

- 1. 6 small sterilised dressings.
- 2. 3 medium size sterilised dressings.
- 3. 3 large size sterilised dressings.
- 4. 3 large sterilised burn dressings.
- 5. 1 (30 ml.) bottle containing a two per cent alcoholic solution of iodine.
- 6. 1 (30 ml.) bottle containing salvolatile having the dose and mode of administration indicated on the label.
- 7. 1 snakebite lancet.
- 8. 1 (30 gms.) bottle of potassium permanganate crystals.
- 9. 1 pair scissors.
- 10. 1 copy of the first-aid leaflet issued by the Director General, Factory Advice Service and Labour Institutes, Government of India.
- 11. 1 bottle containing 100 tablets (each of 5 gms.) of aspirin.
- 12. Ointment for burns.
- 13. A bottle of suitable surgical antiseptic solution.
- 37.2.2 For work places in which the number of contract labour exceed 50. Each first-aid box shall contain the following equipments.
 - 1. 12 small sterilised dressings.
 - 2. 6 medium size sterilised dressings.
 - 3. 6 large size sterilised dressings.
 - 4. 6 large size sterilised burn dressings.
 - 5. 6 (15 gms.) packets sterilised cotton wool.
 - 6. 1 (60 ml.) bottle containing a two per cent alcoholic solution iodine.
 - 7. 1 (60 ml.) bottle containing salvolatile having the dose and mode of administration indicated on the label.
 - 8. 1 roll of adhesive plaster.
 - 9. 1 snake bite lancet.
 - 10. 1 (30 gms.) bottle of potassium permanganate crystals.
 - 11. 1 pair scissors.
 - 12. 1 copy of the first-aid leaflet issued by the Director General Factory Advice Service and Labour Institutes /Government of India.
 - 13. A bottle containing 100 tablets (each of 5 gms.) of aspirin.
 - 14. Ointment for burns.
 - 15. A bottle of suitable surgical antiseptic solution.
- 37.3 Adequate arrangements shall be made for immediate recoupment of the equipment when necessary.

- 37.4 Nothing except the prescribed contents shall be kept in the First-aid box.
- 37.5 The first-aid box shall be kept in charge of a responsible person who shall always be readily available during the working hours of the work place.
- 37.6 A person in charge of the First-aid box shall be a person trained in First-aid treatment in the work places where the number of contract labour employed is 150 or more.
- 37.7 In work places where the number of contract labour employed is 500 or more and hospital facilities are not available within easy distance from the works. First-aid posts shall be established and run by a trained compounder. The compounder shall be on duty and shall be available at all hours when the workers are at work.
- 37.8 Where work places are situated in places which are not towns or cities, a suitable motor transport shall be kept readily available to carry injured person or person suddenly taken ill to the nearest hospital.

<u>SECTION -2</u>

SPECIFICATIONS

Technical Specifications

SPECIFICATIONS:

For items mentioned in the Schedule 'G' i.e. BOQ, the Contractor shall follow UPPWD Specifications/ BIS Standards/ CPWD Specifications relevant to the particular items of work. Wherever these specifications are not available standard engineering practices will be adopted with the approval of the Engineer. Some of the broad specifications are listed hereunder-

1. Site Clearance:

- **1.1** Before the earth work is started, the area coming under cutting and filling shall be cleared of shrubs, rank vegetation, grass, brushwood, trees and saplings of girth up to 30cm measured at a height of one metre above ground level and rubbish removed up to a distance of 50 metres outside the periphery of the area under clearance. The roots of trees and saplings shall be removed to a depth of 60cm below ground level or 30 cm below formation level or 15 cm below sub grade level, whichever is lower, and the holes or hollows filled up with the earth, rammed and leveled.
- **1.2** The trees of girth above 30 cm measured at a height of one metre above ground shall be cut only after permission of the Engineer is obtained in writing. The roots of trees shall also be removed as specified in Clause 1.1 payment for cutting such trees and removing the roots shall be made separately.
- **1.3** Existing structures and services such as old buildings, culverts, fencing, water supply pipe lines, sewers, power cables, communication cables, drainage pipes etc. within or adjacent to the area if required to be diverted/removed, shall be diverted/dismantled as per directions of the Engineer and payment for such diversion/dismantling works shall be made separately.
- 1.4 Lead of 50m mentioned in the 'Schedule Of Quantities' is the average lead for the disposal of excavated earth within the site of work. The actual lead for the disposal of earth may be more or less than the 50 m for which no cost adjustment shall be made in the rates.

2. Setting Out And Making Profiles:

- 2.1 A masonry pillar to serve as a bench mark will be erected at a suitable point in the area, which is visible from the largest area. This bench mark shall be constructed connected with the standard bench mark as approved by the Engineer. Necessary profiles with strings stretched on pegs, bamboos or 'Burjis' shall be made to indicate the correct formation levels before the work is started. The contractor shall supply labour and material for constructing bench mark, setting out and making profiles and connecting bench mark with the standard bench mark at his own cost. The pegs, bamboos or 'Burjis' and the bench mark shall be maintained by the contractor at his own cost during the excavation to check the profiles.
- **2.2** The ground levels shall be taken at 5 to 15 metres intervals (as directed by the Engineer Charge) in uniformly sloping ground and at closer intervals where local mounds, pits or undulations are met with. The ground levels shall be recorded in field books and plotted on plans. The plans shall be drawn to a scale of 5 metres to one cm or any other suitable scale decided by the Engineer. North direction line and position of bench mark shall invariable be shown on the plans. These plans shall, be signed by the contractor and the Engineer or their authorized representatives before the earth work is started. The labour required for taking levels shall be supplied by the contractor at his own cost.

3. Earth Work& Filling:

3.1 All excavation operations manually or by mechanical means shall include excavation and 'getting out' the excavated materials. In case of excavation for trenches, basements, water tanks etc. 'getting out' shall include throwing the excavated materials at a distance of at least one metre or half the depth of excavation, whichever

is more, clear off the edge of excavation. In all other cases 'getting out' shall include depositing the excavated materials as specified. The subsequent disposal of the excavated material shall be either stated as a separate item or included with the items of excavation stating lead.

- **3.2** In case of excavation for foundation in trenches or over areas, the bed of excavation shall be to the correct level or slope and consolidated by watering and ramming. If the excavation for foundation is done to a depth greater than that shown in the drawings or as required by the Engineer, the excess depth shall be made good by the contractor at his own cost with the concrete of the mix used for levelling/ bed concrete for foundations. Soft/defective spots at the bed of the foundations shall be dugout and filled with concrete (to be paid separately) as directed by the Engineer.
- **3.3** The earth used for filling shall be free from all roots, grass, shrubs, rank vegetation, brushwood,tress, sapling and rubbish.
- **3.4** Filling with excavated earth shall be done in regular horizontal layers each not exceeding 20 cm in depth. All lumps and clods exceeding 8 cm in any direction shall be broken. Each layer shall be watered and consolidated with steel rammer or ½ tons roller. Where specified, every third and top must layer shall also be consolidated with power roller of minimum 8 tonnes. Wherever depth of filling exceeds 1.5 metre vibratory power roller shall be used to consolidate the filing unless otherwise directed by Engineer-in-charge. The top and sides of filling shall be neatly dressed. The contractor shall make good all subsidence and shrinkage in earth fillings, embankments, traverses etc. during execution and till the completion of work unless otherwise specified.
- **3.5** Sand shall be clean and free from dust organic and foreign matter and its grading shall be within the limits of grading zone IV or V specified in Section 3 'Mortars' of CPWD Specifications, 2009.
- 4. Anti-Termite Treatment:
 - **4.1** The termites find access to the super-structure of the building either through the timber buried in the ground or by means of mud shelter tubes constructed over unprotected foundations. Anti-termite treatment can be either during the time of construction i.e. pre-constructional chemical treatment or after the building has been constructed i.e. treatment for existing building.
 - **4.2** Prevention of the termite from reaching the super-structure of the building and its contents can be achieved by creating a chemical barrier between the ground, from where the termites come and other contents of the building which may form food for the termites. This is achieved by treating the soil beneath the building and around the foundation with a suitable insecticide.
 - **4.3** *Chemicals:* Any one of the following chemicals in water emulsion to achieve the percentage concentration specified against each chemical shall be used:
 - (i) Chlorphriphos emulsifiable concentrate of 20%

(ii) Lindane emulsifiable concentrate of 20%

Anti-termite treatment chemical is available in concentrated form in the market and concentration is indicated on the sealed containers. To achieve the specified percentage of concentration, Chemical should be diluted with water in required quantity before it is used. Graduated containers shall be used for dilution of chemical with water in the required proportion to achieve the desired percentage of concentration.

5. Design Mix Concrete:

The contractor shall be required to submit two separate design mix of concrete with and without using plasticizers, separately. The decision of the engineer to specify the design mix of concrete based on above shall be final.

- **5.1** Coarse aggregate: As per UPPWD/CPWD Specifications.
- **5.2** Fine Aggregate: As per UPPWD/CPWD Specifications.
- **5.3** Water: It shall conform to requirements laid down in IS:456: 2000 and UPPWD/CPWD specifications.
- 5.4 Cement: Cement arranged by the contractor will be PPC (in bags) conforming to IS: 1489-Part-1. If for any reasons, cement other than that specified in this Para for example OPC of grade 43 or higher grade is brought to site by contractor, payments rate as well as the quantity to be used in the design mix concrete will remain unchanged.
- 5.5 Slump: Design slump should be clearly specified in the mix design.
- **5.6** Admixtures shall not be used without approval of Engineer. Wherever required, admixtures of approved quality shall be mixed with concrete as specified. The admixtures shall conform to IS: 9103. The chlorides content in the admixture shall satisfy the requirements of BS: 5075. The total amount of chlorides admixture mixed concrete shall also satisfy the requirements of IS: 456. The contractor shall not be paid anything extra for admixture required for achieving desired workability without any change in specified water cement ratio for RCC/CC work.
- **5.7** Grade of Concrete: The compressive strength of various grades of concrete shall to be given as below:

	~ .				
	Grade	Compressive	Specified	Minimum	Maximum
	designation	strength on 15	characteristic	cement quantity	water
		cm cubes min. 7	compressive	(Kg. per cum.	cement ratio
		days (N/mm2)	strength at 28	Mtr.)	
			days		
			(N/mrn2)		
Ι	M20	Nominal Mix	20	As per table 5,	0.50
II	M25	As per design	25	clause	0.50
III	M30	As per design	30	6.1.2,8.2.4.1 &	0.45
IV	M35	As per design	35	9.1.2 page 20 of IS 456-2000	0.45
V	M40	As per design	40	15 430-2000	0.40

Note

(i) In the designation of a concrete mix letter M refers to the mix and number to the specified characteristic compressive strength of 15 cm x 15 cm x 15 cm - cube 28 days expressed in N/mrn2

(ii) Design slump has to be constantly monitored and maintained during placing of concrete through slump tests carried out as per PWD/CPWD specifications for Mortar, Concrete and RCC works, and records maintained accordingly.

- **5.8** The concrete mix design/laboratory tests with and without admixture shall be got done by contractor at his own cost and will be carried out by the contractor through one of the following laboratory *Test* houses:
 - **5.8.1** IITKanpur, IIT Varanasi, IIT Roorkee, HBTI Kanpur.

5.8.2 Other Approved Labs/Govt. Engineering Institutions as directed by the Engineer.

The various ingredients for mix design/laboratory tests shall be sent to the test houses through the Engineer and the samples of such aggregate &cement shall be preserved at site by the department.

- **5.9** The contractor shall submit the mix design report from any of above approved laboratory for approval of Engineer-in-Charge within 30 days from the date of issue of letter of acceptance of the tender. No concreting shall be done until the mix design is approved by the Engineer.
- **5.10** In case of change of source or characteristic properties of the ingredients used in the concrete mix during the work, a revised laboratory mix design report conducted at laboratory established at site shall be submitted by the contractor as per the direction of the Engineer.

6. Approval Of Design Mix:

The mix design for a specified grade of concrete shall be done for a target mean compressive strength Tck=Fck+ 1.65 s.

Where Fck= Characteristic compressive strength of 28 days

s = Standard deviation which depends on degree of quality control

The degree of quality control for this work is 'good" for which the standard deviation (s) obtained for different grades of concrete shall be as bellow:

Grade of Concrete	For "Good" quality of control
M25	4.00
M30	5.00
M35	5.00
M40	5.00

Of the six specimen of each set three shall be tested at seven days and remaining three at 28 days. The preliminary tests at seven days are intended only to indicate the strength to be attained at 28 days

- 6.1 All cost of mix designing and testing connected therewith including charges payable to the laboratory shall be borne by the contractor.
- **6.2** The batching plant shall conform to IS:4925. It shall have the facilities of presetting the quantity to be weighed with automatic cutoff when the same is achieved. Concreting at places may have to be resorted to through concrete pump for which nothing extra shall be paid.
- **6.3** All other operations in concreting work like Mixing, Slump, Laying Placing of concrete, compaction curing etc. not mentioned in this particular specification for Design Mix of concrete shall be as per Employer.

7. Work Strength Test:

7.1 Test Specimen: Workstrength test shall be conducted in accordance with IS: 456 on random sampling. Each test shall be conducted on six specimens, three of which shall be tested at 7 days and remaining three at 28 days.

7.2 Test Results Of Samples:

The test result of the sample shall be the average of the strength of three specimens. The individual variation shall not be more than 15 percent of the average. If more, the test results of the sample are invalid. Not more than 90% of the total test shall be done at the laboratory established at site by contractor and 10% testing of materials shall be got done from IIT/ NIT. However, for the tests to be carried out by the external laboratories, the contractor shall supply free of charge all the materials required for testing, including transportation. If the tests which were to be conducted in the site laboratory are conducted in other laboratories for any the reasons the cost of such tests shall be borne by the contractor.

7.3 Lot Size

The minimum frequency of sampling of concrete of each grade shall be according to the following: -

Quantity of concrete in the work cubic metre per day	Number of samples.	
1-5	1	
6-15	2	
16-30	3	
31-50	4	
51& above	4 + one additional sample for additional 50 cubic meter or part thereof.	

Note: At least one sample shall be taken from each shift.

7.4 STANDARDS OF ACCEPTANCE

(i) In case the test result of all the samples is above the characteristic compressive strength, the concrete shall be accepted.

- (ii) In case the test result of one or more samples fails to meet the requirement (i) above it shall be accepted if both the following conditions are met:
 - a) Any individual test result is not less than (Fck 4) N/mm2
 - b) The mean of test result from any group of four consecutive samples is more than (Fck+4) N/mm2.

(iii)Concrete of each grade shall be assessed separately.

- (iv) Concrete is liable to be rejected if it is porous or honeycombed, its placing has been interrupted without providing a proper construction joint or the reinforcement has been displaced beyond the tolerances specified, or construction tolerances have not been met. However the hardened concrete may be accepted after carrying out suitable remedial measures to the satisfaction of the Engineer for which nothing extra is payable to the contractor.
- **7.5** Only MS centering/shuttering and scaffolding material unless & otherwise specified/permitted shall be used for all RCC work to give an even finish of concrete surface. However marine ply shuttering in exceptional cases as per site requirement may be used on specific request from contractor on approval by the Engineer.

- **7.6** In case of actual average compressive strength being less than specified strength which shall be governed by Para 'Standard of Acceptance" as above the rate payable shall be worked out accordingly on prorata basis.
- **7.7** In case of rejection of concrete on account of unacceptable compressive strength governed by Para "Standard of Acceptance" as above, the work for which samples have failed shall be redone at the cost of contractors. However the Engineer may order for additional test (like cutting cores, ultrasonic pulse velocity test, load tests on structure or part of structure etc.) to be carried out at the cost of contractor to ascertain if the portion of structure wherein concrete represented by the sample has been used, can be retained on the basis of results of individual or combination of these tests. The contractor shall take remedial measures necessary to retain the structure as approved by the Engineer without any extra cost. However for payment the basis of rate payable to contractor shall be governed by the 28 days cube test results.

8. Sanitary Installations, Water Supply And Drainage:

- **8.1** The work of water supply and sanitary installations shall be got executed by the contractor in accordance with design & drawings provided by Consultant through Engineer. The entire responsibility for the quality of work will however rest with the building contractor only.
- **8.2** The work of water supply, internal sanitary installations and drainage etc. shall be carried out as per the bylaws of the Municipal Corporation or any other local body.
- **8.3** The contractor shall engage licensed plumbers for the work. Nothing extra shall be paid/reimbursed for the same.
- **8.4** The contractor shall give a performance test of the entire installation(s) as per standing specifications before the work is finally accepted by making his own arrangements for water supply, electricity etc. and nothing extra whatsoever shall be payable for the same.
- **8.5** The work in general shall be carried out as per PWD/ CPWD specifications. Rate includes all materials, labour and all the operations mentioned in the respective items unless and otherwise specifically mentioned.
- **8.6** The contractor shall be responsible for all the protection of sanitary, water supply fittings and fixtures against pilferage and breakage during the period of installation until the completion *I* handing over of the work.
- **8.7** The contractor shall submit completion plans for water supply internal sanitary installations and building drainage work within thirty days of the date of completion. These plans are to be submitted on drawings prepared preferably through computers (1 original copy+ 3 photocopies) on suitable scales to show the general arrangement and desired details.

9. Water Proofing Treatments:

The contractor shall associate himself with the specialised firm, for water proofing treatment for basement/flower ground floor, underground tank and on roofs. Guarantee in the prescribed Proforma attached with tender document shall be given by the contactor, for a period of 10 years from end of defect liability period prescribed in the contract which shall be also signed by engaged specified firm. If however any defect is noticed during the guarantee period, it shall be rectified by the contractor within seven days of intimation. In

case it is not attended to, the same will be got done by another agency at the risk and cost of the contractor.

10. **uPVC Window Works:**

The contractor shall associate himself with the specialised firm, for uPVC Window Work for all the windows. Guarantee in the prescribed Proforma attached with tender document shall be given by the contactor, for a period of 10 years from end of defect liability period prescribed in the contract which shall be also signed by engaged specified firm.

11. Sewerage Treatment Plant (If Proposed):

The contractor shall associate himself with the specialised firm, for installation and commissioning of Sewerage Treatment Plant. Guarantee in the prescribed Proforma attached with tender document shall be given by the contactor, for a period of 10 years from end of defect liability period prescribed in the contract which shall be also signed by engaged specified firm. If however any defect is noticed during the guarantee period, it shall be rectified by the contractor within seven days of intimation. In case it is not attended to, the same will be got done by another agency at the risk and cost of the contractor.

12. Antitermite Treatment Works:

The contractor shall associate himself with the specialised firm, for antitermite treatment of the building.Guarantee in the prescribed Proforma attached with tender document shall be given by the contactor, for a period of 10 years from end of defect liability period prescribed in the contract which shall be also signed by engaged specified firm. If however any defect is noticed during the guarantee period, it shall be rectified by the contractor within seven days of intimation. In case it is not attended to, the same will be got done by another agency at the risk and cost of the contractor.

13. Additional Specifications For Internal Electrical Works:

- **13.1** The work stall be carried out strict compliance to UPPWD Specifications or CPWD Specifications in that order and in accordance with Indian Electricity Rules, 1956, Indian Electricity Act, 2003 as amended up to date and as per instructions of the Engineer including as below and nothing will be paid extra.
- **13.2** All material shall be got approved from Engineer before use. All damages done to the building during execution of Electrical work shall be the responsibility of the contractor and the same will be made good immediately at his own cost to the satisfaction of the Engineer. Any expenditure incurred by the department in this condition shall be recovered from the contractor and decision of the Engineer about recovery shall be final.
- **13.3** All hardware items such as screws, thimbles, G.I. wires etc. which are essentially required for completing an item as per specifications will be deemed to be included in the item even when the same have not been specifically mentioned. All hardware materials such as nuts/bolls/screws/washers etc. to be used in the work shall be zinc/cadmium plated iron.
- **13.4** CONDUIT LAYOUT shall be prepared by contractor and got approved before execution of work. In case contractor does not do so before start of work, recovery @ 2 (two)% of tendered amount of IE Works shall be made from the bill. Minimum No. of Junctions to be kept, & if required junctions to be kept underneath the fitting locations

in corridor/ rooms so that junctions are not visible after fittings are fixed/ in position. Drop of conduit shall be well planned w.r.t. location of fitting/ D.B. and crisscrossing to be avoided. All chases in walls shall be cut using electrical chisels/ cutters. For this purpose electricity shall be arranged by contractor. In case contractor fails to do chase cutting by electrical chisels/cutters and resorts to manual methods, a recovery of Rs. 50/- per point shall be made from contractor's bill.

Whenever point wiring items is executed in casing system PVC box of make approved by Employer shall be provided in place of MS box. In case cable in the lift shaft is also to be fixed contractor shall have to liaison with CIVIL/Lift agency to make use of the scaffolding provided by them.

- **13.5** Any conduit which is not to be wired by the contractor shall be provided with GI fish wire for wiring by some other agency subsequently. Nothing extra shall be paid for the same.
- **13.6** Copper wire up to 4 sq.mm. may be single stranded or multi stranded whereas wires 4 sq.mm, shall be multi-stranded conductor. Termination of multi- stranded conductors shall be done using crimping type thimbles at both the ends. Nothing extra shall be paid for the same.
- 13.7 All metal boxes to be applied primer and painted, then only should be installed else recovery @ Rs. 20/- per point should be made from contractor's bill. Boxes shall rave socket arrangement for tightening screws, instead of simple holes in M.S. sheet. Boxes shall be again painted at the time of wiring.
- **13.8** For Sub main Wiring, Colour Code for different phases and Neutral (R.Y.B. black) to be maintained. While circuit wiring, wiring for fan point, wiring for light point shall be done with different colours for easy identification. Wiring for neutral shall be done with back colour and all connections to fans & fittings wherever visible shall be made with white PVC insulated copper wire or wherever cover sleeve may be provided. At Switch board, Switch shall be fixed in a logical manner w.r.t. fitting layout.
- **13.9** Unless specifically approved by Engineer loose wire box, above DB shall not be provide however DB's shall rave loose wire box of same make.
- **13.10** All connections to MC B's shall be made using thimble/lugs.
- **13.11** All DB's i/c incoming &outgoing MCB's shall be suitably numbered with PAINT for location/circuits. DB shall be fixed in recess suitably (30 mm. approx. projected from unplastered wall) to ease opening of door. Top of DB to match with door frame height as per site conditions.
- **13.12** Phenolic laminated sheet shall be of Egg white colour, and shall be filed/rounded at edges and of minimum 3mm thick.
- **13.13** All fittings and fans should be property earthed through the protective conductor.
- **13.14** Provision of earth bars in main boards, earth terminal block in DB's &earth studs in all metal boxes shall be made, connection to this stud shall be crimped.
- **13.15** A camp type termination should be made in the termination of earth strips (where provided) to pipe electrodes to provide surface type contact.
- **13.16** The earthing shall be carried out in the presence of the Engineer or his authorized representative

- **13.17** The size at switch box for providing Modular Plate Type Switch/Sockets shall be properly settled to take care of all necessary switches/screws/fan regulators. Blanking plate if required shall also be provided at no extra cost.
- **13.18** For point wiring in steel conduit all piano type switch or all modular type switches/sockets/telephone/outlets/T.V. outlets shall be of make approved by U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd.
- **13.19** Whenever supply items like fans & fitting etc. are also included in the Schedule of work, such items shall be executed only after completion of at least 75% of the wiring items.
- **13.20** The contractor shall make his own arrangement at his own cost for electrical/general tools and plants required for the work.
- **13.21** The work shall be carried out according to approved drawing/details which shall be subsequently issued to the successful tenderer for execution of work and as per instructions of the Engineer who will have the right to change the layout as per requirement at site and the contractor shall not have any claim due to change in layout.
- **13.22** The work shall be carried out in engineering like manner. The bad workmanship will not be accepted and defects shall be rectified at contractor's cost of the satisfaction of the Engineer The programme of electrical works are to be co-ordinated in accordance with the building work and no claim for idle labour will stipulated in the tender, electrical work, shall have to be completed along with completion of civil work.
- **13.23** All the debris of the electrical works should be removed and the site should be cleared by the contractor immediately after the accruing of debris. Similarly, and rejected material should be immediately cleared off from the site by the contractor.
- **13.24** Watch and ward of the material/equipment shall be the responsibility of the contractor till handing over of installation to the department.
- **13.25** The contractor or his representative is bound to sign the site order book as and when required by the Engineer and to comply with the remarks therein.
- **13.26** The entire installation shall be at the risk and responsibility of the contractor until these are tested and handed over to the department.
- **13.26.1** Some of the items of work, if already executed; on that case the successful tenderer shall have to use these items for completing the work. For wiring, the existing conduit wherever required shall be used by the contractor. The recovery will be made for these items as accepted rate of similar items.
- **13.27** Test Certificate: Test certificate for the work carried out shall also be submitted falling which recovery @1% tendered amount & maximum of Rs. 15000/- shall be made from final bill.
- **13.28 Panels:** Drawing of panel shall be submitted for approval within 30 days from award of work and fabrication to be taken up only after approval of such drawing. Before painting proper surface treatment shall be done and then powder coated. These shall be offered for inspection during fabrication.
- **13.29** Quantities indicated in Schedule of work are only tentative, contractor shall consult Engineer before procurement. Payment shall be made only for the quantities actually executed and measured.
- **13.30** Contractor has to plan his activities, so that electrical work is to be carried out in close co-ordination with CIVIL work and in no case CIVIL work be delayed because of delay in electrical work and the work has to be completed accordingly.

- **13.31** The makes for items shall be as per lists attached.
- **13.32** Material to be used in the work shall be ISI marked as applicable. The material in required quantity to be used in the work shall be got approved from the Engineer before its use at site. The Engineer shall reserve the right to instruct the contractor to remove the material which in his opinion, is not as per specifications.
- **13.33** Contractor shall preserve copies of invoices, test certificates, gate passes etc. to prove the genuineness of material / purchases. The responsibility of procurement, genuine material of specialized works shall rest with the contractor.

List of Preferred Makes

- 1- Specifications/Brands Names of materials and finishes as approved are listed below. Although this list is fairly comprehensive, however approved equivalent materials and finishes of other firms may be used, in case it is established by the Engineer that the brands specified below are not available in the market and subject to approval of the Client as well as General Manager, concerned.
- 2- All branded materials will be ISI Marked of approved specifications (wherever BIS Specifications are available).
- **3-** Listing of the materials does not absolve the Contractor from his responsibility of using the products only if they are satisfied about quality and performance of the products. Proper quality checking must be performed for every product being used.

Sl. No.	Name of Materials	Approved Brand/Make
(A)	CIVIL WORKS	
1	Cement PPC/OPC43 Grade IS 8112:1989 IS 1489 (Part - 1): 1991	ACC, J.P. Rewa, Birla, Diamond, Ambuja cement, Shree, Prism, Ultratech, Lafarge, Bangur, Binani (I.S.I. Marked of approved quality)
2	White Cement	J&K White, Birla White (I.S.I Marked)
3	Putty	Birla, J.K. Putty
4	Plaster of Paris	Shree Ram, Adhar Shree, Sakarni, Decotouch.
5	AAC Blocks	BILT, Magicrete or equivalent.
6	Structural Steel / TMT bars-Fe 500/415 IS 1786:2008, IS 2062:2011	
	(a) Primary Producers (Iron Ore as basic raw material)	SAIL, TATA, RINL, Jindal Steel & Power Ltd. and Jindal Saw Ltd.
	(b) MS Hallow Tubular/ Box sections	SAIL, TATA, Jindal, RINL Essar Steel
7	Aluminum sections	Hindalco, Jindal, Indian Aluminum Co., Bhoruka, Mahavir.
8	Fittings for Aluminum Doors and Windows	Ebco, Doorline, Classic, Argent, Crown, Hardima,Everite, Sigma, Earl Bihari (Ebco). For 'A' Class Buildings- Besides above Ozone, Dorma.
9	Aluminum Composite Panels	Alstrong, Aluco-bond, Aludecor/Durabuild.
10	(a) Mineral Fibre False Ceiling	Armstrong, OWA, Hi-Steel, Saint Gobain, USG Boral.
	(b) Metal False Ceiling	Hi-Steel, Hunter Duglus, Armstrong, Saint Gobain, Durlum, USG Boral.
	(c) PVC Laminated Gypsum Ceiling Tiles	Hi-Steel
11	Adhesives/Glues. IS: 9103:1999 (Mandatory for Toilets)	Fevicol, Bermicol, Pidilite, Vam Organic, CICO (I.S.I. Marked of approved quality)
12	Roofing (a) A.C. Sheet (b) G.I. Sheet (IS 277:2003) (c) Alloy sheets	UPAL, CHARMINAR, A.C.C. TATA Shakti, Trishul, Jindal, Bhushan. KALZIP, BEMO, SANKO, KINGSPAN-RIGIDAL, TATA
13	Flush Doors/Particle Boards / Laminated Boards IS 12823:1990 Grade-I Type-II, IS 1659:2004, IS 2202 (Part 1) : 1999	Novapan, Ecoboard, Bhutan Board Duro, National, Euro, Kitply, Kitlam, Sarda Ply, Green Ply, Eco Merino, Bison Panels, Century, Archid, Nothern Plywood.

~		
SI. No.	Name of Materials	Approved Brand/Make
14	PVC Door Shutters & Frames	Sintex or Plasopan, M/s Raj Shri or equivalent.
15	Laminates	Decolam, Merino, Greenlam, Archid, Century.
16	Water Proofing Compounds/Admixtures IS:2645:2003, IS: 9103:1999	Pidilite, Sika Qualcrete, Impermo, Mec, Duraseal, Acco- Proof, CICO, Degussa, Don, Fosroc, Penetron MC Bauchemie, Chocksey, Fairmate, Sunanda Chemicals.
17	Crystalline Waterproofing Admixtures	Penetron, Xypex or equivalent.
18	Polymer Waterproofing	Kerkoll, BASF, MC
19	Antitermite Chemicals	Premise(Byer), Choropyriphos.
20	Chemical/Mechanical Anchor Fasteners	HILTI, FISCHER, Canon.
21	Dry/ Liquid Distemper	ICI, Nerolac, Berger, Johnson & Nicholson, Asian Paints, Shalimar Paint.
22	Water Proofing Cement Paints/ Primers/ Synthetic Paints	Snowcem Plus, Asian, Berger, Nitcocem, Sanotex, Pentuco, Nitcotex, ICI, Nerolac.
23	Epoxy Paint	Neroalc. Sika, Bal Endura
24	Hydraulic Door Closer	Godrej, Hardwyn (Eddy)/Hitech/Sandhu. For 'A' Class Buildings- Besides above Ozone, Dorma.
25	Textured Exterior Paint	Sandtex Matt, Syntex, Apex, Neortex, Colourtex.
26	Mortice Latch	Godrej/Harrison
27	Floor Springs, IS 6315:1992	Hardwyn /Hitech/Sandhu/Godrej
28	Float Glass/ Clear Glass, IS 14900:2000	Atul, Modi Guard, Saint Gobain, AIS or equivalent.
29	Reflective Glass for Structural Glazing/Windows	Asahi India, Saint Gobain, Modi Float, Glaverbel.
30	Drapery Rod	Vista/Mac/Vesta
31	Ceramic Glazed Tiles/Vitrified Tiles IS 13712:1993/ IS: 15622: 2006	Premium Quality Nitco, Somany, Kajaria, Simpolo, Vermora, Johnson, Orient/Bell, RAK, Asian of approved design, colour and shade to be used in consultation with Client.
32	Eoxy Grout for Tile (Tile Adhesive)	Cico, Bell, Pidilite, BASF, SIKA, Bal Endura/Keracol/ Laticrete or equivalent
(B)	INTERNAL ELECTRIFICATION WORKS	
1	M.S Conduit Pipe & Accessories	BEC, NIC, KT, MONARCH, AKG/ M-Kay/ RM Com ISI MARKED
2	PVC conduit Pipe including its accessories IS 9537 (Part 1): 1980/ IEC 60614-1 (1978)	Harsh, CAP Plastics, PARAFLEX, Seiko, Precision, Asian, AKG ISI MARKED
3	Metal clad socket and plug having scrapping earth arrangement.	Hager, Schneider (CG), L&T, Gerard, Legrand.
4	Luminaries, LED-IS 10322 (Part 1) : 1982/ IEC 598-1 (1979) Fluorscent-IS 10322 (Part 1) : 1982/ IEC 598-1 (1979)	PHILIPS, BAJAJ, CROMPTON, Wipro, GE/OSRAM/Syska/Havells ISI MARKED
5	MCB & MCB DB, IS 2675:1983	L&T, Schneider, MDS, Legrand, ABB, C&S, Hager, Havells. Siemens
6	M.S. Boxes	Should be Galvanized
7	BAKALITE SHEET	HYLEM, FORMICA
8	FAN/EXHAUST FAN IS 374:1979	BAJAJ, CROMPTON, KHAITAN, GEC, ORIENT, POLAR, ORTEM, HAVELLS, USHA
9	PVC insulated copper wires i/c control cables, TV/ Telephone Cable, IS	R.R. Kable/Finolex/Lapp Kable/ Havells/ Skytone/Seiko/Ploycab, National (NC)/SBEE Cables.

Sl. No.	Name of Materials	Approved Brand/Make
140.	694:1990/IEC 60227-1 to 5 (1979)	
	094.1990/IEC 00227-1 (0 5 (1979)	
10	1100 V Grade PVC/ XLPE Insulated steel	NICCO, Havells/Finolex/Universal, Rallison/KEI/Gloster
	armoured and overall PVC sheathed, IS	Havells/ National /CCI Polycab/SBEE Cables.
11	694:1990/IEC 60227-1 to 5 (1979)	Siemens/L&T/Schneider/ABB/C&S.
11	MCCB, Timer, SFU, FSU, HRC Fuses, Cable management System/ DLP	Siemens/L&I/Schneidel/ABB/C&S.
	Trunking. IS 13032:1991	
12	Piano Switches/Sockets/T.V./ Telephone	Anchor, Rider, Leader, Havells, Precision, SSK, CPL/
	outlet, Ceiling Rose	Kinjal
12	IS 3854:1997 Modulor type Switches/Seekets T.V./	Lagrand/Sigmana/L&T/ADD/Maalar/MK/Hayalla/
13	Modular type Switches/Sockets T.V./ Telephone outlet/Cell bell / Buzzer.	Legrand/Siemens/L&T/ABB/Moeler/M.K./ Havells/ Philips/Anchor Roma, MDS Mosaic, Crabtree, Kinjal.
14	Ammeter/Voltmeter	AE/IMP/Rishabh/HPL, Universal Electric, L&T, Vaishno
1 f	IS 1248 (Part 2): 2003/ IEC 60051-2 (1984)	(only Digital Type to be used)
15	Selector Switch	Kaycee/Siemens/Bhartiya Cutler Hammer/L&T/ Hager
16	Change over Switch	HPL/H-Elecon/Standard/L&T. / Siemens/Gerard/Clipsal
17	Cable Glands	COMIC, Raychem
18	Cable Tray	Pilco, MEK
19	Indicating Lamps	Teknic/Siemens/L&T/ Vaishnov.
20	Panel Board/ Feeder Pillar/Meter Board	CPRI approved manufactures for PANELS (tested in last
		three years of current rating required or higher) and having ISO: 9001 Certification.
21	Rising Main	L&T/ MDS-Legrand/ C&S/ Schneider/GE
22	Energy Meter/ Multifunctional/ Intelligent	Siemens/HPL/L&T/ Hensel/ Anchor/Havells.
	Energy Meter	
23	Wall Brackets	DECON/Philips/GE/ Havells/ Lustre
24	Angle Holder/Batten Holder	ISI Marked Kinjal/Emperor/ Anchor
25	GEYESER	Racold/ Bajaj/ Crompton/ Jagaur
26	Internet Cable	D-Link/Avaya/Lucent/Finolex/HCL
27	Pumps, IS 9542-1980	
a	Centrifugal Pumps	Kirloskar/ Beacon/ KSB/ Khimline/ Stork
b	Submersible Pumps IS 8034-1989	Modi Industries/ KSB/ Pullen/ ABS/ AQUA/BS/MBH/Hindustan. Groundfos.
с	Copper conductor Flat Submersible Cable,	Finolex / Havells / Universal / Polycab / Skytone
	IS 694:1990/IEC 60227-1 to 5 (1979)	
28	Electrical Equipment	
a	Power Transformer	Bharat Bijlee Ltd. / Crompton Greaves/ Kirloskar/ Voltas/ NGEF/ ABB/ ALSTOM/ Raksan.
b	11 KV Panels	ABB/ Jyoti/ NGEF/ Siemens/ Crompton Greaves/ BHEL/ SCHNEIDER/ ALSTOM
c	415 Panels/ MCB/ MCCB	L&T/ Siemens/ Bhartia Culter Hammer/ GE/ ABB/ SCHEIDER/ LEORAND
d	Instruments & Controls	Universal/ Automatic Electric Ltd./ Meco Instruments/ SHCAN
e	Air Circuit Breaker	Larsan & Turbo/ Siemens/ GE/ SCHNEIDER/ ABB

Sl. No.	Name of Materials	Approved Brand/Make
f	Starters	BHEL/ Perimal Engg./ Enterprising Engg./ Pan Asia/ Seimens, L&T, Schneider (CG), GE
g	Bus Duct	Best & Cromption Engg. Ltd/ Power Gear P. Ltd./ LEORAND
h	Switches & Fuses	L & T/ Siemens/ GE/ ALSTOM/ C&S
29	(a) Fire Extinguishers IS 15683:2006	Ceasefire/Deflame / Bharat /Newage / Fire Shield / Steelage Industries/ Kooverji Devshi/ Fire Stop/ ETCO/ HFE Guard/ Agni/ National/ Vijaya Fire Protection Systems /
	(b) Heat/Smoke Detector/Fire Alarm Panel/Manual Call Point & Speakers	System Sensor /Morley-IAS/ Edwards /Notifier/Honeywell/Agni/National
30	D.G. Sets Engine- IS 10001 Alternator- IS 13364 (part- 1)	Kirloskar green/ Greaves Cotton Ltd./ Crompton Greaves/ Ashok Leyland/ Caterpillar/ Cummins/ Volvo / Penta/ Mahindra/TIL/Eicher
(C)	SANITARY WORKS	
1	Pipes Fitting & Valves	
а	MS Pipes up to 200 dia	Tata Steel/ GST/ BST/ Jindal
b	MS Pipes above 200mm dia	HSL-Heavy/ Mukand/ Jindal/ Tata Steel
c	CI Class Pipes & Fittings	BRM/ Oriental/ Electrosteel/Kesoram/ Udadhaya/ IISCO.
d	Centrifugally (Spun) Cast Iron Pipe (Double Flanged)	NECO, (red) or equivalent conforming to IS: 3989.
e	Sand Cast Iron Pipes & Fittings (IS: 1729)	AMC/ALC/Bengal Iron/HEP/Avon/Hepco
f	C.I Sluice valve, Fire Hydrant & Fixture	Kirloskar, IVS, Leader, Venus, Upadhyay, Sarkar, Suraj, Burn, Zoloto, Kent (I.S.I. Marked of approved quality)
g	HDPE Pipes (Water Supply) IS 4985:2000 & IS 14233:1999	Finolex/ Uniplast/ Supreme/ Duroline/Prince
h	uPVC Pipes (For use in sanitary insallations)	Kisan, Ajanta, Ajay, Uniplas, Supreme, Duroline, Finolex, Jain, Oriplast, Prince, SFMC/Ashirvad
i	cPVC Pipes (Water Supply) IS 16088: 2012, IS 15778:2007	Astral, Ajay, Supreme or equivalent.
j	PP-R Pipes & Fittings (Water Supply)	Finolex, Supreme, SFMC
k	Specialised Waste Pipes	Astral Silencio, Supreme Skyrise (HD Low noise system Waste Pipes).
1	Ball Valves	Zoloto, IBP, Arco.
2	PVC Flushing cistern	Parryware, Hindware, Jaquar, Cera.
3	Mirrors	Saint Gobain, Modi Guard, HNG, Asahi India, Cera, Atul.
4	White Vitreous China Wares	Parryware/Hindware, Neycer, Johnson Peddar, Cera (I.S.I. Marked of approved quality). For 'A' Class Buildings- Besides above Roca, Duravit, Kohler or equivalent.
5	Wash Basin and WC PAN	 Parryware, Hindware, Jaguar, Cera, Jhonson Peddar, Neycer. For 'A' Class Buildings- Besides above Roca, Duravit, Kohler or equivalent. For EWC in toilets of Type-IV/V residential buildings or individual toilets of Class 'A' buildings wall hung type pans should be preferred for ease of cleaning.

Sl. No.	Name of Materials	Approved Brand/Make
6	Low Level PVC Flushing Cistern	Parryware, Hindware, Jhonson Peddar, Seabird, Orient, Cera,Alpine.
7	Plastic Seat Covers with frame	as above
8	Brass/ C.P. Brass Fittings, IS:7784:1993	ESS-ESS, Jaquar, Jhonson, Marc, Cera, , Kohler, L&K, Parryware, GEM, ARK, Plumber, Kingston, PARKO, Metro, Vardhman.
9	PTMT Fittings, IS:9763	Prayag, Prakash, Surya
10	Kitchen Sink / Stainless Steel sink, IS: 13983:1994	Salem, Kingston-Cobra, Cera, Neelkhanth, AMC, Nirali, Parryware, Diamand.
11	G.I. Pipe and Fittings	TATA, Surya, Jindal, QST, GST, Hissar, SAIL, TT Swastik.
12	Ductile Iron Pipes & Specials	Kesoram, Electro Steel, Electrotherm, Jindal Saw.
13	Polythylene Water Storage Tank, IS: 12701:1996	Sintex, Electroplast, Star, Lotus, Purewell, Sheetal, Uniplast.
14	Stone Ware pipe Grade "A"	Parry Perfect, Mahakaushal, Swastic, Anil Hind Ceramic, Orind, and Dev Raj Anand.
15	Manhole covers- CI	RIF, Kajeco, NECO, SKF.

<u>SECTION -3</u>

SCHEDULES

SCHEDULE-"A"

Brief Details of Works and its Location

I / We have read understood and accept for compliance, the above mentioned instructions and conditions of this schedule and have taken these factors into account while quoting rates in Schedule "G".

Signature.....

Name of Contractor.....

Address.....

SCHEDULE – "B"

DRAWINGS ACCOMPANYING THE CONTRACT:

Drawings such as Site Plans, Lay-out plans, Structural/ Architectural Drawings are not available with the bidding documents downloaded from the website and may be obtained from the office of the Ex. Engineer Unit-..... U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd., situated at on payment of Rs

I / We have read understood and accept for compliance, the above mentioned instructions and conditions of this schedule and have taken these factors into account while quoting rates in Schedule "G".

Signature.....

Name of Contractor.....

Address.....

SCHEDULE "C"

LIST OF SAMPLES:-

The following samples are to be submitted by the tenderer within seven days from the date of order to commence the work.

- (1) Cement
- (2) Bricks
- (3) Core sand
- (4) Steel

SCHEDULE "D"

COMPLETION OF WORK:-

The completed work, as specified herein shall mean the total works as specified in schedule "A" to "G" finished in all respects to the entire satisfaction of the Engineer completed within **12** (**Twelve**) calendar months from the date of written order to commence the work and remove defects noticed/found within **12** (**Twelve**) calendar months from the date of handing over of the works.

Any defects noticed in the work during the above period shall be repaired / rectified or replaced in whole or part there of. No extra payment shall be made for such repairs / rectifications.

I / We have read, understood and accept for compliance, the above mentioned instructions and conditions of this schedule and have taken these factors into account while quoting rates.

Signature.....

Name of Contractor.....

Address.....

SCHEDULE-E

BILL OF QUANTITIES

Preamble

1. The Bill of Quantities shall be read in conjunction with the Instructions to Bidders, Conditions of Contract, Special Conditions of Contract, Technical Specifications and Drawings.

2. The quantities given in the Bill of Quantities are estimated and provisional, and are given to provide a common basis for bidding. These are liable to change upto any extent for which no claim shall be admitted whatsoever. The basis of payment will be the actual quantities of work ordered and carried out, as measured by the Contractor and verified by the Engineer and valued at the rates and prices tendered in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Engineer may fix within the terms of the Contract.

3. The rates and prices tendered against Bill of Quantities shall, except in so far as it is otherwise provided under the Contract, include all constructional plant, labour, supervision, materials, erection, maintenance, insurance, profit, and other Taxes (excluding GST), cess (including labour cess) and duties, together with all general risks, liabilities and obligations set out or implied in the Contract.

4. The Contractor shall, while quoting his rates, take into account the Input Tax Credit available under the GST Act relevant to the input services/goods required for proper execution of the work under contract.

5. The rates and prices shall be quoted in percentage terms and resultant contract price will be entirely in Indian Currency.

6. General directions and descriptions of work and materials are not necessarily repeated or summarized in the Bill of Quantities. References to the relevant sections of the contract documentation shall be made before entering % age against the Bill of Quantities.

7. The method of measurement of completed work for payment shall be in accordance with the UPPWD/CPWD Specifications unless otherwise provided in contract.

8. Rock is defined as all materials which, in the opinion of the Engineer, require blasting, or the use of metal wedges and sledgehammers, or the use of compressed air drilling for its removal, and which cannot be extracted by ripping with a tractor of at least 150kw with a single rear mounted heavy duty ripper.

SCHEDULE-F

ADDITIONAL ITEM RATES:-

These will be measured and paid as defined in the contract.
<u>SECTION -4</u>

GUARANTEES & FORMS

Letter of Acceptance

(On the Letter Head)

Subject:- Letter of acceptance for Construction ofatatin District.....

To,

M/s

.....

You are also requested to submit following Stamps, affidavits and documents for execution of contract.

List of documents-



Yours faithfully,

....,

Endt.No. & Dated as above.

Copy to the following for information & necessary action.

(Issue of Notice to Proceed with Work)

OFFICE OF THE,(Letter Head)

Subject:-Issue of Notice to proceed with the work

To,

.....

.....

.....

Dear Sirs:

Yours faithfully,

STANDARD FORM OF AGREEMENT

{Notes on Standard Form of Agreement: The Agreement should incorporate any corrections or modifications to the Bid resulting from corrections of errors as mentioned in Instructions to Bidders.}

Standard Form: Agreement

Agreement

.....

.....

.....

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

NOW THIS AGREEMENT WITNESSETH as follows:

1. In this Agreement, words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to, and they shall be deemed to form and be read and construed as part of this Agreement.

2. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all aspects within the provisions of the Contract.

3. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying the defects wherein the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

4. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz:

i) Letter of Acceptance;

ii) Notice to proceed with the works;

iii) Contractor's Bid;

- iv) Contract Data;
- v) Special Conditions of contract and General Conditions of Contract;
- vi) Specifications;
- vii) Drawings& Schedules;
- viii) Bill of Quantities; and
- ix) Any other document listed in the Contract Data as forming part of the contract.

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

.....

.....

.....

.

The Common Seal of

was hereinto affixed in the presence of:

Signed, Sealed and Delivered by the said to,

In the presence of:

Binding Signature of Employer's authorised representative.

Binding Signature of Contractor

Form of Performance Security (Guarantee)

Bank Guarantee Bond

1- We, _ (Hereinafter referred to as 'the Bank") hereby undertake to pay to the Nigam an amount not exceeding Rs (Rupees Only) on demand by the Nigam.

3- We, the said bank further undertake to pay the U.P C.L.D.F any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the Contractor(s) shall have no claim against us for making such payment.

5- We, (indicate the name of the Bank) further agree with the U.P C.L.D.F that the Nigam shall have the fullest liberty without our consent and without affecting in any manner our obligation & hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the U.P C.L.D.F against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be

relieved from our liability by reason of any such variation, or extension being granted to the said Contractor(s) or for any forbearance, act of omission on the part of the U.P C.L.D.For any indulgence by the U.P C.L.D.F to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6- This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).

7- We, (Indicate the name of the Bank) lastly undertake not to revoke this guarantee during it's currency except with the previous consent of the U.P C.L.D.F in writing.

Dated theday of

For.....

(Indicate the name of the Bank)

BANK GURANTEE FOR MOBILISATION ADVANCE

(On non-judicial paper of an appropriate value)

To,

U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd.

.....

.....

Subject: -----

(Name of work and Contract No.)

Dear Sir,

3- We......Bank further agree that the U.P C.L.D.F shall be the sole judge of and as to whether the contractor has utilized or not utilized the said advance or any part thereof for the purpose of the said contract and/or as to whether the advance or any part thereof with interest has been recovered or not and the finding of the U.P C.L.D.F in this regard shall be final and binding on us.

4- We, the said Bank further agree that the Guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said contract and till the said advance has been fully recovered and its claims satisfied or discharged and till the U.P C.L.D.F certifies that the said advance with interest has been fully recovered from the contractors.

5- The U.P C.L.D.F shall have the fullest liberty without affecting in any way the liability of the said Bank under this guarantee or indemnity from time to time to vary any of the terms and conditions of the said Contract or the advance or to extend time of performance by the Contractor or to postpone for any time and from time to time any of the powers exercisable by it against the said Contractor and either to contract or the advance or securities available to U.P C.L.D.F and the said Bank shall not be released from its liability under these presents any exercise by the U.P C.L.D.F of the liberty with reference to the matter aforesaid or by reason of time being given to the said Contractor/or any forbearance, act or omission on the part of the U.P C.L.D.For any indulgence by the U.P C.L.D.F to the said Contractor or of any other matter or thing whatsoever which under the law relating to sureties would but for this provision have the effect of so releasing the said Bank from its said liability.

6- The Bank hereby waives all rights at any time inconsistent with the terms of this Guarantee and the obligations of the Bank in terms hereof shall not be in any way affected or suspended by reason of any dispute or disputes having been raised by the affected or suspended by reason of any dispute or disputes having been raised by the Contractor (whether or not pending before any Arbitrator, Tribunal or Court) or any denial or liability by the Contractor stopping or preventing or purporting to stop or prevent any payment by the Bank to the U.P C.L.D.F in terms thereof.

7- The amount stated in any notice of demand addressed by the U.P C.L.D.F to the Bank as liable to be paid to the U.P C.L.D.F, by the Contractor shall be conclusive evidence of the amount so liable to be paid to the U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd.by the Bank.

8- This guarantee/undertaking shall be in addition to any other guarantee or security whatsoever that the U.P C.L.D.F may now or any time may have in relation to the Contractor's obligations or liabilities under and/or in connection with the said Contract, and the U.P C.L.D.F shall have full authority to have recourse to or enforce this security in preference to any other guarantee or security which the U.P C.L.D.F may have or obtain and no forbearance on the part of the U.P C.L.D.F in enforcing or requiring enforcement of any other security shall have the effect to releasing the Bank from its full liability hereunder.

9- It shall not be necessary for the U.P C.L.D.F to proceed against the said Contractor before proceeding against the Bank and the guarantee herein contained shall be enforceable against the Bank notwithstanding that any security the U.P C.L.D.F may have obtained from the Contractor shall at the time when proceedings are taken against the said Bank hereunder be outstanding or unrealized.

10- We the said Bank undertake that we shall pay for the with the amount stated in the notice or demand notwithstanding any dispute/difference pending between the parties before the arbitrator and/or that any dispute is being referred to arbitration.

11- We, the said Bank undertake not to revoke this guarantee during its currency except with the consent of the U.P C.L.D.F in writing and agree that any change in the Constitution of the said Contractor or the said Bank shall not discharge our liability hereunder.

Dated Day of 201....

For and on behalf of Bank.

Issued under seal

SAMPLE FORMAT FOR WILLINGNESS CERTIFICATE

(To be submitted for Specialized Works)

I declare that I am having technical expertise required for proper execution of above specialized work. I am registered **withforwork in category.....** I have been issued license **no.valid upto** (attach copy) as required for execution of the specialized work.

I hereby give my willingness to work as associated specialized agency/contractor for the above mentioned work. I declare that I will execute the said works as per specifications, conditions of the agreement and as per directions of the Engineer. I also undertake that I will employ full time technically qualified supervisor for the works. I will attend inspection of officers of the department as and when required.

Date:

Signature: Name: Address Phone No. E-mail:

SAMPLE FORMAT FOR EXECUTING MEMORANDUM OF UNDERSTANDING

Memorandum of Understanding (M.O.U.) Between

M/S (Insert Name of the Firm with full address).....

•••••

(Hereinafter called the Main Contractor)

And

M/s (Insert Name and full address of the associated specialized contractor).....

Name of Work:- Construction of (SH:-Insert name of item of specialized work).

We state that M.O.U. between us will be treated as an agreement and has legality as per Indian Contract Act (amended upto date). The department (U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd.) can enforce all the terms and conditions of the agreement for execution of the above work. Both of us shall be responsible for the execution of work as per the agreement to the extent of this MOU allows.

We have agreed as under:

1- The associated specialized contractor shall be responsible to discharge his duties as per terms of agreement entered with Main Contractor. In case of falilure of associated specialized contractor in discharging his duties the Department shall be free to take any action as per agreement including forfeiture of the security deposit against the Main Contractor.

3- The site staff required for the specialized work shall be arranged by the associated specialized contractor as per terms and conditions of the agreement.

Signature of Main Contractor	Signature of Associated Specialized Contractor
Date:	Date:
Place:	Place:
Countersigned:	
(Name)	
Engineer,	
Ex. Engineer, Unit U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd.,	

TO BE EXECUTED BY CONTRACT FOR REMOVAL OF DEFECTS

IN WATER PROOFING WORKS (Basements, Sunken Parts, and Roofs etc.)

(On Rs. 100/- stamp paper)

This Agreement is made on.....day of 201.. between U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd., represented by Ex. Engineer, Unit-... U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd. (hereinafter called the U.P C.L.D.F which expression shall where ever the context so demands or requires, includes their successors in office and assigns) of one part and M/s ________(hereinafter called the Guarantor which expression shall wherever the context so demands or requires includes his successors and assigns) of the other part.

AND WHEREAS THE GUARANTOR agrees to give a guarantee to the effect that the said structures will remain water and leak proof for 10 (Ten) years from the date after the defect liability period prescribed in the contract.

NOW THE GUARANTOR hereby guarantees that water proofing treatment given by him will render the structures completely leak proof and the minimum life of such water proofing treatment shall be ten years to be reckoned from the date after the defect liability period prescribed in the contract.

Provided that the Guarantor will not be responsible for the leakages caused by earthquake or structural defects or misuse of roof/other components rendered waterproof by the Guarantor or alteration and for such purpose:

- (a) Misuse shall mean any operation which will damage proofing treatment, like chopping of firewood and things of the same nature which might cause damage to the roof.
- (b) Alteration shall mean construction of an additional storey or a part of the roof or construction adjoining to existing roof whereby proofing treatment is removed in parts.
- (c) The decision of the Engineer-in -charge with regard to cause of leakage/seepage shall be final.

During this period of guarantee the guarantor shall make good all defects and in case of any defect being found, render that component water proof to the satisfaction of the Engineer-in-charge at his cost. The Guarantor shall commence the work for the rectification within seven days from the date of issue of the notice from the Engineer-in-charge calling upon him to rectify the defects failing which the work shall be done by the department by some other agency/contractor at the GUARANTOR's risk and cost. The decision of the Engineer as to the cost payable by the Guarantor shall be final and binding.

Guarantor hereby indemnifies the U.P C.L.D.F for any/all losses, damages, cost expense otherwise which may be incurred by U.P C.L.D.F by reason of any default on the part of the GUARANTOR in performance and observance of this supplementary agreement and in this respect the amount of loss and/or damage and/or cost incurred by the U.P C.L.D.F, the decision of the Engineer will be final and binding on the parties.

In the presence of:

1.

2.

In the presence of:

1.

2.

Signed by Guarantor

Signed for U.P C.L.D.F by

GUARANTEE BOND TO BE EXECUTED BY CONTRACTOR (s) FOR REMOVAL OF DEFECTS AFTER COMPLETION IN RESPECT OF ANTITERMITE TREATMENT WORKS

(On Rs. 100/- stamp paper)

demands or requires includes his successors and assigns) of the other part.

WHEREAS THIS agreement is supplementary to a contract (Hereinafter called the Contract) dated------executed for the purpose of anti-termite treatment of structures connected with construction ofand made between the GUARANTOR OF THE ONE part and the U.P C.L.D.F of the other part, whereby the Guarantor, interalia, undertook to render the buildings and structures in the contract recited completely termite proof.

AND WHEREAS the Guarantor agrees to give a guarantee to the effect that the said structure will remain Termite proof for ten years to be reckoned from the date after the defect liability period prescribed in the contract expires.

During this period of guarantee the contractor shall make good all defects and for that matter shall replace at his risk and cost such wooden members and other materials like furniture, books etc. as may be damaged by termite and in case of any other defect being found he shall render the building termite proof at his cost to the satisfaction of the U.P C.L.D.F and shall commence the works of such rectification within seven days from the date of issuing notice from the U.P C.L.D.F calling upon him to rectify the defects. If the Guarantor fails to rectify the defects which the work shall be got done by U.P C.L.D.F through some other contractor at the Guarantor's cost and risk and in the later case the decision of the U.P C.L.D.F as to the cost recoverable from the Guarantor shall be final and binding.

Guarantor hereby indemnifies the U.P C.L.D.F for any/all losses, damages, cost expense otherwise which may be incurred by U.P C.L.D.F by reason of any default on the part of the GUARANTOR in performance and observance of this supplementary agreement and in this respect the amount of loss and/or damage and/or cost incurred by the U.P C.L.D.F, the decision of the Engineer will be final and binding on the parties.

IN WITNESS WHEREOF these presents have been executed byfor and on behalf of the U.P C.L.D.F and the Guarantor M/s.....on the day, month and year first above written SIGNED, SEALED AND delivered by Guarantor.

Signed by Guarantor

In the presence of :

1.

2.

In the presence of:

1. 2. Signed for U.P C.L.D.F by

GUARANTEE BOND TO BE EXECUTED BY CONTRACTOR (s) FOR REMOVAL OF DEFECTS AFTER COMPLETION IN RESPECT OF ALUMINIUM DOORS, WINDOWS VENTILATORS WORKS

(IF APPLICABLE)

(On Rs. 100/- stamp paper)

This Agreement is made on.....day of 201. between U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd., represented by Ex. Engineer, Unit..., U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd. (hereinafter called the U.P.C.L.D.F which expression shall where ever the context so demands or requires, includes their successors in office and assigns) of one part and M/s (hereinafter called the Guarantor which expression shall wherever the context so demands or requires includes his successors and assigns) of the other part.

WHEREAS THIS agreement is supplementary to a contract (Hereinafter called the Contract) dated----------- executed for construction ofand made between the GUARANTOR OF THE ONE part and the U.P.C.L.D.F of the other part, whereby the Guarantor, inter alia, undertook to render the work in the said contract recite structurally stable, use sound material, workmanship, anodizing, colouring, sealing.

AND WHEREAS the Guarantor agrees to give a guarantee to the effect that the said work will remain structurally stable and guarantees against faulty material and workmanship, defective anodizing, colouring, sealing and finishing for 2 (Two) years to be reckoned from the date after the expiry of defect liability period prescribed in the contract.

During this period of guarantee, the guarantor shall make good all defects to the satisfaction of the Engineer-in-charge at his cost and shall commence the work for such rectification within seven days from the date of issue of the notice from the Engineer calling upon him to rectify the defects failing which the work shall be got done by the Department by some other contractor at the Guarantor's risk and cost. The decision of the Engineer as to the cost, payable by the Guarantor shall be final and binding.

Guarantor hereby indemnifies the U.P C.L.D.F for any/all losses, damages, cost expense otherwise which may be incurred by U.P C.L.D.F by reason of any default on the part of the GUARANTOR in performance and observance of this supplementary agreement and in this respect the amount of loss and/or damage and/or cost incurred by the U.P C.L.D.F, the decision of the Engineer will be final and binding on the parties.

IN WITNESS WHEREOF these presents have been executed byfor and on behalf of the U.P C.L.D.F and the Guarantor M/s.....on the day, month and year first above written SIGNED, SEALED AND delivered by Guarantor.

Signed by Guarantor

In the presence of:

1.

2.

.....

.....

In the presence of:

1. _____ 2.

Signed for U.P C.L.D.F by

GUARANTEE BOND TO BE EXECUTED BY CONTRACTOR (s) FOR REMOVAL OF DEFECTS AFTER COMPLETION IN RESPECT OF WATER SUPPLY AND SANITARY INSTALLATIONS

(On Rs. 100/- stamp paper)

This Agreement is made on.....day of 201.. between U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd, represented by Ex. Engineer, Unit...., U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd, (hereinafter called the U.P C.L.D.F which expression shall wherever the context so demands or requires, includes their successors in office and assigns) of one part and M/s ________ (hereinafter called the Guarantor which expression shall wherever the context so demands or requires includes his successors and assigns) of the other part.

WHEREAS THIS agreement is supplementary to a contract (Hereinafter called the Contract) dated-----executed for construction ofand made between the GUARANTOR OF THE ONE part and the U.P C.L.D.F of the other part, whereby the Guarantor, interalia, undertook to render the work in the said contract recited structurally stable leak proof, workmanship, finishing and use of sound materials.

AND WHEREAS the Guarantor agrees to give a guarantee to the effect that the said work will remain structurally stable and guarantees against faulty workmanship, finishing, manufacturing defects of materials and leakages, etc. after expiry of defect liability period prescribed in the contract for the minimum life of **05** (Five) year to be reckoned from the date after the expiry of defect liability period prescribed in the contract.

During this period of guarantee, the guarantor shall make good all defects to the satisfaction of the Engineer-in-charge at his cost and shall commence the work for such rectification within seven days from the date of issue of the notice from the Engineer calling upon him to rectify the defects failing which the work shall be got done by the Department by some other contractor at the Guarantor's risk and cost. The decision of the Engineer as to the cost, payable by the Guarantor shall be final and binding.

Guarantor hereby indemnifies the U.P C.L.D.F for any/all losses, damages, cost expense otherwise which may be incurred by U.P C.L.D.F by reason of any default on the part of the GUARANTOR in performance and observance of this supplementary agreement and in this respect the amount of loss and/or damage and/or cost incurred by the U.P C.L.D.F, the decision of the Engineer will be final and binding on the parties.

IN WITNESS WHEREOF these presents have been executed byfor and on behalf of the U.P C.L.D.F and the Guarantor M/s.....on the day, month and year first above written SIGNED, SEALED AND delivered by Guarantor.

Signed by Guarantor

In the presence of:

1.

1. 2. In the presence of:

Signed for U.P C.L.D.F by

2.

GUARANTEE BOND TO BE EXECUTED BY CONTRACTOR (s) FOR REMOVAL OF DEFECTS AFTER COMPLETION IN RESPECT OF INTERNAL ELECTRICAL INSTALLATIONS

(On Rs. 100/- stamp paper)

This Agreement is made on.....day of 201.. between U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd, represented by Ex. Engineer, Unit...., U.P. Rajya Nirman Evam Sharam Vikas Sahakari Sangh Ltd, (hereinafter called the U.P C.L.D.F which expression shall where ever the context so demands or requires, includes their successors in office and assigns) of one part and M/s ________ (here in after called the Guarantor which expression shall wherever the context so demands or requires includes his successors and assigns) of the other part.

WHEREAS THIS agreement is supplementary to a contract (Hereinafter called the Contract) dated-----executed for construction ofand made between the GUARANTOR OF THE ONE part and the U.P C.L.D.F of the other part, whereby the Guarantor, interalia, undertook to render the work in the said contract recited with sound workmanship, finishing and use of sound materials.

AND WHEREAS the Guarantor agrees to give a guarantee to the effect that the said work will remain effective/ stable and guarantees against faulty workmanship, finishing, manufacturing defects of materials and leakages, short circuiting etc.after expiry of defect liability period prescribed in the contract for the minimum life of 02 (Two) years to be reckoned from the date after the expiry of defect liability period prescribed in the contract.

During this period of guarantee, the guarantor shall make good all defects to the satisfaction of the Engineer-in-charge at his cost and shall commence the work for such rectification within seven days from the date of issue of the notice from the Engineer calling upon him to rectify the defects failing which the work shall be got done by the Department by some other contractor at the Guarantor's risk and cost. The decision of the Engineer as to the cost, payable by the Guarantor shall be final and binding.

Guarantor hereby indemnifies the U.P C.L.D.F for any/all losses, damages, cost expense otherwise which may be incurred by U.P C.L.D.F by reason of any default on the part of the GUARANTOR in performance and observance of this supplementary agreement and in this respect the amount of loss and/or damage and/or cost incurred by the U.P C.L.D.F, the decision of the Engineer will be final and binding on the parties.

IN WITNESS WHERE OF these presents have been executed byfor and on behalf of the U.P C.L.D.F and the Guarantor M/s...... On the day, month and year first above written SIGNED, SEALED AND delivered by Guarantor.

In the presence of:

1.	
2.	

In the presence of:

2.

Signed for U.P C.L.D.F by

Signed by Guarantor