

TENDER SCHEDULE

FOR

CONSTRUCTION OF B+G+5 GIRL'S HOSTEL

AT

CIPET: CSTS, MANCHESWAR INDUSTRIAL ESTATE
BHUBANESWAR

CENTRE FOR SKILLING AND TECHNICAL SUPPORT (CSTS)

(Govt.of India)

Tender No. CIPET: CSTS/BBSR/B+G+5 /2019-20/03



For & on behalf of CIPET:

Cost – Rs.5, 000/- (Non Refundable)

Prepared by:



1465, Binayak Complex
Nayapalli
Bhubaneswar – 751012
Ph: 0674- 2563546, 9861127011

INDEX

- Notice inviting tender
- Issue letter of tender documents
- General project information
- Information to Tenderers
- General Conditions of contract
- Technical specifications for electrical Work
- General specification of civil work
- Approved materials for civil& electrical Work
- Schedule of quantities
- Drawings

NOTICE INVITING e-TENDER

CONSTRUCTION OF B+G+5 GIRL'S HOSTEL (AT CIPET: CSTS, BHUBANESWAR)

E-tenders on item rate basis are invited from experienced & reputed registered contractors / firms for construction of Girl's Hostel building at Bhubaneswar. Details of Tender are as under:

1.	Name of the Work	:	Construction of Girl's Hostel Building including Civil, internal and external electrical works, internal PH , sanitary works, Structural glazing, Isolated foundation, Interior furnishing
2.	Time allowed for completion	:	15 Calendar Months
3.	Estimated Cost of Work	:	Rs. 1205.31 Lakh
4.	Earnest money	:	Rs. 2205310.00 (Twenty Two Lakh Five Thousand Three Hundred and Ten Only) by crossed demand draft In favor of CIPET, Bhubaneswar A/c No. 33904991783 payable at Bhubaneswar.
5.	Cost of Tender document	:	Rs.5000/- by DD in favor of CIPET, Bhubaneswar A/c No. 33904991783 payable at Bhubaneswar
6.	Date of Sale of Tender Paper	:	29.08.2019 to 18.09.2019 upto 5.00 PM
7.	Time and date of Submission of tender :	:	On or before 12 hrs on 19.09.2019
8.	Website at which tenders are to be submitted	:	www.tenderwizard.com/CIPET
9.	Time and date of opening of Technical bid	:	15 hours on 19.09.2019

The authority reserves the right to accept or reject any or all the tenders without assigning any Reason what so ever.

Eligibility Criteria:

The contractor/ Firm shall submit along with application for purchase of tenders:-

1. Tenderers are requested to go through the eligibility criteria carefully and produce definite proof of works completed from the appropriate authority and other required documents to the satisfaction of the competent authority along with submission of the tender form. Tenders will be liable for rejection if any shortcomings are found. Decision of CIPET:CSTS,BHUBANESWAR authorities in this regard shall be final and binding on all tenderers. The bidder who wishes to participate in the bidding shall satisfactorily establish that they fulfill the following qualifying requirements, as stipulated hereunder.
2. The Civil Contractor or Firms of appropriate Class should produce registration certificate with CPWD/ State PWD/ Public sector Undertaking/ Government Organization.
3. Experience of having successfully completed works during the last 5 years ending last day of the month previous to the one in which applications are invited:
 - (a) Three similar completed works costing not less than the amount equal to 40% of estimated cost put to tender, Or
 - (b) Two similar completed works, costing not less than the amount equal to 50% of the estimated cost put to tender, Or
 - (c) One similar completed work of aggregate cost not less than the amount equal to 80% of the Estimated cost. And
4. One Completed work of any nature (either part of (1) or a separate one) costing not less than the amount equal to 50 % of the estimated cost put to tender with some Central Government Department/State Government Department/Central Autonomous Body/Central Public Sector undertaking.
5. The firm should have valid GST registration.
6. Should have Bank solvency certificate issued not more than One year before the date of Tender, equal to 40% of the estimated cost.
7. The cost of the tender document is to be paid by crossed Demand Draft in favour of "CIPET BHUBANESWAR" A/C.No. 33904991783 payable at Bhubaneswar
8. The Earnest Money Deposit(EMD) mentioned above should be paid in crossed Demand Draft in favour of "CIPET, BHUBANESWAR" A/C.No. 33904991783.payble at Bhubaneswar

9. The Sealed Tender in the prescribed forms invited for Technical and financial bid should be submitted in separate covers duly super scribed and both the seal covers may be put in bigger cover, which should also be sealed and duly super scribed.

10. Average annual financial turn over during the last three years ending the 31st March of the previous financial year should be at least 30% of estimated cost certified by a Chartered Accountant in practice.

11. In addition to the above the applicant has to submit the following documents/information in hard copy.

a. Work completion certificate issued by an Officer ranked Executive Engineer or equal and above.

b. Copy of EPF Registration Certificate with latest deposit challan.

c. Copy of PAN, TAN & GSTN

d. ITR copy for the last three financial years.

e. Balance sheet & P/L statement for the last three financial years.

f. Manpower Histogram

g. List of tools & plants

h. Details of Projects executed and list of current projects supported by LOA/Agreement/Completion certificates.

i. Details of Court Case/Arbitration if any or self-certification that "NO COURT CASE/VIGILANCE CASE/DISPUTE/ARBITRATION" in which your firm is a party is pending at any place should be given.

j. Organization Profile.

12. Tender documents without EMD will be summarily rejected.

The Tender Documents along with the Price Bid & GCC shall be downloaded and each page shall be properly sealed and signed by the bidder.

The authority will not be bound to accept the lowest tender and reserves the right to accept or reject any or all the tenders without assigning any Reason what so ever.

Dy. Director & Head

CIPET: CSTS, BHUBANESWAR

**ISSUE LETTER OF TENDER DOCUMENT
CONSTRUCTION OF B+G+5 GIRL'S HOSTEL AT BHUBANESWAR.**

This Tender document set containing 87nos of pages, Terms & Conditions, 25-No of Pages for Schedule of Quantities and drawings 27 nos of pages, as shown in the index sheet is issued to :-

Name of Tenderer:-----

Address of Tenderer:-----

The fees for this set of Tender document is Rs.5, 000/- (Rupees Five Thousand only)

On Behalf of

Dy. Director & Head
CIPET: CSTS, Bhubaneswar.

GENERAL PROJECT INFORMATION

1.	Owner	:	CIPET:CSTS, BHUBANESWAR
2.	Consultants	:	M/S BUILD SOL PLOT NO. - 1465 , BINAYAK COMPLEX NAYAPALLI , BHUBANESWAR-751012
3.	Project Title	:	Construction of B+G+5 Girl's Hostel in CIPET:
4.	Location	:	S-3/79, SECTOR – A , ZONE – B, MANCHESWAR, INDUSTRIAL ESTATE, BHUBANESWAR

A) **SITE CONDITIONS:**

Collection of data is Tenderer's responsibility. The work is to be carried out in the above mentioned area. The contractor shall abide by the regulations promulgated from time to time. The Tenderer shall acquaint himself / herself with the site conditions prevailing at the site.

Tenderer shall visit the site to check the actual site conditions, availability of labor, communication, transport accessibility availability of construction power and water to the site, etc. And these factors shall be taken care of in the quoted unit rate. Failure to ascertain such conditions by the Tenderer at the time of tendering shall not constitute any reason for any dispute later on as regards the rates, etc.

The Tenderer shall visit the site and acquaint himself/herself fully of the site & no claims whatsoever will be entertained on the plea of ignorance of difficulties involved in execution of work or carriage of materials.

B) **SITE OFFICE:**

CIPET- CSTS, BHUBANESWAR shall at its own discretion & convenience and for the duration of the execution of the work make available at the site, land for contractor's field office, go-downs, workshops and assembly yard required for the execution of the contract within the plot / site area. The contractor shall at his own cost construct all temporary buildings & make arrangements of construction power, water sanitary arrangements approved by the Architect.

C): POWER & WATER SUPPLY

Power & water supply arrangement shall be made by the contractor for execution of work till completion of the project. The contractor shall make his own arrangements to draw water & power from source point (as provided by the owner) at his own cost on monthly chargeable basis. Electric power consumption can be measured by meter as provided by the contractor & bill shall be paid at unit rate basis levied by CESU. The owner (CIPET: CSTS, BHUBANESWAR) will bear no cost in this respect.

D): AGREEMENT:-

The contractor has to sign an agreement in the standard agreement form of the owner in non-judicial stamp paper. All the conditions, specifications and bill of quantities will form a part of the agreement.

INFORMATION TO TENDERER**1. DEFINITIONS AND TERMS**

01.	Owner	CIPET : CSTS, BHUBANESWAR
02.	Dy. Director & Head	Shall include such officers in the service of the CIPET: CSTS, BHUBANESWAR who may for the time be in-charge of the work, which is the subject of contract or any portion thereof.
03.	Architectural & Structural Consultants	M/S BUILD SOL 1465, BINAYAK COMPLEX, NAYAPALLI BHUBANESWAR- 751012
04.	Tenderer	Shall mean the firm / individual who quotes against an enquiry
05.	Contractor	Shall mean the successful Tenderer whose tender has been accepted by the owner and /or to whom a letter of intent has been placed & shall include his heirs legal representatives & assigns.
06.	Sub-Contractor	Shall mean the person / firm / party named in the contract undertaking a part of the work or any person to whom a part of the contract has been

		sublet with the consent in writing of the owner and shall include his heirs, successors legal representatives and assign.
07.	Contract price	Shall mean, if there is a formal agreement, the prices referred to in the agreement or if there is no formal agreement the prices agreed to be the value of the contract.
08.	This contract	Shall mean the articles of agreement, the conditions the appendix, the schedule of quantities & or specifications attached here to and duly signed.
09.	Notice in writing	Shall mean a notice in writing, typed or printed characters sent (unless delivered personally or otherwise proved to have been received) by registered post to the last known private or business address or registered office of the addressee and shall be deemed to have been received when in the ordinary course of post it would have been delivered.
10.	Site	Shall mean the actual place of the proposed project or any other place where work is to be executed under the contractor. It shall also include any other land allotted by the owner for the contractor's use.
11.	Month	Shall mean calendar month

2. SUBMISSION OF TENDER:

- a. Tender must be submitted in original & without making any additions, alterations and as per details given in other clauses given hereunder. The rates shall be quoted both in figures & words in the schedule given in this tender document. Reservations if any regarding the tender conditions and schedule of rates should be clearly brought out in a separate letter. The reservations must also be filled up for the scheduled of deviations from the tender conditions given in the tender documents.

- b. Addenda/ corrigenda to this tender document, if issued must be signed, submitted along with the tender documents. The Tenderer should write clearly the revised quantities in schedule of rates of tender document and should price the work based on revised quantities when amendments for quantities are issued in the addenda.
- c. Covering letter along with its enclosures accompanying the tender document and all further correspondence shall be submitted.

3.ALL PAGES TO BE INITIALLED:

- a) All signatures in tender paper shall be dated, & all the pages of all sections of tender documents shall be initialled at the lower right hand corner or signed wherever required in the tender papers by the Tenderer or by a person holding power of attorney authorizing him to sign on behalf of the Tenderer should sign before submission of tender.
- b) Rates to be in figures and words .
- c) The Tenderer should quote in English both in figures & in words, the rates & amount, Tenderer by him in schedule of quantities as per Proforma of works submitted by the contractor for each item & in such a way that interpolation is not possible. The amount for each item should be worked out & entered & requisite total given of all items, both in figures & in words, the tender amount for the work shall be entered in the tender & duly signed by the Tenderer.
- d) Corrections & Erasures :
All corrections & alterations in the entries of tender paper will be signed with full signature by the Tenderer with date. No erasures or over writings are permissible.
- e) Witness & sureties shall be persons of status & property & their names, occupation & address shall be stated below to their signature.

4. TRANSFER OF DOCUMENT

Transfer of tender documents purchased by one intending Tenderer to another is not permissible.

5. EARNEST MONEY

- a. The Tenderer must pay earnest money (EMD) of **(Rs.22,05,310)** as given in the notice inviting tender and attach the official receipt with the tender failing which the tender is liable to be out-rightly rejected. The earnest money can be paid in demand drafts on any nationalized bank in favor of "**CIPET, BHUBANESWAR. A/c No-33904991783, payable at Bhubaneswar .**

Note: No interest shall be paid by the owner on earnest money. The earnest money of the un-successful Tenderers will be refunded without any interest soon after the decision towards the work is taken or after the expiry of the validity period of the tender.

- b. The earnest money deposited by successful Tenderer will be retained towards the security deposit for the fulltime of the contract, but shall be forfeited if the Tenderer fails to start work within 15 days after the date of issue of the letter of acceptance of tender.

6. VALIDITY

Tenders submitted by Tenderers shall remain valid for acceptance for a period of 120 days from the date of opening of the tender. The Tenderers shall not be entitled during the said period without the consent in writing to revoke; or cancel his tender or to vary the tender given for any term therein. In case of Tenderer revoking or canceling his tender or revoking the same or vary any term in regard thereof without the consent in writing, CIPET: CSTS BHUBANESWAR shall forfeit earnest money paid by him along with tender.

7. ADDENDA / CORRIGENDA.

- a. Addenda/corrigenda to the tender documents may be issued prior to the opening of the Tenders to clarify documents or to reflect modification in the design or contract
- b. Each addenda/corrigenda issued by CIPET:CSTS, BHUBANESWAR/Architect will be distributed in duplicate to each Person or organization to which a set of tender documents has been issued. Each recipient will retain one copy of each addendum /corrigendum for submission along with his tender and return the signed copy to the consultant as acknowledgement of receipt of the same. All addenda/corrigenda issued by CIPET:CSTS BHUBANESWAR shall become part of tender documents.

8. RIGHT TO OWNERS/CONSULTANT TO ACCEPT OR REJECT TENDER.

The right to accept the tender will rest with the owner/consultant. The owner/consultant, reserves to himself the authority to reject any or all the tenders received without assigning any reason whatsoever.

9.DRAWING AND SUFFICIENCY OF QUANTITIES.

a) Drawings: Drawings enclosed are intended to give the Tenderer an idea of the type of work involved. The drawings as such are only indicative and for tender purpose only. All drawings "released for construction" shall bear such remarks. Any deviations & extra work shall not be allowed without prior permission of Architect-in- charge. Work shall proceed openly on "released for construction" drawings which shall be issued to the contractor progressively after the award of the contract, No claim shall be entertained from the contractor if the "released for construction drawings" are at variance with those issued for tender purposes.

(b) Sufficiency of quantities. The quantities furnished in the schedule of quantities are only approximate based on preliminary design and are meant primarily to form a common basis for tender analysis. Actual quantities may vary from the quantities given in the schedule and no extra claim against variation of quantities from the contractor shall be entertained on this account.

10. DATE OF COMMENCEMENT AND DATE OF COMPLETION :

The date of commencement shall be taken as the date on which the letter of intent or work order is issued to him to start the work. The date of completion shall be Fifteen calendar Months from the date of issue of work order or the date of issue of the letter of intent, whichever is earlier. If the contractor fails to complete the work within the period he shall pay liquidated damages(Compensation for delay) to the owner, as stipulated in the general conditions of contract.

11. TIME SCHEDULE, WORK SCHEDULES:

- a. The work shall commence in the field within two weeks from the date of placing the work order or issue of a letter of intent, / One week from the date of the site handed over by.CIPET: CSTS, BHUBANESWAR whichever is earlier.
- b. The contractor on receipt of the work order or letter of intent shall submit to the Architect his / her acceptance a detailed work schedule showing how the

contractor proposes to carry out the work at the required rate specifically mentioning the time period required as well as the date of completion of individual buildings and such approved schedules shall be strictly adhered to by the contractor. The schedules are to be reviewed periodically to ensure that the completion date will be met to take corrective steps at no extra cost to the owner as the owner may consider necessary in order to maintain the completion dates. The consultants reserve the right to revise the schedule at his discretion in order to suit project requirements.

- c. The contractor shall furnish to the Engineer/Architect-in-charge monthly progress report, in triplicate, before end of first week of every month showing the progress made during the previous month in the following proforma.

Name of work	Item of work	Schedule for month	Actual progress	Reasons for shortfall if any	Steps taken to make up
--------------	--------------	--------------------	-----------------	------------------------------	------------------------

12. OTHER INFORMATION TO TENDERER

- a. Complete contract documents to be complied with by the Tenderer whose tender may be accepted can be seen at the office of, CIPET:CSTS BHUBANESWAR.
- b. Canvassing in connection with the tenders is prohibited and the tenders submitted by the contractor who resort to canvassing are liable for rejection.
- c. The Tenderer shall not be permitted to tender for works in the concerned unit of CIPET:CSTSBHUBANESWAR in which a relative is posted in the grade between controller of administration and junior engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or subsequently employed by him and who are relatives as mentioned above.
- d. The Tenderer shall quote rates both in figures and words. He shall also work out the amount for each item of works and write in both figures and words. On check if there are difference between the rate quoted by the Tenderer in words and in figures or in the amount worked out by him, the following procedure shall be followed :

- (i) When there is a difference between the rates in figures and in words, the rates which correspond to the amounts worked out by the Tenderer, shall be taken as correct.
 - (ii) When the amount of an item is not worked out by the Tenderer or it does not correspond with the rate written either in figures or in words, the rate quoted by the Tenderer in words shall be taken as correct.
 - (iii) Where the rate quoted by the Tenderer in figures and in words tallies but the amount is not worked out correctly, the rate quoted by the Tenderer shall be taken as correct and not the amount.
- e. The Tenderer should see the drawings and in the case of doubt; obtain required particulars, which may in any way influence his tender from the architect .
 - f. Conditions affecting accommodations and movement of labour etc. required for the satisfactory execution of the works contract should be responsibility to the contractor and no claim whatsoever on such account shall be entertained by CIPET: CSTS BHUBANESWAR in any circumstances.
 - g. Earnest money will be forfeited if the contractor fails to commence the work as per letter of award.
 - h. Except writing rates and amounts the Tenderers should not write any conditions or make any changes, additions, alteration and modification in the printed form of Tenders. The Tenderers , those who are desirous to offer rebate the same should be brought out separately in the covering letter and submitted along with the tender.
 - i. The employer reserves to himself / herself the right to accept the whole or any part of the tender and the Tenderer shall be bound to perform the same at the rates quoted.

GENERAL RULES

1. Defect's liability period: **Fifteen months** from the date of completion of work as certified by the Architect.
2. Security deposit: shall be deducted from the running bill at 5% of the gross value of work done.
3. The successful bidder shall be required to deposit an amount equal to 5% of the tendered value of the work as performance guarantee in the form of an irrevocable bank guarantee bond of any scheduled bank or State Bank of India

in accordance with the form prescribed or in cash or in the form of Govt. security, fixed deposit receipt etc., within 7 days of the issue of letter of acceptance.

4. Whenever any claim against the contractor for the payment of a sum of money arises out of or under the contract, the owner shall be entitled to recover such sum by appropriation in part or whole, the security deposit of the contractor. In the event of the security being insufficient or if no security has been taken from the contractor, then the balance of total sum recoverable, as the case may be, shall be deducted from any sum due to the contractor. The contractor shall pay to the owner on demand any balance remaining due.
5. Time of performance: the work covered by this contract shall be commenced within 14 (Fourteen) days after the issue of the letter of acceptance of tender and be completed in stages or before the dates as mentioned in the time schedule of completion of works.
6. Stores to be issued: No material shall be issued by CIPET:CSTS BHUBANESWAR. Contractor has to arrange all materials, required for this work.
7. All statutory deductions like GST, TDS, labour cess etc will be made as per prevailing Govt. rules from their running and final bills on all works.
8. The contractor shall be required to upload the technical bid & the Financial bid separately. The required earnest money deposit shall be uploaded along with the technical bid. Both the envelopes shall then be placed in another sealed envelope (Tender bid) and submitted to the Tender inviting authority in the usual manner. At the time of opening the tender, if any "Tender Bid" is not found as per the above format, the Tenderer shall be liable to be rejected on the spot. The technical bid shall include all relevant documents such as copies of enlistment certificate, work credentials as per NIT, eligibility document as per NIT. Any sort of false document as required by NIT shall be rejected.
9. *ITEM* rates tenders showing abnormally Low/ abnormally High are liable to be rejected.
10. The contractor shall have to make arrangements for storage required for the work.
11. If the contractor dies;

Without prejudice to any of the rights or remedies under this contract, if the contractor dies, the owner shall have the option of terminating the contract without compensation to the contractor or such decision shall be taken by the owner.

12. When the contractor fulfills his obligation he shall be eligible to apply for completion certificate. The contractor, after obtaining the completion Certificate is eligible to present the final bill for the work executed by him under the terms of the contract.

13. Tests for quality of works:-

All workmanship shall be of the respective kinds described in the contract documents and in accordance with the instructions of the Engineer-in-charge and shall be subjected from time to time to such test at contractor's cost as the Site engineer-in-charge may direct and the place of manufacture or fabrication or on the site or at all or any such places. The contractor shall provide assistance, instructions, labour and materials as are normally required for examining, measuring and testing any workmanship as may be selected and required by the Engineer-in-charge.

14. Clearing the site before starting the work.

The project site described & shown on the plans all around the building shall be cleared of all obstructions, vegetations, loose stones & materials, rubbish of all kinds as well as brush wood. All holes & hollows whether originally existing or produced by removal of loose stone or brush wood shall be carefully filled up with earth well rammed & leveled off as directed. Before the earth work starts the entire area should be made good by either cutting, filling up to 12", removing of grass, vegetation, brushwood, trees roots & saplings. No trees shall be cut without permission.

15. Successful Tenderers also would be required to submit the names, qualifications and experience of the supervising staff to be deputed for total control of work. He / She should also communicate changes if any, in the names thus communicated earlier.

GENERAL CONDITIONS OF CONTRACT

CLAUSE-1: INTERPRETATION

In construing these conditions, the specifications, the schedule of quantities, tender and Agreement, the following works shall have the meaning herein assigned to them except where the subject or context otherwise requires:

- i) Employer: The term employer shall denote CIPET: CSTS, BHUBANESWAR with any of its, employees representative authorized on their behalf.
- ii) Architect: The term Architects shall mean M/S BUILD SOL, 1465- Binayak Complex, Nayapalli, Bhubaneswar-751012 or in the event of his/ their ceasing to be the Architects for the purpose of this contract such other person/s as the Employer shall nominate for the purpose. The Architect with the approval of the office may engage a local Architect/Consulting Engineer for supervision and co-ordination of the work at site. He will be considered a representative of the Architect. The Office may also engage a project management consultant for the supervision of the work. He will be designated by the term P.M.C, and work as Employer's agent at the site.
- iii) Contractor: the term Contractor shall mean.....(Name and address of the Contractor) and his/their heirs, legal representatives, assigns and successors.
- iv) Site: the site shall mean the site where the works are to be executed as shown on the site plan including any building and erections thereon allotted by the Employer for the Contractor's use.
- v) Site Engineer: The Site Engineer shall be appointed by the Employer/ Architect. The Employer may also determine the number of Site Engineer and the supporting staff at site office to assist them and also whether the Site Engineer shall be temporary or permanent. Where more than one Site Engineer is appointed, one of them shall be designated as Senior Site Engineer by the employer and the other Site Engineer shall be reporting to the Senior Site Engineer. Wherever P.M.C, is engaged, Site Engineer, if any, will work in close co-ordination with P.M.C.
- vi) Drawings: The work is to be carried out in accordance with drawings, specifications, the schedule of quantities and any further drawings which may be supplied or any other instruction which may be given by the Employer during the execution of the work.

All drawings relating to work given to the Contractor together with a copy of schedule of quantities are to be kept at site and the Employer/Architect shall be given access to such drawings or schedule of quantities whenever necessary.

In case any detailed Drawings are necessary beyond those supplied Contractor shall prepare such detailed drawings and/or dimensional sketches there for and have it confirmed by the Employer/Architects prior to taking up such work.

The Contractor shall ask in writing for all clarifications on matters occurring anywhere in drawings, specifications and schedule of quantities or to additional instruction at least 10 days ahead from the time when it is required for implementation so that the Employer may be able to give decision thereon.

- vi) "The work" shall mean the work or works to be executed or done under this contract.
- vii) "Act of Insolvency" shall mean any act as such as defined by the Presidency Towns Insolvency Act or in Provincial Insolvency Act or any amending statutes.
- viii) "The Schedule of Quantities shall mean the Schedule of Quantities as specified and forming part of this contract.
- ix) "Priced Schedule of Quantities" shall mean the Schedule of quantities duly priced with the accepted quoted rates of the Contractor.

CLAUSE-2: SCOPE

The work consists of Construction of B+G+5 Girl's Hostel Building at,CIPET :CSTS BHUBANESWAR-Civil, Electrical, PH, Sanitary & etc as in tender schedule, in accordance with the "Drawings" and "Schedule" of Quantities". The elevation work are within the scope of this tender. It includes furnishing all materials, labor, tools, and equipment and management necessary for and incidental to the construction and completion of the work. All work, during its progress and upon completion, shall conform to the lines elevations and grades as shown on the drawings furnished by the Employer/Architect. Should any detail essential for efficient completion of the work be omitted from the drawings & specifications it shall be the responsibility of the Contractor to inform the employer/ Architect and to furnish and install such detail with Employer's /Architect's concurrence, so that upon completion of the proposed

work the same will be acceptable and ready for use. Employer or his agent (PMC) /Architects may in their absolute discretion issue further drawings and/or written instructions, details, directions and explanations which are hereafter collectively referred to as "The Employer's/Architect's instruction" in regard to :-

- a. The variation or modification of the design quality or quantity of works or the addition or omission or substitution of any work.
- b. Any discrepancy in the drawings or between the schedule of quantities/rates and/or drawings and/or specifications.
- c. The removal from the site of any materials brought thereon by the Contractor and substitution of any other materials thereof.
- d. The demolition removal and/or re-execution of any works executed by the Contractor/s.
- e. The dismissal from the works of any persons employed thereupon.
- f. The opening up for inspection of any work covered up.
- g. The rectification and making good of any defects under clauses herein after mentioned and those arising during the maintenance period (retention period).
The Contractor shall forthwith comply with and duly execute any work comprised in such Employer's/Architect's instructions provided always that verbal instructions, directions and explanation given to the Contractor or his representative upon the works by the Employer/Architects shall if involving a variation be confirmed in writing by the Contractor within seven days. No works, for which rates are not specifically mentioned in the priced schedule of quantities, shall be taken up without written permission of the Employer/architects. Rates of items not mentioned in the priced schedule of quantities shall be fixed by the employer in consultation with the Architects as provided in clause "Variation".

The contractor shall set up a field laboratory with necessary equipments for day to day testing of materials like grading of coarse and fine aggregates, silt content and bulk age of sand, Regarding all factory made products for which ISI marked products are available, only products bearing ISI marking shall be used in the work.

CLAUSE - 3 : TENDERER SHALL VISIT THE SITE

Intending Tenderer shall visit the site and make him thoroughly acquainted with the local site condition, nature and requirements of the works, facilities of transport conditions, effective labor and materials, access and storage for materials and removal of rubbish. The Tenderer shall provide in their tender for cost of carriage, freight and other charges as also for any special difficulties and including police restriction for transport etc. for proper execution of work as indicated in the drawings. The successful Tenderer will not be entitled to any claim of compensation for difficulties faced or losses incurred on account of any site condition which existed before the commencement of the work or which in the opinion of the Employer/Architects might be deemed to have reasonably been inferred to be so existing before commencement of work.

CLAUSE-4:TENDERS

The entire set of tender paper issued to the Tenderer should be submitted fully priced and also signed on the last page together with initials on every page. Initial/signature will indicate the acceptance of the tender papers by the Tenderer.

(Also see Clause 7 of General Rules and instructions for guidance of Tenderers

The Schedule of quantities shall be filled in as follows:-

- i. The "Rate" column to be legibly filled in ink in both English figures and English words.
- ii. Amount column to be filled in for each item and the amount for each sub head as detailed in the "Schedule of Quantities".
- iii. All corrections are to be initialed.
- iv. The "Rate Column" for alternative items shall be filled up.
- v. The "Amount" column for alternative items of which the quantities are not mentioned shall not be filled up.
- vi. In case of any errors/omissions in the quoted rates, the rates given in the tender marked "Original" shall be taken as correct rates.
- vii. Contractors should quote rates for all items. If rates are not quoted for any item then the tender will be considered as incomplete and is liable to be rejected. No modifications, writings or corrections can be made in the tender papers by the Tenderer, but may at his option offer his comments or modifications in a separate sheet of paper attached to the original tender papers.

- viii. The employer reserves the right to reject any tender .
The tenderers should note that the tender is strictly on the item rate basis and their attention is drawn to the fact that the rates for each and every item should be correct, workable and selfsupporting. If called upon by the Employer/Architects detailed analysis of any or all the rates shall be submitted. The employer/architects shall not be bound to recognize the Contractor's analysis.
- ix. The works will be paid for as "measured work" on the basis of actual work done and not as "lump sum" contract. All items of work described in the schedule of quantities bills are to be deemed and paid as complete works in all respects involved, directly related to and reasonably detectable from the drawings, specifications and schedule of quantities and no further extra charges in the tender in respect of any item of works, the payment of such items of work will be made for the actual work done on the basis of tenderers rates charges to be payable by the employer.
- x. The employer has power to add to or omit from any work as shown in drawings or described in specifications or included in schedule of quantities and intimate the same in writing but no addition, omission or variation shall be made by the Contractor without authorization from the Employer. No variation shall vitiate the contract.

CLAUSE-5 DISCREPANCIES & ADJUSTMENT OF ERRORS :

The several documents forming 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 and special conditions in preference to General Conditions. 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) Technical Specifications.
- v) Indian Standard Specifications of B.I.S.

If there are varying or conflicting provisions made in any one document forming part of the contract, the 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.

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 therein according to drawings and specifications or from any of his obligations under the contract.

CLAUSE - 6: GOVERNMENT AND LOCAL RULES

The Contractor shall conform to the provisions of all local Bye-laws and Acts relating to the work and to the Regulations etc., of the Government and Local Authorities and of any company with whose system the structure is proposed to be connected. The Contractor shall give all notices required by said Act, Rules, Regulations and bye-laws etc., and pay all fees payable to such authority/Authorities for execution of the work involved. The cost, if any, shall be deemed to have been included in his quoted rates, taking into account all liabilities for licenses, fees for footpath encroachment and restorations etc., and shall indemnify the Employer against such liabilities and shall defer all actions arising from such claims or liabilities.

CLAUSE - 7 : TAXES AND DUTIES

The tenderers must include in their tender prices quoted for all duties royalties, VAT, GST, and sales tax or any other taxes or local charges, sales tax on works contract, Weigh Bill charges if required whether existing or in future. No extra claim on this account will in any case be entertained.

CLAUSE - 8 : QUANTITY OF WORK TO BE EXECUTED

The quantities shown in the Schedule of quantities are intended to cover the entire new structure indicated in the drawings but the Employer reserves the right to execute only a part or the whole or any excess thereof without assigning any reason there for.

CLAUSE - 9: EARNEST MONEY AND SECURITY DEPOSIT

The Tenderer will have to deposit an amount of **Rs, 22,05,310** in the form of Demand Draft/Pay order/Officer's Cheque draw in favor of CIPET, Bhubaneswar **A/C No— 33904991783 payable at Bhubaneswar** at the time of submission of tender as an Earnest money. The Employer is not liable to pay any interest on the Earnest Money. The Earnest Money of the unsuccessful tenderers will be refunded without any interest soon after the decision towards the work is taken or after the expiry of the validity period of the tender.

- a. The successful Tenderer to whom the contract is awarded will have to deposit additional security deposit which shall be deducted from progressive running bills @ 5% of the gross value of each running bill until the total security deposit equals to 5% of the value of the contract amount.

CLAUSE-10: RELEASE OF SECURITY DEPOSIT AFTER LABOUR CLEARANCE:

- a. 50% Security Deposit of the work shall be refunded after 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 Employer. The Employer, 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 50% the Security Deposit will be released if otherwise due.
- b. The balance 50% of the Security deposit will be refunded to the Contractor 14 (Fourteen) days after the end of defect liability period provided he has satisfactorily carried out all work and attended to all defects in accordance with the conditions of the contract.

CLAUSE - 11: CONTRACTOR TO PROVIDE EVERYTHING NECESSARY

The Contractor shall provide everything necessary for the proper execution of the work according to the intent and meaning of the drawings, schedule of quantities and specifications taken together whether the same may or may not be particularly shown or described therein provided that the same can reasonably be inferred there from and if the Contractor finds any discrepancies therein he shall immediately and in writing, refer the same to the Employer/ Architects whose decision shall be final and binding. The Contractor shall provide himself for ground and fresh water for carrying out of the works at his own cost. The Employer shall on no account be responsible for the expenses incurred by the Contractor for hired ground or fresh water obtained from elsewhere.

The rates quoted against individual items will be inclusive of everything necessary to complete the said items of work within the meaning of the contract and beyond the unit price no extra payment will be allowed for incidental or contingent work, labor and/or materials inclusive of all taxes and duties whatsoever except for specific items, if any, stipulated in the tender documents.

The Contractor shall supply, fix and maintain at his own cost for the execution of any work, all tools tackles, machineries and equipment and all the necessary centering, scaffolding, staging planking timbering strutting, shoring, pumping fencing boarding watching and lighting by night as well as by day required not only for the proper execution and protection of the said work but also for the protection of the public and safety of any adjacent roads, streets, walls houses, building all other erection matters and things and the Contractor shall take down and remove any or all such centering scaffolding planking timbering strutting shoring etc., as occasion shall be required or when ordered to do so and shall fully reinstate and make good all matters and things disturbed during the execution of work to the satisfaction of the Employer/Architects.

The Contractor shall also provide at his own cost such temporary road on the site as may be necessary for the proper performance of the contract and for his own convenience.

Upon completion such roads shall be broken up and leveled where so required by the drawings unless the Employer shall otherwise direct.

The Contractor shall at all times give access to workers employed by the employer or any agency employed on the building and to provide such parties with proper sufficient and if required, special scaffolding, hoists and ladders and provide them with water and lighting and leave or make any holes grooves etc. in any work, where directed by the employer as may be required to enable such workmen to lay or fix pipes electrical wiring, special fittings etc. The quoted rates of the tenderers shall accordingly include all these above mentioned contingent works.

CLAUSE- 12: TIME OF COMPLETION, EXTENSION OF TIME & PROGRESS CHART

1. Time of completion: The entire work is to be completed in all respect within the stipulated period. The work shall deemed to be commenced within fourteen days from the date of work order or date of handing over of site, whichever is later. Time is the essence of the contract and shall be strictly observed by the Contractor.

The work shall not be considered as complete until the Employer/Architects have certified in writing that this has been completed and the Defects Liability period shall commence from the date of such certificate.

2. Extension of Time: If in the opinion of the Employer/Architects the works be delayed (a) by reason of any exceptionally inclement weather, or (b) by reason of instructions from the Employer in consequence of proceedings taken or threatened by or disputes, with adjoining or neighboring owners or (c) by the works or delay, of other contractors or tradesman engaged or nominated by the employer and not referred to in the specification or (d) by reasons of authorized extra and additions or (e) any reason of any combination of trades or (f) from other causes which the Employer may consider are beyond the control of the Contractor, the Employer at the completion of the time allowed for the contract shall make fair and reasonable extension of time for completion in respect thereof. In the event of the Employer failing to give possession of the site upon the day specified above the time of completion shall be extended suitably.

In case of such strikes or lock-outs as, the Contractor shall immediately give the Employer, written notice thereof. Nevertheless, the Contractor shall use his best endeavors to prevent delay and shall do all that may be reasonably required to the

satisfaction of the employer to proceed with the works and on his doing so that it will be ground of consideration by the employer for an extension of time as above provided. The decision of the Employers to the period to be allowed for an extension of time for completion hereunder (which decision shall be final and binding on the Contractor) shall be promulgated at the conclusion of such strike or lock-out and the Employer shall then in the event of an extension being granted determine and declare the final completion date. The provisions in relevant clause with respect to payment of liquidated damages shall in such case, be read construed as if the extended date shall be deducted accordingly.

3. Progress of work: During the period of construction the Contractor shall maintain proportionate progress on the basis of a programmed Chart submitted by the Contractor immediately before commencement of work and agreed to by the Employer/Architects. Contractor should also include planning for procurement of scarce material well in advance and reflect the same in the Progress chart so that there is no delay in completion of the project.

CLAUSE -13: TOOLS, STORAGE OR MATERIALS, PROTECTIVE WORKS AND SITE OFFICE REQUIREMENTS.

The Contractor shall provide, fix up and maintain in an approved position proper office accommodation for the contractor's representative and staff which offices shall be open at all reasonable hours to receive instruction notices or Communications and clear away on completion of the works and make good all work disturbed.

All drawings maintained on the site are to be carefully mounted on boards of appropriate size and covered with a coat of approved varnish. They are to be protected from ravages of termites, ants and other insects.

The Contractor shall provide at his own cost all artificial light required for the work and to enable other contractors and sub-contractor to complete the work within the specified time.

The Contractor shall provide a suitable temporary hut for the watchman and clear away the same when no longer required and to provide all necessary attendance, lights etc., required.

The Contractor shall arrange for drinking water and also an adequate number of temporary latrines for the use of workers and field staff and keep the same in a clean and sanitary condition to the satisfaction of the public health authorities and shall cause such latrines and soil to be cleared away whenever necessary and shall make good all the works disturbed by these conveniences.

Every precaution shall be taken by the Contractor to prevent the breeding of mosquitoes on the works during the construction and all receptacles cisterns, water tanks etc, used for the storage of water must be suitably protected against the breeding of mosquitoes. The Contractor shall indemnify the Employer against any breach of rules on respect of anti-malarial measures.

The Contractor shall not fix or place any placards or advertisement of any description or permit the same to be fixed or placed in or upon any boarding, gantry, building structure other than those approved by the Employer.

PROTECTIVE MEASURES: The Contractor from time to time of being placed in possession of the site must make suitable arrangements for watching, lighting and protecting the work, the site and surrounding property by day, by night on Sundays and other holidays.

Contractor shall indemnify the Employer against any possible damage to the building, roads, or members of the public in course of execution of the work.

The Contractor shall provide necessary temporary enclosures, gates, entrances etc., for the protection of the work and materials and for altering and adopting the same as may be required and removing on completion of the works and making good all works disturbed.

STORAGE OF MATERIALS: The Contractor shall provide and maintain proper sheds for the proper storage and adequate protection of the materials etc. and other work that maybe executed on the site including the tools and materials of Sub-Contractors and remove same on completion. Sheds for storage of cement are to have pucca floor raised above the ground.

TOOLS: The Theodolite, levelling instrument, prismatic compass, chain, steel and metallic tapes and all other surveying Instruments found necessary on the works shall be provided by the Contractor for the due performance of this contract as instructed by the site Engineer.

All measuring tapes shall be of steel and suitable scaffolding and ladders that may be required for safety taking measurement and shall be supplied by the Contractor.

The mistries and supervisors on the works shall carry with them always a one meter or two meters steel tape, a measuring tape of 30 meters, a spirit level, a plump bob and a square and shall check the work to see that the work is being done according to the drawing and specifications. The Site Engineer will use any or all measuring instruments or tools belonging to the Contractors as he chooses for checking the works executed or being executed on the control.

The Contractor should cover in his rates for making provisions for all reasonable facilities for the use of his scaffolding rope and plant etc., by subcontractor for their work.

CLAUSE -14: NOTICE AND PATENTS OF APPROPRIATE AUTHORITY AND OWNERS.

The Contractor shall conform to the provisions of any Acts of the Legislature relating to the work and to the Regulations and Bye-laws of any authorities, and/or any water, lighting and other companies and/or authorities with whose systems the structures were proposed to have connection and shall before making any variations from the drawings or specification that may be associated to so conform give the Employer/Architects written notices Specifying the variations proposed to be made and the reasons for making them and apply for instruction thereon. The Employer/Architects on receipt of such intimation shall give a decision within a reasonable time.

The Contractor/s shall arrange to give all notices required for by the said Acts, Regulations or Bye-laws to be given to any authority and to pay to such authority or to any public officer all fees that may be properly chargeable in respect of the work and lodge the receipts with the employer.

The Contractor shall indemnify the Employer Against all claims in respect of patent rights, royalties, damages to building roads or members of public in course of execution of work and shall defend all actions arising from such claims and shall keep the employer saved harmless and indemnified in all respects from such actions cost and expenses.

CLAUSE -15: CLEARING SITE AND SETTING OUT WORKS

The site shown on the plan shall be cleared of all obstructions, loose stone and materials rubbish of all kinds. All holes or hollows whether originally existing or produced by removal of loose stone or materials shall be carefully filled up with earth well rammed and leveled off as directed at his own cost. The Contractor shall set out the works and shall be responsible for the true and perfect settings out of the work and for the correctness of the positions, levels, dimensions and alignment of all parts thereof. If at any time, any error shall appear during the progress of any part of work. The contractor shall at his own expenses rectify such error, if called upon to the satisfaction of the Employer. The Contractor shall further set out the works to the alternative position at the site until one is finally approved and the rates quoted in his tender should include for this and no extra on this account will be entertained.

CLAUSE-16: DATUM

The Contractor is to construct and maintain proper benches or all the main walls, in order that the lines and levels may be accurately checked at all times.

These benches will consist of Sal wood post of adequate length and minimum diameter 75mm to be driven in the ground at suitable distance as directed encased with brick work. The wire nails will be driven on the top of Sal wood post on the centre lines of column walls, and outside faces of foundations trenches in order that lines may be stretched between the benches and accurate intersection of excavation centre line of walls, columns etc. may be clearly indicated and checked at any time if it is so required.

CLAUSE -17: CONTRACTORS IMMEDIATELY TO REMOVE ALL OFFENSIVE MATTERS

All soil filth or other matters of any offensive nature taken out of any trench, sewer, drain, cesspool or other place shall not be deposited on the surface but shall be at once carted away by the Contractor to place provided by him.

The Contractor shall keep the foundations and works free from water and shall provide and maintain at his own expenses electrically or other power driven pumps and other plant till the building is handed over to the Employer. The Contractor shall arrange for the disposal of such water if accumulated to the satisfaction of the employer and local authority and no claims will be entertained afterwards if he does not include in his rates for the purpose.

CLAUSE-18: ACCESS

Any authorized representative of the Employer shall at all reasonable times have free access to the works and/or to the workshops, factories or other places where materials are being prepared or constructed for the work and also to any place where the materials are lying or from where they are being obtained and the Contractor shall give every facility to the office or their representatives necessary for inspection and examination and test of the materials and workmanship. Except the representatives of the employer no person shall be allowed at any time without the written permission of the Employer.

CLAUSE- 19: MATERIALS, WORKMANSHIP, SAMPLES, TESTING OF MATERIALS.

All the works specified and provided for in the specifications or which may be required to be done in order to perform and complete any part thereof shall be executed in best and most workmanship like manner with materials of the best and approved quality of the respective kinds in accordance with the particulars contained in and implied by the specification and as represented by the drawings or according to such other additional particulars and instructions as may from time to time given by the Employer/Architects during the execution of the work and to his entire satisfaction.

The Contractor shall have to carry out tests on materials and workmanship in approved materials testing laboratories or as prescribed by the Employer/Architects at his own cost to prove that the materials etc., under test conform to the relevant I.S. standards as specified in the specifications. The necessary charges for preparation of mould (in case of concrete cube) transporting testing etc., shall have to be borne by the Contractor. No extra

payment on this account should in any case be entertained. All materials (except where otherwise described) stores and equipment required for the full performance of the work under the contract must be provided through normal channels and must include charge for import duties, sales tax, octroi and other charges and must be the best of their kind available and the Contractor/s must be entirely responsible for the purpose and efficient carrying out of the work. The work must be done in the best workmanship like manner. Samples of all materials to be used must be submitted to the Employer/Architects when so directed by the Engineer/Architects and written approval from Employer/Architects must be obtained prior to placement of order.

During inclement weather the Contractor shall suspend concreting and plastering for such time as the Employer/Architects may direct and shall protect from injury all works when in course of execution, any damage (during construction) to any part of the work for any reasons due to rain, storm or negligence of Contractor shall be rectified by the Contractor in an approved manner at no extra cost.

Should the work be suspended by reason of rain, strike, lock-out of any other case, the Contractor shall take all precautions necessary for the protection of work and at his own expenses shall make good any damage arising from any of these causes.

The Contractor shall cover up and protect from damage from any cause all new work and supply all temporary/doors protection to Windows, and any other requisite protection for the execution of the work whether by himself or special tradesman or sub-contractor and any damage caused must be made good by the Contractor at his own expenses.

CLAUSE - 20: REMOVAL OF IMPROPER WORKS

The Employer / Architect appointed by the employer shall during the progress of work have power to order in writing from time to time. The removal from the works within such reasonable time or times as may be specified in the order of any materials which in the opinion of the Architects/Employer are not in accordance with the specification or the instructions, the substitution or proper re-execution of any work executed with materials or workmanship not in accordance with the drawings and specifications or instructions.

In case the Contractor refuses to comply and pay other agencies to carry out the work and all expenses consequent thereon or incidental thereto as certified by the Architect/Employer shall be borne by the Contractor or may be deducted from any money due or that may become due to the Contractor. No certificate which may be given by the Architects shall relieve the Contractor from his liability in respect of unsound work or bad materials.

CLAUSE-21: CONTRACTOR'S EMPLOYEES

The Contractor shall employ technically qualified site engineer and competent supervisors for the work shall be available (by turn) throughout the working hours to receive and comply with instructions of the Employer/Architects. The Contractor shall employ in connection with the work persons having the appropriate skill or ability to perform their job effectively. The Contractor shall employ local laborers on the work as far as possible.

No labours below the age of sixteen years and who is not an Indian National shall be employed on the work. Any labour supplied by the Contractor to be engaged on the work on day-work basis either wholly or partly under the direct order of control of the employer or his representative shall be deemed to be a person employed by the Contractor.

The Contractor shall comply with the provisions of all labour legislation including the requirements of

- a) The payment of Wages Act.
- b) Employer's Liability Act.
- c) Workmen's Compensating Act.
- d) Control Labor (Regulation & Abolition) Act 1970 and Central Rules 1971.
- e) Apprentices Act 1961.
- f) Any other Act or enactment relating thereto and Rules framed there under from time to time.

The Contractor shall keep the Employer saved harmless and indemnified against claims if any of the workmen and all costs and expenses as may be incurred by the Employer in connection with any claim that may be made by any workmen.

The Contractor shall comply at his own cost with the order or requirement of any Health Officer of the State or any local authority or of the Employer regarding the maintenance of proper environmental sanitation of the area where the

Contractor's laborers are housed or accommodated for the prevention of small pox, cholera, plague, typhoid, malaria and other contagious diseases. The Contractor shall provide, maintain and keep good sanitary condition adequate sanitary accommodation and provide facilities for pure drinking water at all times for the use of men engaged on the works and shall remove and clear away the same on completion of the works. Adequate precautions shall be taken by the Contractor to prevent nuisance of any kind on the works or the lands adjoining the same.

The Contractor shall arrange to provide first aid treatment to the laborers engaged on the works. He shall within 24 hours of the occurrence of any accident at or about the site or in connection with execution of the works, report such accident to the Employer and also to the competent authority where such report is required by law.

CLAUSE - 22: CONTRACTORS SUPERINTENDENCE & EMPLOYMENT OF PERSONNEL

The Contractor shall give all necessary personal superintendence during the execution of the work & as long thereafter as the Architect/Employer may consider necessary until expiration of the Defect Liability period.

The Contractor or a competent and authorized agent or representative approved in writing by the Architect/Employer which approval may at any time be withdrawn is to be present on the works and shall give his whole time to the superintendence of the same. Any directions, explanations, instructions given to such representative shall be deemed to be given to the Contractor.

If the approval as mentioned above shall be withdrawn by the Architect/Employer, the Contractor after receiving written notice of such withdrawal shall remove the agent from the works and shall not employ him again in any capacity on the works. The Contractor shall at all times enforce strict discipline & good order among his employees and shall not employ and unfit person or anyone not skilled in the work assigned to him. The Contractor shall employ his technical staff besides other personnel approved by the Architect/ Employer. The technical staff should be available at site to take instructions whenever required by the aforesaid he shall be liable to pay a sum of Rs. 2000/- each month or part thereof for default in case of work valued Rs. 20 lakhs or above and Rs.1000/- each month or part

thereof for default in case of work valued more than Rs.5 lakhs but less than Rs.20 lakhs.

The decision of the Architect/Employer on the above subject will be final and binding on the Contractor. The Architect/Employer shall be at liberty to object to and require the Contractor to remove forthwith from the works any person employed by the Contractor or about the execution or maintenance of the works, who in the opinion of the Architect/Employer misconduct himself or is incompetent or negligent in the performance of his duties of whose employment is consider otherwise undesirable.

CLAUSE - 23: DISMISSAL OF WORKMEN

The Contractor shall on the request of the employer immediately dismiss from works any person employed thereon by him who may in the opinion of the employer be unsuitable or incompetent or who may misconduct himself such discharges shall not be the basis of any claim for compensation or damages against the employer or any of their officer or employer.

CLAUSE - 24: ASSIGNMENT

The whole of the works included in the contract shall be executed by the Contractor and the Contractor shall not directly or indirectly transfer, assign or underlet the contract or any part, share or interest therein not shall take a new partner, without written consent of the Employer and no subletting shall relieve the Contractor from the full and entire responsibility of the contract or from active superintendence of the work during their progress.

CLAUSE - 25: INJURY TO PERSONS AND DAMAGE TO PROPERTY INSURANCE ETC.

The Contractor shall be responsible for all injury to the work or workmen to persons, animals or thing and for all damages to the structural and/or decorative part of property which may arise from the operations or neglect by him or of any sub-contractor or of any of his or a sub-Contractor's Employees, whether such injury or damage arise from carelessness, accident or any other cause

whatsoever in any way connected with the carrying out of this contract. The clause shall be held to include inter-alia any damage to buildings and the work forming the subject of this contract by rain, wind or other inclemency of the weather. The Contractor shall indemnify the Employer and hold of all and any expenses arising from any such injury or damages to persons or property as aforesaid and also in respect of any claim made in respect of injury or damage under any acts of compensation or damage consequent upon such claim.

The Contractor shall reinstate all damage of every sort mentioned in this clause so as to deliver the whole of the contract works complete and perfect in every respect and so as to make good or otherwise satisfy all claims for damages to the property or third parties.

The Contractor shall effect the insurance necessary and indemnify the Employer entirely from all responsibility in this respect. The insurance must be placed in a company approved by the employer and must be effected, jointly in the name of the Contractor and the employer & the policy lodged with the later. The scope of insurance is to include damage or loss to the contract itself till this is made over in a complete State. Insurance is compulsory and must be effected from the very initial stage. The contractor shall also be responsible for any damage which may be arising out of incidents, negligence or defective carrying out of this contract.

The Employer shall be at liberty and is hereby empowered to deduct the amount of any damages compensations, costs, charges and expenses arising or accruing from or in respect of any such claim or damages from any sums due or to become due to the Contractor.

CLAUSE - 26: ACCOUNT RECEIPTS AND VOUCHERS

The Contractor shall upon the request of the Employer furnish them with all the invoices, accounts, receipts; and other vouchers that they may be require in connection with the works under this contract. If the contractor, shall use materials less than what is required under the contract, the value of the difference in the quantity of the materials he was required to use and that he actually used shall be deducted from his dues. The decision of the Employer shall be final and binding; on the contractor as to the amount of materials the contractor is required to use for any work under this contract.

CLAUSE - 27: MEASUREMENT OF WORK

Before taking any measurement of any work the site Engineer or a subordinate deputed by him shall give reasonable notice to the contractor. If the contractor fails to attend at the measurements after such notice or fails to countersign or to record the difference within a week from the date of measurement in the manner required by the site Engineer then in any such event the measurements taken by the site Engineer or by the subordinate deputed by him as the case may be is final and binding on the contractor and the contractor shall have no right to dispute the same.

Measurement Books

- a. The number of pages for measurements alone shall be 100 per book. If convenient, the measurement book may be provided with perforated sheets, in triplicate, for dispatch to concerned authorities. The pages shall be serially machine numbered. The book shall be in the custody of the Site Engineer.
- c. In addition to pages for measurements, pages shall be provided for Index, Instructions, Certificate of Condition (wholeness) of the Book and Record of handling and taking over.
- d. Each book shall bear an identifying number.
- e. Separate format of Measurement Book shall be used for recording measurements of steel reinforcement.
- f. Stock Register shall be maintained to show receipts and issues of Measurement books.

Recording of Measurements

- a. The measurements shall be generally recorded by the Site Engineer or by an employee or an agency of the employer, specially authorized for the purpose, e.g. a Project Management Consultant.
- b. The Site Engineer (or his representative) or PMC wherever PMC is deployed separately for supervision shall take joint measurements (i.e. accompanied by

the contractor's authorized representative) of the work as it progresses and record them directly in the Measurement Books.

- c. It shall be ensured that the method of measurement is in accordance with the contract. The precision in measurements shall be as laid down in IS-1200. Any points of disagreement with the contractor pertaining to measurements shall be promptly referred to the decision of the Competent Authority.
- d. Extra/deviated items, as claimed by the contractor, shall not be recorded in Measurement Book until they are approved by the Competent Authority.
- e. In case some allegedly extra/deviated item is carried out by the contractor while complying with approved drawings and specifications, and the same is to be covered up, the Site Engineer or Project Management Consultant shall check the item and its specification and record its measurements but simultaneously enter up the provision that their admittance is subject to the approval by the Competent Authority. Both the measurements and the provision shall be signed by the contractor.
- f. The Measurement Book shall not be handed over to the contractor at any time. The contractor or his representative may be permitted by the Site Engineer or Project Management Consultant to see it in his presence and/or make a (concurrent) copy of his own. The contractor shall, however, be warned that his copy shall be regarded as an unofficial copy of the Employer Measurement Book. This is the only authorized document in the matter,
- g. The measurement shall be signed at the end of each session of measurement of the day's work, as the case may be, by both the parties (i.e. Measurer/Site Engineer and the contractor).

Concealed work

The contractor shall give due notice to the Employer whenever any work is to be buried in the earth, concrete or in the bodies of it or otherwise, becoming inaccessible later on, in order that the work may be inspected and correct dimensions taken before such burial, in default whereof the same shall, at the opinion of the Employer be either opened up for measurement at the contractor's expense or no payment may be made for such work, should any dispute or difference arise after the execution of any work as to measurements etc., or other matters which cannot be conveniently tested or checked the

notes of the employer shall be accepted as correct and binding on the contractor.

CLAUSE -28: INTERIMEDIATE PAYMENT :

No payment shall be made for work, estimated to cost Rs. Two Lakh or less till after the whole of the work shall have been completed and certificate of completion given. For works estimated to cost over Rs. Two Lakh, the interim or running account bills shall be submitted by the Contractor for the work executed on the basis of such recorded measurements on the format of the Department in triplicate on or before the date of every month fixed for the same by the Employer. The Contractor shall not be entitled to be paid any such interim payment if the gross work done together with net payment/adjustment of advances for material collected, if any, since the last such payment is less than Rs. Two Lakh, in which case the interim bill shall be prepared on the appointed date of the month after the requisite progress is achieved. Employer 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 Employer certifying the sum to which the Contractor is considered entitled by way of interim payment at such rates as decided by the Employer. The amount admissible shall be paid by 14th working day after the day of presentation of the bill by the Contractor to the Engineer together with the account of the material issued by the department, or dismantled materials, if any. In the case of works outside the headquarters of the Employer, the period of 14 working days will be extended to 21 working days. 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 Employer 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 Employer 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. 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 Employer to take action under the terms of this contract for delay in the completion of work, if the extension of date of completion is not granted by the competent authority.

CLAUSE-29: COMPLETION CERTIFICATE AND COMPLETION PLANS :

Within ten days of the completion of the work, the Contractor shall give notice of such completion to the Employer and within thirty days of the receipt of such notice the Employer shall inspect the work and if there is no defect in the work, shall furnish the Contractor with a final certificate of completion, otherwise a provisional certificate of physical completion indicating defects (a) to be rectified by the contractor and/or (b) for which payment will be made at reduced rates, shall be issued. But no final certificate of completion shall be issued, nor shall the work be considered to be complete until the contractor shall have removed from the premises on which the work shall be executed all scaffolding, surplus materials, rubbish and all huts and sanitary arrangements required for his/their work people on the site in connection with the execution of the works as shall have been erected or constructed by the contractor(s) and cleaned off the dirt from all wood work, doors, windows, walls, floor or other parts of the building, in, upon, or about which the work is to be executed or of which he may have had possession for the purpose of the execution thereof, and not until the work shall have been measured by the Employer. if the contractor shall fail to comply with the requirements of this Clause as to removal of scaffolding, surplus materials and rubbish and all huts and sanitary arrangements as aforesaid and cleaning off dirt on or before the date fixed for the completion of work, the Employer may at the expense of the contractor remove such scaffolding, surplus materials and rubbish etc., and dispose of the same as he thinks fit and clean off such dirt as aforesaid, and the

contractor shall have no claim in respect of scaffolding or surplus materials as aforesaid except for any sum actually realized by the sale thereof. When the annual repairs and maintenance of works are carried out, the splashes and droppings from white washing, colour washing, painting etc., on walls, floor, windows, etc. shall be removed and the surface cleaned simultaneously with the completion of these items of work in the individual rooms, quarters or premises etc. where the work is done without waiting for the actual completion of all the other items of work in the contract. In case the Contractor fails to comply with the requirements of this clause, the Employer shall have the right to get this work done at the cost of the Contractor either departmentally or through any other agency. Before taking such action, the Employer shall give ten days notice in writing to the contractor.

CLAUSE-30: PAYMENT OF FINAL BILL :

The final bill shall be submitted by the Contractor in the same manner as specified in interim bills within one month of physical completion of the work or within one month of the date of the final certificate of completion furnished by the Employer whichever is earlier. 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. Payments of those items of the bill in respect of which there is no dispute and of items in dispute, for quantities and rates as approved by Employer, will, as far as possible be made within a period of three months, the period being reckoned from the date of receipt of the bill by the Engineer, complete with account of dismantled materials.

CLAUSE - 31: FINAL PAYMENT

The final bill shall be accompanied by certificate of completion from the employer/Architects payments off final bill shall be made after deduction of Retention money as specified in relevant clause of these conditions, which sum shall be refunded after the completion of the Defects Liability period after receiving the employer's/Architects' certificate that the contractor has rectified all defects to the satisfaction of the Employer/Architects. The acceptance of payment of the final bill by the contractor would indicate that he will have no further claim in respect of the work executed.

CLAUSE - 32: SUBSTITUTION

Should the Contractor desire to substitute any materials and workmanship, he/they must obtain the approval of the Employer/Architects in writing for any such substitution work in advance. Materials designed in this specification indefinitely by such term as "Equal" or "Other approved" etc., specific approval of the employer/Architects has to be obtained in writing.

CLAUSE- 33: PREPARATION OF BUILDING WORKS FOR OCCUPATION AND USE ONCOMPLETION

The whole of the work will be thoroughly inspected by the contractor and deficiencies and defects put right. On completion of such inspection the Contractor shall inform the Employer that he has completed the work and it is ready for inspection.

On completion the Contractor shall clean all windows and doors including the cleaning and oiling if necessary of all hardware inside and outside all floors staircase and every part of the building. He will leave the entire building neat and clean & ready for immediate occupation and to the satisfaction of the employer.

CLAUSE - 34: CLEARING OF SITE ON COMPLETION

On completion of the works, the contractor shall clear away and remove from the site all construction plants and equipment, surplus materials, rubbish and temporary works of every kind and leave the whole of the site and works clean and in a workman- like condition to the satisfaction of the employer/Architects.

CLAUSE - 35: DEFECTS AFTER COMPLETION

The Contractor shall make good at his own cost and to the satisfaction of the employer / Architect all defects, shrinkage, settlement or other faults which may appear within 12 months after completion of the work. In default the Employer may employ and pay other persons to amend and make good such

damages, losses and expenses consequent thereon or incidental thereto shall be made good and borne by the Contractor and cost of such damages, loss and expenses shall be recoverable from him by the Employer or may be deducted from his dues by the Employer or lieu of such amending and making good the equivalent cost of amending such work will be recovered from the contractor dues and in the event of the amount retained being insufficient, recover that balance from the contractor from the amount retained deposited with the Employer may have incurred in connection therewith.

CLAUSE - 36: CONCEALED WORK

The Contractor shall give due notice to the Employer/Architects whenever any work is to be buried in the earth concrete or in the bodies of walls or otherwise becoming inaccessible later on, in order that the work may be inspected and correct dimensions taken before such burial, in default whereof the same shall at the opinion of the Employer/Architects be either opened up for measurement at the contractor's expense or no payment may be made for such materials. Should any dispute or difference arise after the execution cannot be conveniently tested or checked the notes of the Employer/Architects shall be accepted as correct and binding on the Contractor.

CLAUSE - 37: ESCALATION

The rate quoted shall be firm throughout the tenure of the contract (including extension of time if any granted) and will not be subject to any fluctuation due to increase in cost of materials, labor, sales tax, octroi etc., unless specifically provided elsewhere in these documents.

CLAUSE - 38: IDLE LABOUR

Whatever the reasons may be no claim for idle labor, additional establishment cost of hire & labor charges of tools and plants would be entertained under any circumstances.

CLAUSE - 39: SUSPENSION

If the Contractor except on account of any legal restraint upon the Employer preventing the continuance of the work or in the opinion of the Employer shall neglect or fail to proceed with due diligence in the performance of his part of the contract or if he shall more than once make default, the Employer shall have the power to give notice in writing to the Contractor requiring the work to proceed within a reasonable manner and with reasonable dispatch, such notice purport to be a notice under this clause.

After such notice shall have been given the Contractor shall not be at liberty of remove from the site of the works or from any ground contiguous thereto any plant or materials to subsist from the date of such notice being given until the notice shall have been complied with. If the Contractor shall fail for 7 days after such notice has been given to proceed with the works as therein prescribed, the Employer may proceed as provided in relevant Clause (Termination of contract by Employer)

CLAUSE - 40: TERMINATION OF CONTRACT BY EMPLOYER

If the Contractor being a company go into liquidation voluntary or compulsory or being a firm shall be dissolved or being an individual shall be adjudicated as insolvent or shall make assignment or a composition for the benefit of the greater part in number of amount of his creditors or shall enter into a Deed or arrangement with his creditors, or if the official assignee in insolvency of the Receiver of the Contractor in insolvency, shall repudiate the contract, or if a Receiver of the Contractor's firm appointed by the court shall be unable, within fourteen days after notice to him requiring him to do so, to show to the reasonable satisfaction of the employer that he is able to carry out and fulfill the contract, and if so required by the Employer to give reasonable security therefore, or if the Contractor shall suffer execution to be issued, or shall suffer any payment under this contract to be attached by or on behalf of and of the creditors of the Contractor, or shall assign charge or encumber this contract or any payments due or which may become due to the Contractor, there under, or shall neglect or fail to observe and perform all or any of the act matters of things by this contract, to be observed and performed by the Contractor within three clear days after the notice shall have been given to the Contractor in a manner hereinafter mentioned requiring the Contractor to observe or perform

the same or shall use improper materials or workmanship in carrying on the works, or shall in the opinion of the employer not exercise such due diligence and take such due progress as would enable the work to be completed within due time agreed upon and shall fail to proceed to the requiring the Contractor so to do shall have been given to the Contractor as hereinafter mentioned, or shall abandon the contract, then and in any of the said cases, the employer may notwithstanding previous waiver determine the contract by a notice in writing to the effect as hereinafter mentioned, but without thereby effecting the power of the Employer of the obligations and liabilities of the Contractor the whole of which so determined and as if the works subsequently executed had been executed by or on behalf of the Contractor (without thereby creating any trust in favor of the Contractor) further the employer or his agent, steam and other power, utensil and materials, lying upon premises or the adjoining lands or roads and sell the same as his own property or may employ the same by means of his own servants and workmen in carrying on and completing the works or by employing any other Contractor or other persons or person to complete the works, and the Contractor shall not in any way interrupt or do any act, matter or thing to prevent or hinder such other Contractor or other persons or person employed from completing and finishing or using the materials and plants for the works when the works shall be completed, or as soon hereafter as conveniently may be, the employer shall give notice in writing to the Contractor to remove his surplus materials and plants and should the contractor fail to do so within a period of 14 days after receipt by him the employer may sell the same by public Auction and shall give credit to the Contractor for the amount so realised. Any expenses or losses incurred by the employer in getting the works carried out by other contractor's shall be adjusted against the amount payable to the Contractor by way of selling his tools and plants or due on account of work carried out by the Contractor prior to engaging other Contractors or against the Security Deposit.

CLAUSE - 41: DRAWING & SPECIFICATIONS

(a) The Contractor after the award of the contract and on signing thereof shall be furnished by the Architect/ employers free of cost two copies of each of the drawings specification, description schedule and other details necessary

for execution of the work. All further drawings & details as may be prepared by the Architect/Employers from time to time for reasonable developments of the work described in the contract documents and to explain and clarify the contract drawings when require and to enable the contractor to execute and complete the works shall also be supplied in duplicate to the contractor free of cost.

Any further copies of such drawings required by the contractor shall be paid for by him. The contractor shall keep one laminate copy of all drawings specifications, priced schedule of items and quantities on the works & the Architects/Employers or his representative shall at all reasonable times have access to the same.

(b)The Contractor shall provide at his cost everything necessary for the proper execution of the works according to the intent and meaning of the drawings, schedule of quantities and specifications taken together whether the same may or may not be particularly shown or described therein provided that the same can reasonably be inferred there from and if the contractor finds any discrepancy in the drawings or between drawings, schedule of quantities and specifications he shall immediately & in writing refer the same to the Architect/Employers whose decision shall be final and binding

(c) Figured dimension on the scale drawings and large size details shall govern. Any work done at any time or even before receipt of such details shall be removed / replaced by the contractor without any expense to the owner, If the work is not in order and if so directed by the Architect/Employers error, inconsistencies in drawing & local conditions affecting the works shall be brought to the notice of the Architect/Employers immediately for his decision.

(d)All drawings, bills of quantities and specifications and copies thereof furnished by the Architect/Employer are their property. They shall not be used on any other work and shall be returned to the Architect at his request on completion before issue of final certificate or termination of the contract.

(e) Reinforcing steel and bar bending schedules shall be furnished by the contractor to the architect/employer at least 15 days before the items of work is

to be taken up and approval of the Architect/Employer shall be obtained before the fabrications and placing of reinforcement.

(f) Shuttering and tagging drawings if called for by the Architect/Employer shall also be furnished well in advance for his approval before taking up the work.

(g) 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 and special conditions in preference to General Conditions.

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) C.P.W.D. Specifications.
- v) Indian Standard Specification of B.I.S.

If there are varying or conflicting provisions made in any one document forming part of the contract, the 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.

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 specifications or from any of his obligations under the contract.

CLAUSE - 42: NOTICE OF ANY CLAIMS

The Contractor shall submit within seven days, in case there is any instance for which the contractor considers himself entitled to or likes to prefer claim for additional payment, a statement giving particulars as full and detailed as possible to enable the Architect/Employer verification, admissibility and assessment, failing which no claim will be entertained.

CLAUSE - 43: FINAL CLAIMS

1. Not later than 90 calendar days the issue of the completion certificate the contractor shall submit to the Architect/Employer a statement of final account with supporting documents showing in details the value of work done in accordance with the contract together with all payment due to him.
 2. Within 60 calendar days after receipt of the final account and all information reasonably required for verifications, the Architect/Employer shall issue final certificate both to the contractor and the employer stating the balance amount which as per opinion of the Architect/ Employer is due to the contractor by the employer or payable to the employer for all sums previously paid by the employer and for all sums to which the employer is entitled for credit under the contract.
 3. The Contractor on receipt of the final certificate shall either
 - (i) Accept the final certificate and sign the documents as evidence of his agreement therewith and refrain from any further claims
- Or**
- (ii) Take exception to the certificate by filing with the employer within a period of 30 calendar days, a written statement setting forth his claim for reconsideration.

CLAUSE - 44: PERFORMANCE GUARANTEE

- (i) The Contractor shall submit an irrevocable Performance Guarantee of 5% (Five percent) of the contract price in addition to other deposits mentioned elsewhere in the contract for his proper performance and due fulfillment of the terms and conditions of the Contract, (notwithstanding and/or without prejudice to any other provisions in the contract) within period specified in Bid Data from the date of issue of letter of acceptance. This period can be further extended by the Employer up to a maximum period as specified in bidding data on written request of the contractor stating the reason for delays in procuring the Bank Guarantee, to the satisfaction of the Employer. This guarantee shall be in the form Deposit at Call receipt of any scheduled bank/Banker's Cheque/Demand Draft/Pay Order of any scheduled bank or Government Securities or Fixed Deposit Receipts or Guarantee Bond

so of any Scheduled Bank in accordance with the form annexed hereto. In case a fixed deposit receipt is furnished by the contractor to the Government as part of the performance guarantee and the Bank is unable to make payment against the said fixed deposit receipt when demanded, the loss caused there by shall fall on the contractor and on demand the contractor shall forthwith furnish additional acceptable security to the Employer to make good the deficit.

- (ii) The Performance Guarantee shall be initially valid up to the stipulated date of completion plus 60 days thereafter. In case the time for completion of work gets enlarged, the Contractor shall get the validity of Performance Guarantee extended to cover such enlarged time for completion of work. After recording of the completion certificate for the work by the competent authority, the performance guarantee shall be returned to the Contractor, without any interest.
- (iii) The Employer shall not make a claim under the performance guarantee except for amounts to which the Employer is entitled under the contract (not withstanding and/or without prejudice to any other provisions in the Contract) in the event of:
 - (a) Failure by the Contractor to extend the validity of the Performance Guarantee as described herein above, in which event the Employer may claim the full amount of the Performance Guarantee.
 - (b) Failure by the Contractor to pay the Employer any amount due, either as agreed by the contractor or determined under any of the Clauses/Conditions of the Contract, within 30 days of the service of notice to this effect by Employer.
- (iv) In the event of the Contract being determined or rescinded under provision of any of the Clause/Condition of the Contract, the performance guarantee shall stand forfeited in full and shall be absolutely at the disposal of the Employer.

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 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 by the Employer 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 cash or fixed deposit receipt tendered by the State Bank of India or by Scheduled Banks or Government Securities (if deposited for more than 12 months) endorsed in favor 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. The security deposit shall be collected from the running bills of the Contractor at the rates mentioned above and the earnest money if deposited in cash at the time of tenders will be treated part of the Security Deposit.

Note-1: Government papers tendered as security will be taken at 5% (five per cent) below its market price or at its face value, whichever is less. The market price of Government paper would be ascertained by the Employer at the time of collection of interest and the amount of interest to the extent of deficiency in value of the Government paper will be withheld if necessary.

Note-2: Government Securities will include all forms of Securities mentioned in rule No. 275 of the G.F. Rules except fidelity bond. This will be subject to the observance of the condition mentioned under the rule against each form of security.

(iv) The performance Guarantee shall be continuous and revolving for the whole of the warranty period. In case, the Bank Guarantee is invoked during the warranty period, the Bank Guarantee shall be replenished by an equal amount within 15 days by the contractor.

CLAUSE- 45:WORKS TO BE EXECUTED IN ACCORDANCE WITH SPECIFICATIONS, DRAWINGS, ORDERS ETC:

The Contractor shall execute the whole and every part of the work in the most substantial and workmanlike manner both as regards materials and otherwise in every respect in strict accordance with the specifications. The Contractor shall also conform exactly, fully and faithfully to the design, drawings and instructions in writing in respect of the work signed by the Employer and the Contractor shall be furnished free of charge one copy of the contract documents together with specifications, designs, drawings and instructions as are not included in the Standard specifications specified in Bidding Data or in any Bureau of Indian Standard or any other, published Standard or code or,

Schedule of Rates or any other printed publication referred to elsewhere in the contract. The contractor shall comply with the provisions of the contract and with the care and diligence execute and maintain the works, and provide all labour and materials, tools and plants including for measurements and supervision of all works, structural plans and other things of temporary or permanent nature required for such execution and maintenance in so far as the necessity for providing these, is specified or is reasonably inferred from the contract. The Contractor shall take full responsibility for adequacy, suitability and safety of all the works and methods of construction.

CLAUSE-46: DEVIATIONS/VARIATIONS EXTENT AND PRICING :

The Employer shall have power (i) to make alteration in, omissions from, additions to, or substitutions for the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work, and (ii) to omit apart of the works in case of non availability of a portion of the site or for any other reasons and the Contractor shall be bound to carry out the works in accordance with any instructions given to him in writing signed by the Employer and such alterations, omissions, additions or substitutions shall form part of the contract as if originally provided therein and any altered, additional or substituted work which the Contractor may be directed to do in the manner specified above as part of the works, shall be carried out by the Contractor on the same conditions in all respects including price on which he agreed to do the main work except as here after provided. The time for completion of the works shall, in the event of any deviations resulting in additional cost over the tendered value sum being ordered, be extended, if requested by the Contractor, as follows:

- (i) In the proportion which the additional cost of the altered, additional or substituted work, bears to the original tendered value plus
- (ii) 25% of the time calculated in (i) above or such further additional time as may be considered reasonable by the Employer.

In the case of extra item(s) the Contractor may within fifteen days of receipt of order or occurrence of the item(s) claim rates, supported by proper analysis, for the work and the Employer shall within one month of the receipt of the claims supported by analysis, after giving consideration to the analysis of the

rates submitted by the Contractor, determine the rates on the basis of the market rates and the Contractor shall be paid in accordance with the rates so determined. In the case of substituted items, the rate for the agreement item (to be substituted) and substituted item shall also be determined in the manner as mentioned in the aforesaid para.

- (a) If the market rate for the substituted item so determined is more than the market rate of the agreement item (to be substituted) the rate payable to the Contractor for the substituted item shall be the rate for the agreement item (to be substituted) so increased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted). i)
- i) If the market rate for the substituted item so determined is less than the market rate of the agreement item (to be substituted) the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so decreased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted). In the case of contract items, substituted items, contract cum substituted items, which exceed the limits laid down in Bidding Data, the contractor may within fifteen days of receipt of order or occurrence of the excess, claim revision of the rates, supported by proper analysis, for the work in excess of the above mentioned limits, provided that if the rates so claimed are in excess of the rates specified in the schedule of quantities the Employer shall within one month of receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined. The provisions of the preceding paragraph shall also apply to the decrease in the rates of items for the work in excess of the limits laid down in Bidding Data, and the Employer shall after giving notice to the contractor within one month of occurrence of the excess and after taking in to consideration any reply received from him within fifteen days of the receipt of the notice, revise the rates for the work in question within one month of the expiry of the said period of fifteen days having regard to the market rates. The Contractor shall send to the Employer once every three months an up to date account giving complete details of all claims for additional payments to which the Contractor may consider himself entitled and of all additional work ordered

by the Employer which he has executed during the preceding quarter failing which the Contractor shall be deemed to have waived his right. However, the Employer may authorize consideration of such claims on merits. For the purpose of operation deviation limit as provided in the Bidding Data, the following works shall be treated as works relating to foundation: For buildings, compound walls plinth level or 1.2 meters (4 feet) above ground level whichever is lower excluding items of flooring and D.P.C, but including base concrete below the floors.

- (ii) For abutments, piers, retaining walls of culverts and bridges, walls of water reservoirs the bed of floor level.
- (iii) For retaining walls where floor level is not within 1.2 meters above the average ground level or bed level.
- (iv) For Roads all items of excavation and filling including treatment of sub-base. Any operation incidental to or necessarily has to be in contemplation of tenderer while filing tender, or necessary for proper execution of the item included in the Schedule of quantities or in the schedule of rates mentioned above, whether or not, specifically indicated in the description of the item and the relevant specifications, shall be deemed to be included in the rates quoted by the tenderer or the rate given in the said schedule of rates, as the case may be. Nothing extra shall be admissible for such operations.

CLAUSE - 47: ACTION IN CASE WORK NOT DONE AS PER SPECIFICATIONS :

All works under or in course of execution or executed in pursuance of the contract shall at all times be open and accessible to the inspection and supervision of the Employer, his authorized subordinates in charge of the work and all the superior officers, and architect and the Contractor shall, at all times, during the usual working hours and at all other times at which reasonable notice of the visit of such officers has been given to the Contractor, either himself be present to receive orders and 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 had been given to the Contractor himself. If it shall appear to the Employer or his authorized subordinates in-charge of the work or to the that any work has been executed with unsound, imperfect, or unskillful workman-

ship, or with materials or articles provided by him for the execution of the work which are unsound or of a quality inferior to that contracted or otherwise not in accordance with the contract the Contractor shall, on demand in writing which shall be made within six months of the completion of the work from the Employer specifying the work, materials or articles complained of notwithstanding that the same may have been passed, certified and paid for forth with rectify, or remove 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 charge and cost. In the event of the failing to do so within a period specified by the Employer in his demand aforesaid, then the Contractor shall be liable to pay compensation at the same rate as under clause 8.2 of the contract (for non-completion of the work in time) for this default. In such case the Employer may not accept the item of work at the rates applicable under the contract but may accept such items at reduced rates as the competent authority may consider reasonable during the preparation of on account bills or final bill if the item is so acceptable with out detriment to the safety and utility of the item and the structure or he may reject the work outright without any payment and/or get it and other connected and incidental items rectified, or removed and re-executed at the risk and cost of the Contractor. Decision of the Employer to be conveyed in writing in respect of the same will be final and binding on the Contractor.

CLAUSE- 48: CONTRACTOR LIABLE FOR DAMAGES

LIABILITY PERIOD:

If the Contractor or his working staff or servants shall break, deface, injure or destroy any part of building in which they may be working, or any building, road, road curb, 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 what ever or if any defect, shrinkage or other faults appear in the work within the period as specified in the Bidding document after a certificate final or

otherwise of its completion shall have been given by the Employer as aforesaid 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 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 there after may become due to the Contractor, or **from his security deposit or the proceeds** of sale thereof or of a sufficient portion thereof. The security deposit of the Contractor shall not be refunded before the expiry defects liability period after the issue of the certificate final or otherwise, of completion of work, or till the final bill has been prepared and passed whichever is later. In case of Maintenance and Operation works of E&M services, the security deposit deducted from Contractors shall be refunded in instalment within one month from the date of final payment or within one month from the date of completion of the maintenance contract whichever is earlier.

CLAUSE - 49: EMPLOYMENT OF TECHNICAL STAFF AND EMPLOYEES :

Contractors Superintendence, Supervision, Technical Staff & Employees

- i) The contractor shall provide all necessary superintendence during execution of the work and all along thereafter as may be necessary for proper fulfilling of the obligations under the contract. The contractor shall immediately after receiving letter of acceptance of the Bid and before commencement of the work, intimate in writing to the Employer the name(s), qualifications, experience, age, address(s) and other particulars along with certificates of the principal technical representative to be in charge of the work and other technical representative (s) who will be supervising the work. Minimum requirement of such technical representative(s) and their qualifications and experience shall not be lower than specified in Bidding Document. The Employer shall within 3 days of receipt of such communication intimate in writing his approval or otherwise of such representative(s) to the contractor. Any such approval may at any time be withdrawn and in case of such withdrawal, the contractor shall appoint another such representative(s) according to the provisions of this clause. Decision of the bid accepting authority shall be final and binding on the contractor in this respect. Such a principal technical representative and

other technical representative(s) shall be appointed by the contractor soon after receipt of the approval from Employer and shall be available at site before start of work. All the provisions applicable to the principal technical representative under the clause will also be applicable to other technical representative(s). The principal technical representative and other technical representative(s) shall be present at the site of work for supervision at all times when any construction activity is in progress and also present himself/ themselves, as required, to the Employer and/or his designated representative to take instructions. Instructions given to the technical representative(s) shall be deemed to have the same post as if these have been given to the contractor. The principal technical representative(s) shall be actually available at site fully during all stages of execution of work, during recording/checking/test checking of measurement of works and whenever so required by the Employer and shall also note down instructions conveyed by the Employer or his designated representative(s) in the Site Order Book and shall affix his/their signature(s) in token of noting down the instructions and in token of acceptance of measurements/checked measurements/test checked measurements. The representative(s) shall not look after any other work. Substitutes, duly approved by Employer of the work in similar manner as aforesaid shall be provided in event of absence of any of the representative(s) by more than two days. If the Employer, whose decision in this respect is final and binding on the contractor, is convinced that no such technical representative(s) is/are effectively appointed or/is/are effectively attending or fulfilling the provision of this clause, a recovery (non-refundable) shall be effected from the contractor as specified in Bidding Data and the decision of the Employer as recorded in the Site Order Book and measurements recorded, checked/test checked in Measurement Books shall be final and binding on the contractor. Further if the contractor fails to appoint a suitable principal technical representative and/or other technical representative(s) and if such appointed persons are not effectively present or are absent by more than two days without duly approved substitute or do not discharge their responsibilities satisfactorily, the Employer shall have full powers to suspend the execution of the work until such date as a suitable other

technical representative(s) is/are appointed and the contractor shall be held responsible for the delay so caused to the work. The contractor shall submit a certificate of employment of the technical representative(s) along with every on account bill/final bill and shall produce evidence if at any time so required by the Employer. The contractor shall provide and employ on the site only such technical assistants as are skilled and experienced in their respective fields and such foremen and supervisory staff as are competent to give proper supervision to the work. The contractor shall provide and employ skilled, semiskilled and unskilled labour as is necessary for proper and timely execution of the work. The minimum strength of trained and certified workers shall be 5 % of the total strength employed. The accepted certification shall be granted by government authorized organizations. The Employer shall be at liberty to object to and require the Contractor to remove from the works any person who in his opinion misconducts himself, or is incompetent or negligent in the performance of his duties or whose employment is otherwise considered by the Employer to be undesirable. Such person shall not be employed again at works site without the written permission of the Employer and the persons so removed shall be replaced as soon as possible by competent substitutes.

CLAUSE-50: COMPENSATION DURING WARLIKE SITUATION :

The work (whether fully constructed or not) and all materials, machines, tools and plants, scaffolding, temporary buildings and other things connected therewith shall be at the risk of the contractor until the work has been delivered to the employer and a certificate from him to that effect is to be obtained. In the event of the work or any materials properly brought to the site for incorporation in the work being damaged or destroyed in consequence of hostilities or warlike operation (i.e. war, border skirmishes, invasion, act of foreign enemies, rebellion, revolution, insurrection of military or usurped powers, or civil war, action against terrorist/ militant), the contractor shall, when ordered (in writing) by the employer to remove any debris from the site, collect and properly stack or remove in store all serviceable materials salvaged from the damaged work and shall be paid at the contract rates in accordance with the provision of this

agreement for the work of clearing the site of debris, stacking or removal of serviceable material and for reconstruction of all works ordered by the employer, such payments being in addition to compensation up to the value of the work originally executed before being damaged or destroyed and not paid for in case of works damaged or destroyed but not already measured and paid for, the compensation shall be assessed by the employer, the contractor shall be paid for the damages/destruction suffered and for the restoring the material at the rate based on analysis of rates tendered for in accordance with the provision of the contract, the certificate of the employer regarding the quality and quantity of materials and the purpose for which they were collected shall be final and binding on all parties to this contract. provided always that no compensation shall be payable for any loss in consequence of hostilities or warlike operations (a) unless the contractor had taken all such precautions against air raid as are deemed necessary by the a.r.p. officers or the employer (b) for any material etc. not on the site of the work or for any tools, plant, machinery, scaffolding, temporary building and other things not intended for the work-in the event of the contractor having to carry out reconstruction as aforesaid, he shall be allowed such extension of time for its completion as is considered reasonable by the employer, on the written request of the contractor and upon his giving to the government full security for all costs for which government might become liable in contesting such claim.

CLAUSE-51: OPERATION OF CONTRACT

TIME AND EXTENSION FOR DELAY:

The time allowed for execution of the works as specified in the bidding data or the extended time in accordance with these conditions shall be the essence of the contract, the execution of the works shall commence from such time period as mentioned in letter of acceptance or from the date of handing over of the site whichever is later, if the contractor commits default in commencing the execution of the work as aforesaid, employer shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the earnest money & performance guarantee absolutely. as soon as possible after the contract is concluded the contractor shall submit a time and progress chart and get it approved by the employer, it shall indicate the forecast of the dates of commencement and completion of various trades of

sections of the work and may be amended as necessary by agreement between the employer and the contractor and further to ensure good progress during the execution of the work, the contractor shall in all cases complete the work as per the schedule. if the work(s) be delayed by

- i) force majeure events, or
- ii) abnormally bad weather, or
- iii) serious loss or damage by fire, or
- iv) civil commotion, local commotion of workmen, strike (excluding by party's employees) or lockout (excluding by party's employees), affecting any of the trades employed on the work , or (v) delay on the part of other contractors or tradesmen engaged by employer in executing work not forming part of the contract, or

any other cause which, in the absolute discretion of the authority mentioned in bidding data is beyond the contractor's control and not brought about at the instance of the contractor claiming to be affected by such event then upon the happening of any such event causing delay, the contractor shall immediately give notice thereof in writing to the employer but shall nevertheless use constantly his best endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the employer to proceed with the works request for rescheduling of work and extension of time, to be eligible for consideration, shall be made by the contractor in writing within fourteen days of the happening of the event causing delay on the prescribed form, the contractor may also, if practicable, indicate in such a request the period for which extension is desired. In any such case the authority mentioned in bidding data may give a fair and reasonable extension of time, such extension shall be communicated to the contractor by the employer in writing, within 2 months of the date of receipt of such request, non application by the contractor for extension of time shall not be a bar for giving a fair and reasonable extension by the employer and this shall be binding on the contractor.

CLAUSE-52: COMPENSATION FOR DELAY :

If the contractor fails to maintain the required progress in terms of clause 8.1 or to complete the work and clear the site on or before the contract or extended date of completion, he shall, without prejudice to any other right or remedy available under the law to the government on account of such breach, to the employer as agreed, compensate the amount calculated at the rates stipulated below as the

competent authority (whose decision in writing shall be final and binding) may decide on the amount of tendered value of the work for every completed day/week (as applicable) that the progress remains below that specified in clause 8.1 or that the work remains incomplete. This will also apply to items or group of items for which a separate period of completion has been specified,.

(i) compensation for delay of work	@ 1.0 % per week of delay to be computed on per day basis for repairs work up to Rs.. 10 lakh and for all other works 0.5% of the contract value per week of delay subject to maximum of 10% of contract value.
---------------------------------------	---

Provided always that the total amount of compensation for delay to be paid under this condition shall not exceed 10% of the bid value of work or of the bid value of the item or group of items of work for which a separate period of completion is originally given. The amount of compensation may be adjusted or set-off against any sum payable to the contractor under this or any other contract with the government.

CLAUSE-53: WHEN CONTRACT CAN BE DETERMINED :

Subject to other provisions contained in this clause, the employer may, without prejudice to his any other rights or remedy against the contractor in respect of any delay, inferior workmanship, any claims for damages and/or any other provisions of this contract or otherwise, and whether the date of completion has or has not elapsed, by notice in writing absolutely determine the contract in any of the following cases:

- i) If the contractor having been given by the employer a notice in writing to rectify, reconstruct or replace any defective work or that the work is being performed in an inefficient or otherwise improper or un-workmanlike manner shall omit to comply with the requirement of such notice for a period of seven days thereafter.
- ii) 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.

- iii) If the contractor 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 employer (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 employer. 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 employer.
 - iv) 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 employer.
 - v) If the contractor commits any acts mentioned in clause 2.1 hereof; or
 - vi) If the work is not started by the contractor within stipulated time.
- When the contractor has made himself liable for action under any one or more of the cases aforesaid, the employer on behalf of the Director General, CIPET shall have powers:
- a) To determine or rescind the contract as aforesaid (of which termination or rescission notice in writing to the contractor under the hand of the employer shall be conclusive evidence), upon such determination or rescission, the earnest money deposit, security deposit already recovered and performance guarantee under the contract shall be liable to be forfeited and shall be absolutely at the disposal of the Government/ the employer.
 - b) After giving notice to the contractor to measure up the work of the contractor and to take such whole, or the balance or part thereof, as shall be un-executed out of his hands and to give it to another contractor to complete the work, the contractor, whose contract is determined or rescinded as above, shall not be allowed to participate in the tendering process for the balance work.

In the event of above courses being adopted by the employer, the contractor shall have no claim to compensation for any loss sustained by him by reasons of his

having purchased or procured any materials or entered into any engagements or made any advances on account or with a view to the execution of the work or the performance of the contract, and in case action is taken under any of the provision aforesaid, the contractor shall not be entitled to recover or be paid any sum for any work thereof or actually performed under this contract unless and until the employer has certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified.

CLAUSE-54: FORECLOSURE OF CONTRACT DUE TO ABANDONMENT OR REDUCTION IN SCOPE OF WORK:

If at any time after acceptance of the bid, the employer/ government shall decide to abandon or reduce the scope of the works for any reason whatsoever and hence not require the whole or any part of the works to be carried out, the employer shall give notice in writing to that effect to the contractor 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 works executed at site and, in addition, a reasonable amount as certified by the engineer for the items hereunder mentioned which could not be utilized on the work to the full extent in view of the foreclosure:

- i) 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.
- ii) Employer shall have the option to take over contractor's materials or any part thereof either brought to site or of which the contractor is legally bound to accept delivery from suppliers (for incorporation in or incidental to the work) provided, however, employer shall be bound to take over the materials or such portions thereof as the contractor does not desire to retain, for materials taken over or to be taken over by employer, cost of such materials as detailed by engineer shall be paid, the cost shall, however, take into account purchase price, cost of

transportation and deterioration or damage which may have been caused to materials whilst in the custody of the contractor.

- iii) Reasonable compensation for transfer of T & P from site to contractor's permanent stores or to his other works, whichever is less, if T & P are not transported to either of the said places, no cost of transportation shall be payable.
- iv) Reasonable compensation for repatriation of contractor's site staff and imported labour to the extent necessary.

The contractor shall, if required by the engineer furnish to him books of account, wage books, time sheets and other relevant documents and evidence as may be necessary to enable him to certify the reasonable amount payable under this condition. The reasonable amount of items on (i), (iii) and (iv) above shall not be in excess of 2% of the cost of the work remaining incomplete on the date of closure, i.e. total stipulated cost of the work as per accepted bid less the cost of work actually executed under the contract and less the cost of contractor's materials at site taken over by the government as per item (ii) above, provided always that against any payments due to the contractor on this account or otherwise, the employer shall be entitled to recover or be credited with any outstanding balances due from the contractor for advance paid in respect of any tool, plants and materials and any other sums which at the date of termination were recoverable by the government from the contractor under the terms of the contract.

CLAUSE-55: CANCELLATION OF CONTRACT IN FULL OR PART :

If contractor:

- i) At any time makes default in proceeding with the works or any part of the work with the due diligence and continues to do so after a notice in writing of 7 days from the employer; or commits default to comply 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 employer; or
- ii) Fails to complete the works or items of work with individual dates of completion, on or before the date(s) of completion, and does not complete them within the period specified in a notice given in writing in that behalf by the employer; or

- iii) Shall offer or give or agree to give to any person in government service 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 for government; or
- iv) Shall enter into a contract with government in connection with which commission has been paid or agreed to be paid by him or to his knowledge, unless the particulars of any such commission and the terms of payment thereof have been previously disclosed in writing to the accepting authority/employer; or
- v) Shall obtain a contract with government as a result of wrong tendering or other non-bonafide methods of competitive tendering; or being an individual, or if a firm, any partner thereof shall at any time be adjudged insolvent or have a receiving order or order for administration of his estate made against him or shall take any proceedings for liquidation or composition (other than a voluntary liquidation for the purpose of amalgamation or reconstruction) under any insolvency act for the time being in force or make any conveyance or assignment of his effects or composition or arrangement for the benefit of his creditors or purport so to do, or if any application be made under any insolvency act for the time being in force for the sequestration of his estate or if a trust deed be executed by him for benefit of his creditors; or
- vi) Being a company, shall pass a resolution or the court shall make an order for the winding up of the company, or a receiver or manager on behalf of the debenture holders or otherwise shall be appointed or circumstances shall arise which entitle the court or debenture holders to appoint a receiver or manager; or shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days; or 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 accepting authority. The accepting authority may, without prejudice to any other right or remedy which shall have accrued or

shall accrue hereafter to government, by a notice in writing to cancel the contract as a whole or only such items of work in default from the contract. the employer shall on such cancellation by the accepting authority have powers to:

- (a) Take possession of the site and any materials, constructional plant, implements, stores, etc., thereon; and/or (b) carry out the incomplete work by any means at the risk and cost of the contractor.

On cancellation of the contract in full or in part, the employer shall determine what amount, if any, is recoverable from the contractor for completion of the works or part of the works or in case the works or part of the works is not to be completed, the loss or damage suffered by employer, in determining the amount, credit shall be given to the contractor for the value of the work executed by him up to the time of cancellation, the value of contractor's materials taken over and incorporated in the work and use of plant and machinery belonging to the contractor, any excess expenditure incurred or to be incurred by employer in completing the works or part of the works or the excess loss or damages suffered or may be suffered by government as aforesaid after allowing such credit shall without prejudice to any other right or remedy available to government in law be recovered from any moneys due to the contractor on any account, and if such moneys are not sufficient, the contractor shall be called upon in writing and shall be liable to pay the same within 30 days. if the contractor shall fail to pay the required sum within the aforesaid period of 30 days, the employer shall have the right to sell any or all of the contractors' unused materials, constructional plant, implements, temporary buildings, etc. and apply the proceeds of sale thereof towards the satisfaction of any sums due from the contractor under the contract and if thereafter there be any balance outstanding from the contractor, it shall be recovered in accordance with the provisions of the contract. Any sums in excess of the amounts due to government and unsold materials, constructional plant, etc., shall be returned to the contractor, provided always that if cost or anticipated cost of completion by government of the works or part of the works is less than the amount which the contractor would have been paid had he completed the works or part of the works, such benefit shall not accrue to the contractor.

CLAUSE-56: TERMINATION OF CONTRACT AFTER DEATH OF CONTRACTOR:

Without prejudice to any of the rights or remedies under this contract if the contractor dies, the officer on behalf of the Dy. Director & Head, CIPET shall have the option of terminating the contract without compensation to the contractor.

CLAUSE-57: DISPUTE RESOLUTION MECHANISM:

Except where otherwise provided in the contract, all questions and disputes relating to the meaning of the specifications, design, drawings and instructions here-in before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works or the execution or failure to execute the same whether arising during the progress of the work or after the cancellation, termination, completion or abandonment thereof shall be dealt with as mentioned here in after.

CLAUSE-58: DISPUTE RESOLUTION BOARD

If any dispute arises between the employer and the contractor in connection with, or arising out of, the contract or the execution of the works, whether during the execution of the works or after their completion and whether before or after the repudiation or other termination of the contract, including any disagreement by either party with any action, inaction, opinion, instruction, determination, certificate or valuation of the engineer, the matter in dispute shall, in the first place, be referred to the dispute resolution board here in after called "the board". The board shall comprise of one member selected by the employer and one member by the architect as defined in the bidding data, the board at its discretion may co opt any other officer if in its opinion it may help in resolving the dispute, either party may refer a dispute to the board, the board shall give a decision in writing within 30 days of reference of dispute, either party may refer a written decision of the board, if neither party refers the disputes to arbitration within 30 days, the board's decision will be final and binding. Employer at its discretion may change any of the members of the board.

CLAUSE-59: ARBITRATION:

Any dispute in respect of which the recommendation, if any, of the dispute resolution board has not become final and binding shall be finally settled in accordance with the

provisions of the arbitration and conciliation act, 1996 or any statutory modifications or re-enactment thereof and the rules made there under and for the time being in force, the arbitrator shall have full power to open up, review and revise any decision, and any recommendation of the conciliator related to the dispute. A sole arbitrator shall be appointed by the appointing authority as defined in contract data within 30 days of receipt of request from either party, if the arbitrator so appointed is unable or unwilling to act or resigns his appointment or vacates his office due to any reason whatsoever, another arbitrator shall be appointed in the manner aforesaid, such person shall be entitled to proceed with same reference from the stage at which it was left by his predecessor. It is a term of this contract that the arbitrator shall adjudicate only such disputes as are referred to him by the appointing authority and give separate award against each dispute and claim referred to him and in all cases the arbitrator shall give reasons for the award, if any fees is payable to the arbitrator, these shall be paid equally by both the parties. It is also a term of the contract that the arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the parties calling them to submit their statement of claims and counterstatement of claims. The venue of the arbitration shall be such place in India as may be fixed by the arbitrator in his sole discretion. Neither party shall be limited in the proceedings before such arbitrator to the evidence or arguments put before the conciliator for the purpose of obtaining its recommendation/decision. No recommendation shall disqualify conciliator or employer from being called as a witness and giving evidence before the arbitrator on any matter whatsoever relevant to the dispute.

CLAUSE-60: MISCELLANEOUS PROVISIONS:

- (i) "Nothing contained in this contract shall be construed as establishing or creating between the parties, a relationship of master and servant or principal and agent.
- (ii) Any failure or delay on the part of any party to exercise right or power under this contract shall not operate as waiver thereof.
- (iii) The contractor/consultant shall notify the employer of any material change in their status, in particular, where such change would impact on performance of obligations under this contract.
- (iv) Each member/constituent of the contractor/consultant, in case of a consortium, shall be jointly and severally liable to and responsible for all

obligations towards the employer/government for performance of works/services including that of its associates/sub contractors under the contract.

- (v) The contractor/consultant shall at all times indemnify and keep indemnified the employer/government of India against all claims/damages etc. for any infringement of any intellectual property rights (Ipr) while providing its services under the project.
- (vi) The contractor/consultant shall at all times indemnify and keep indemnified the employer/government of India against any claims in respect of any damages or compensation payable in consequences of any accident or injury sustained or suffered by its (the contractor's/consultant's) employees or agents or by any other third party resulting from or by any action, omission or operation conducted by or on behalf of the contractor/consultant.
- (vii) The contractor/ consultant shall at all times indemnify and keep indemnified the employer/government of India against any and all claims by employees, workman, contractors, subcontractors, suppliers, agent(s), employed engaged or otherwise working for the contractor, in respect of wages, salaries, remuneration, compensation or the like.
- (viii) All claims regarding indemnity shall survive the termination or expiry of the contract.
- (ix) It is acknowledged and agreed by all parties that there is no representation of any type, implied or otherwise, of any absorption, regularization, continued engagement or concession or preference for employment of persons engaged by the (contractor/consultant) for any engagement, service or employment in any capacity in any office or establishment of the government of India or the employer.

CLAUSE-61: LAWS GOVERNING THE CONTRACT:

This contract shall be governed by the laws of India for the time being in force and the contract will be with in the jurisdiction of the Orissa High Court.

SPECIAL CONDITIONS OF CONTRACTS

1. All Materials used in the work, shall be subjected to tests as per applicable standard test BIS recognized labs at contractors cost and test reports shall be submitted to CIPET:CSTS, BHUBANESWAR before using the material.
2. The quantities shown in the schedule of quantities are intended to cover the entire new structure indicated in the drawings but the Employer reserves the right to execute only a part or the whole or any excess thereof without assigning any reason there for.
3. The authority shall approve either of any specified brand of material, the contractor has to take final approval before procurement of material.

ANNEXURE-I SAFETY CODE

SCAFFOLDING:

- I. Suitable scaffolds & nets shall be provided for workmen for all works that cannot safely be done from the ground or from solid construction except in the case of short duration work which can be done safely from ladders. When a ladder is used, it shall be of rigid construction made either of good quality ply or steel plates & steel props . The steps shall have a minimum width of 450mm and a maximum rise of 300mm, Suitable hand holds of good quality wood or steel shall be provided and the ladder shall be given an inclination not steeper than 1/4 horizontal and 1 vertical
- II. Scaffolding or staging more than 4 m above the ground floor, swung or suspended from an overhead support or erected with stationary support shall have a guard rail properly bolted, braced or otherwise secured at least 1 m 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 openings as may be necessary of the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from the building or structure.

- III. Working platforms, gangways and stairway shall be so constructed that they do not sag unduly or unequally and if the height of the platform, gangway or stairway is more than 4m above ground level or floor level, they shall be closely boarded and shall have adequate width and be suitably fenced as described in (ii) above.
- IV. Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or raiting whose minimum height shall be 1m.
- V. Safe means of access shall be provided to all working places. Every ladder shall be over 9m. in length while the width between side rails in rung ladder shall in no case, be less than 290mm for ladder up to and including 3m. in length. For ladders this width shall be increasedby at least 20mm. For each additional meter of length.
- VI. A sketch of the ladders & scaffolding proposed to be used shall be prepared and approval of the engineer obtained prior to construction.

OTHER SAFETY MEASURES:

- VII. All personnel of the contractor working within the plant site shall be provided with safety helmets & safety belts. All welders shall wear welding goggles while doing welding work & all metal workers shall be provided with safety gloves. Persons employed on metal cutting and grinding shall wear safety glasses.
- VIII. Adequate precautions shall be taken to prevent danger from electrical equipment. Nomaterials on any of the sites of work shall be so stacked or placed as to cause damage orinconvenience to any person or the public.

EXCAVATION AND TRENCHING:

- IX. All trenches, 1.25m or more in depth shall at all time be supplied with at least one ladder for each 30m in length or fraction thereof. The ladder shall be extended from bottom of the trench to at least 1m above the surface of the ground. Sides of trenches which are 1.5m 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 1.5m of 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.

- X. The contractor shall take all measures on the site of the work to protect the public from accidents and shall be bound to bear the expenses of defense of every suit, acting or other proceedings at law that may be brought by any persons for injury sustained owing to neglect of the above precautions and to pay any such persons or which may with the consent of the contractor, be paid to comprise any claim by any such person.

DEMOLITION:

- (XI) Before any demolition work is commenced and also during the process of the work :
- (a) All roads & open areas adjacent to the work site shall either be closed or suitably protected.
 - (b) No electric cable or apparatus which is liable to be a source of danger over a cable or apparatus used by the operator shall remain electrically charged.
 - (c) All practical steps shall be taken to prevent danger to persons employed from the risk of fire or explosion or flooding. No floor roof or other part of the building shall be so over loaded with debris or materials as to render it unsafe.

PERSONAL SAFETY EQUIPMENTS:

- (XII) 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 & maintained in a condition suitable for immediate use and the contractor should take adequate steps to ensure proper use of equipment.
- a. Workers employed on mining asphaltic materials, cement & lime mortar shall be provided with protective footwear and protective goggles.
 - b. Those engaged in white washing and mixing or stacking or cement bags or any material which is injurious to eyes shall be provided with protective goggles.
 - c. Those engaged in welding works shall be provided with welder's protective eyesight lids.
 - d. Stone breakers shall be provided with protective goggles and protective clothing and seated at sufficient safe intervals.

- e. When workers are employed in sewers and manholes which are in use, the contractor shall ensure that the manhole covers are opened & are ventilated at least for an hour before the workers are allowed to get into manholes and the manholes so opened shall be cordoned off with suitable railing & provided with warning signals or boards to prevent accident to the public.
 - f. The Contractor shall not employ man below the age of 18 years and woman on the work of painting with products containing lead in any form. Wherever men above the age 18 are employed on the work of lead painting, the following precautions should be taken.
 - i) No paint containing lead or lead produced shall be used except in the form of paste or ready made paint.
 - ii) Suitable face mask should be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint dry rubbed and scrapped.
 - iii) Overalls shall be supplied by the contractor to the workmen and adequate facilities shall be provided to enable the working painters to wash during the cessation of work.
- XIII When the work is done near any public place where there is risk of drains 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 sustained during the course of the work.

HOISTING MACHINES:

- XIV Use of hoisting machines and tackle including their attachments, encourage and supports shall conform to the following stands or conditions:
1. a. These shall be of good mechanical constructions sound material and adequate strength and free from patent defect and shall be kept in good repair & in good working order.
 - b. Every rope used in hoisting or lowering materials or as means of suspensions shall be of durable quality and adequate strength and free from patent defects.
 2. Every crane driver or hoisting appliance operator shall be properly qualified and no person under the age of 21 years shall be in charge of any hoisting machine including any scaffolding which or give signals to operators.

3. In case of every hoisting machine & of every chain ring hook, shackle shovel 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 conditions 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.
4. In case of departmental machines, the safe working load shall be notified by the Engineer. As regards contractor's machine the contractor shall notify the safe working load of the machine to the engineer whenever he / she brings any machinery to site of work & get it verified by engineer concerned.
5. 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 any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations which are already energised, insulating mats, wearing apparel, such as gloves, sleeves and boots as may be necessary should be provided. The workers should not wear any rings, watches and carry keys or other materials which are good conductors of electricity.
6. All scaffolding, 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.
7. These safe provisions should be brought to the notice of all concerned by display on a noticeboard at a prominent place at work spot. The person responsible for compliance of the safe code shall be named therein by the contractor.
8. 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 labor officer, engineer of the department or their representatives.

9. Notwithstanding the above clause from (I) to (xviii) 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.

ANNEXURE-II(A)

R/A/FINALBILL

- i) Name of the Contractor / Agency :
- ii) Name of the work :
- iii) Sr. No. of this bill :
- iv) Sr. No. of previous bill :
- v) Reference to Agreement No. :
- vi) Date of written order to commence:
- vii) Date of completion as per Agreement :
- viii) Date of measurement :
- ix) Present status of work :

Sl.No	Item of Description	Unit	Rate	As per Tender R/A Bills		Up to Previous		Present bill (Since Previous)		Up to Date (Gross)		Remarks
				Qty.	Amt.Rs	Qty.	Amt.Rs	Qty.	Amt.Rs	Qty.	Amt.Rs	
1	2	3	4	5	6	7	8	9	10	11	12	13

Note:

1. If part rate is allowed for any item, it should be indicated with reasons for allowing such a rate.
2. If adhoc payment is made, it should be mentioned specially
3. Consumption of cement/steel statement /material consumption statement to be submitted with each R.A. Bills.

ANNEXURE-II(B)**MEMORANDUM OF PAYMENT**

- i. Name of the Contractor / Agency :
- ii. Name of the work :
- iii. Sr. No. of this bill :
- iv. SR. No. of previous bill :
- v. Reference to agreement No. :
- vi. Date of written order to commence :
- vii. Date of completion as per agreement :
- viii. Date of measurement :
- ix. Present status of work/percentage
Work completed :
1. Secured advance Sr. No.

Sl. No	Up to previous	Since Previous	Up to date	Amount Adjusted till date.
--------	----------------	----------------	------------	-------------------------------

2. Deduction under various heads
- i) Gross amount of Bill :
- ii) Deduction towards secured advance on
Materials :
- iii) Deduction towards cement :
- iv) Deduction towards steel :
- v) Security deposit :
- vi) Income Tax :
- vii) GST :
- viii) Octroi tax if any :
- ix) Rebate offered if any :
- x) Net amount of bill figure :
- xii) Net amount in words

Signature of site Engineer

Signature of Architect

Signature of Contractor

ANNEXURE-II(C)**ACCOUNT OF SECURED ADVANCE, IF ADMISSIBLE ON MATERIALS HELD AT
SITE BY THE CONTRACTOR**

Sl.No.	Item.	Quantity	Unit	Amount	Remarks
1	2	3	4	5	6

Total value of materials at site

Secured Advance @.....% of above value.

CERTIFIED (I) that the materials mentioned above have actually been brought by the contractor on the site of the work & no heir security (ii) that the materials (are of non-perishable nature) and are all required by the contractor for use in the work in connection with the items for which rates of finished work have been agreed upon.

Dated :.....

Signature of the Site Engineer
Preparation the bill

Dated :.....

Signature of Owner's Consultants.

Dated:.....

Signature of the Contractor

ANNEXURE-II(D)**CERTIFICATE**

The measurement on the basis of which the above entries for the running Bill No. -
 weremade have been taken jointly on and are
 recorded at pagesto of measurement book no.

Signature and date
 of contractor

Representative (Seal)

Signature and date
 of consultant

Signature of site
 Engineer

The work recorded in the above mentioned measurement has been done at the site
 satisfactorily as per tender drawings conditions and specifications.

Architect/Consultants

Site Engineer

ARCHITECT'S CERTIFICATE

Certified that the various items of work claimed in this.....
 runningbill/final bill by the contractors.....have completed
 satisfactorily to the extent claimed and at appropriate rates and that the item are in
 accordance with the fully confirming to the standard/prescribed specifications and
 hence the bill is recommend for payment of Rs.

Necessary recoveries have been proposed.

Dated

(Signature of the Architect)

TECHNICAL SPECIFICATION FOR ELECTRICAL WORK

SPECIAL CONDITIONS OF ELECTRICAL WORK:

- All installations shall comply with the requirements of the Indian Electricity rules, 1956, as amended from time to time and as per relevant clauses of National electrical code, 1985.
- All materials to be arranged by the contractor for use in the work must be approved from the architect/consultants in advance before these are actually used on the work.
- Bad workmanship is liable to be rejected in toto.
- The contractor /his supervisor will be bound to sign the site order book and to carry out the instructions given therein.
- All repairs and patch work shall be neatly carried out to match the original finish and to the entire satisfaction of the owner/Architect. Any damage to the building due to execution of work shall have to be made good immediately by the contractor at his own cost.
- The contractor shall make his own arrangements for storing the materials and watch and ward at his own cost, even for the installation till the date of completion and handing over the site.
- The contractor shall make his own arrangement at his own cost for all general and electrical tools and plants at his own cost for all general and electrical tools and plants required for the work.
- All debris due to the electrical works shall be removed and site shall be cleared by the contractor as soon as the work is completed.
- Wiring conduit routes shall be marked at site first and got approved from the architect/consultant before the commencement of the actual work.
- The work shall ordinarily be carried out according to the drawings supplied with the schedule of work at the time of award of work subject to any change made by the architect/consultant.
- All the materials to be used on the work shall confirm to one of the ISI marked wherever specified.
- If materials to be used are not covered by any one of the above specifications, it should get approved from the Architect.

- Unless otherwise mentioned in the schedule of work, the contractor shall use the materials in the work according to the "LIST OF APPROVED MATERIALS" enclosed with the CONTRACT DOCUMENT.
- In case the particular make of materials mentioned under conditions above are not available at the time of execution of the work, the alternative make of materials that has to be approved from the Architect/Consultant before its use.

METHOD OF MEASUREMENT

Unless otherwise mentioned in the schedule of quantities, measurement will be on net quantities of work produced. In the event of any dispute with regard to the measurement of work executed the decision of the consultant/engineer in charge shall be final and binding to the contractor.

WIRES

Unless otherwise mentioned in the schedule of quantities only single core PVC/Polyethylene insulated cable consisting of single/ multistrand copper conductor shall be used for wiring in conduit system.

EARTHING

All exposed metal parts of the electrical equipments shall be connected to earth electrodes by not less than two separate and distinct earth connection in accordance with Indian Electricity Rules and the relevant Indian Code of practice for earthing 3040-1966.

EARTH ELECTRODE

The earth electrode shall be G. I. Pipe class B having 50mm internal diameter 3mt. Long in one single piece with holes 12mm dia on all sides at 150mm centre up to a minimum height of 205mm from bottom and two holes 15mm dia at 100mm from the top end to receive a 76mm (3") long G.I. bolt, double nuts, washers and complete with wireman's funnel. No joints will be allowed in the earth electrode. The electrode shall be driven at least 2 Mt. Clear from masonry structure and the distance between two electrode shall be not less than twice the length of the electrode. A masonry inspection point of size 600mm x 600 x 150mm deep shall be built with 125mm thick C.M. (6:1) brickwork both inside and outside plastered 20mm thick and

neatly cemented 1.5mm thick, inside top and outside around the top of the earth pipe, so that the top of the G.I. pipe is 250mm below the finished ground level.

APPROVED FROM STATUTORY AUTHORITY

The sub-station installation work shall be inspected and approved by electrical inspector and authorities of CESCO. Contractor has to arrange for such clearance.

METHOD OF MEASUREMENT

All stove enameled black M.S. conduit, C.I. conduit/pipe and rigid PVC conduit shall be measured for net length as laid or fixed over all fittings, bends, elbows, tees, etc, shall not be paid separately.

Installation measurement will be based on length from gland to gland with an allowance of 300mm from cable entering fitting and accessories and one liner meter for cable entering switch boards.

Unless otherwise mentioned in the schedule of quantities, measurement will be on net quantities of work produced. In the event of any dispute with regard to the measurement of work executed the decision of the consultant/Engineer in charge shall be final, and binding to the contractor.

Thimbles are to be provided wherever required without any extra charges of cable terminations of size 16Sqm above.

The adopter boxes are to be made up of not less than 16 SWG thick M.S. sheets.

Where unless specified, the G.I. boxes should be 600mm deep (Inside)

The brass batten holder/angle holders should be of as per ISI specifications and ISI approved.

The work shall comprise of entire labor including supervision and all materials necessary to make a complete installation and such test as commissioning may be required to give a satisfactory working installation to the satisfaction of the owner.

The Tenderer shall visit the site before quoting the rates and shall submit the tender complete in all details whether such details have been mentioned in the Schedule of work or in specification.

The contractor shall not be entitled to any compensation for any loss suffered by him on account of delays in commencing or executing the work, whatever the cause for such delay may be.

LIST OF APPROVED MATERIAL AND THEIR APPROVED MANUFACTURES

Junction Box - approved quality

Modular Box - Schenidler, Anchor premium or equivalent makes and quality

DB - Siemens or Legrand or equivalent makes and quality

GENERAL SPECIFICATIONS FOR CIVIL WORK

ALL THE SPECIFICATIONS WILL BE AS PER THE RELEVANT I.S. SPECIFICATIONS.

THE FOLLOWING CODES WILL BE FOLLOWED IN GENERAL:-

I.S. No. General.	Description
1- I.S. 1200	- Method of measurement building work
2- I.S. 456	- Code of practice for plain & reinforced - Concrete for building construction (Revised)
3- I.S. 516	- Method of tests for strength of concrete
4- I.S. 383	- Specification for coarse & fine aggregate from natural sources for concrete
5- I.S. 432	- Specification for mild steel & medium tensile steel bar & hard drawn steel wire for concrete Reinforcement
6- I.S. 1786	- Specification for high strength deformed bar for
I.S. 1139	- Concrete reinforcement
7- I.S. 2520	- Code of practice for bending and fixing of bars for concrete reinforcement
8- I.S. 269	- Specification for ordinary rapid hardening and low heat Portland cement
9- I.S. 460	- Specification for test sieves
10- I.S. 1077	- Natural clay hollow bricks
11- I.S. 1630	- Specification for mason's tools for plaster work and painting work.

12- I.S. 1542	- Specification for sand for plaster.
13- I.S. 786	- Conversion Table
14- N.B.O	- Specification
15- N.B.O	- Analysis of rates of building works
16- Handbook on Concrete	- Published by concrete Association of India
17- CPWD Specification	- For Building & Electrical Works

All materials shall be of conforming to relevant IS code/ NBC and shall be approved by CIPET: CSTS before use.

LIST OF MATERIALS OF APPROVED BRAND AND MANUFACTURERS.

All cement be of Ultratech / BirlaGold/ Lafarge/ Konark/ACC. or equivalent makes and quality

All steel shall be Tata/ Vizag/ SALE conforming to relevant IS code.

ALUMINIUM COMPOSITE PANEL	: Timex, Viva, Armstrong, Alstrong
FLUSHED DOORS AND PLYWOOD PRODUCTS INCLUDING TEAK PARTICLES BOARDS	: Oriply, wood craft, Kitply, Greenply, Archidply, Centuryply, Truwood, Silicon
GRILLS	: Equivalent to ISI approved manufacturers
WATER PROOFING COMPOUND	: Pidilite, Sika.
PAINTS & DISTEMPERS	: Terracry, acrylic, washable distemper, Asian Paints, Jension & Nicholson, Berger, Shalimar, ICI, Nerolac
RED OXIDE (FOR IPS FLOORING)	: Shalimar, Blundel, Ecomite
REDOXIDEZN- CHROMATE	: Shalimar, Asian Paints, Berger.
CEMENT PAINT	: Terraco, Snowcem, Durocem, Berger, Asian
ALUMINIUM SECTION	: Jindal/OEL/Hindalco
CERAMIC TILES	: Bell, Regency, Kajaria, Eurocon tile, Johnson Tile, Granamite , Nitco, Somany

ANTI TERMITE TREATMENT	:	DE-NOCIL/ ROFEE
VITRIFIED TILES	:	Naveen, Euro ,Somany.
KOTA STONE	:	Rajastan of approved quality.
MARBLE STONE	:	Dunguri of approved quality
MOSAIC TILE	:	Gico or equivalent approved make
PVC RAIN WATER PIPE	:	Supreme, Oriplast, Neelplast
OHT	:	Sintex
WATER PROOFING	:	Fosroc, Sika, GICO

HARDWARE FITTINGS:

I) FERROUS	:	Equivalent to ISI approved manufacturers
II) NON- FERROUS	:	Equivalent to ISI approved manufactures
BRICKS STONE AGGREGATE (FINE AND COARSE)	:	As per the source approved by the Architect/ Bank's Engineer.
DOOR CLOSER	:	Godrej
WATER PROOF ADHESIVES FOR TILE/ SLAB FIXING	:	Sika, Pidilite Industries Ltd. or any other approved manufacturers.
TILE JOINING MATERIALS	:	Sika, Pidilite Industries Ltd. or any other approved manufacturers

B- SANITARY/ PLUMBING AND TUBE WELL WORKS.C.I. PIPES

(a) KIRLOSKAR (b) VENUS (c) UPADHAYA (d) BUCO (e) NECO

G.I. PIPES

(a) APPOLO (b) NEITH(c) G.K. BRAND (d) I.T.C. (TATA) (e) JINDAL (f) OSWAL
(g) PRAKASH

G.I. PIPE FITTINGS

(a)K. BRAND (b) KIRTI (c) C- BRAND (d) S. BRAND (e) R.M.I. (ISI)

STAINLESS STEEL SINK- Jayana, diamond, Blanco

FOOT VALVES, CHECKS VALVES

- a) LEADER

GATE VALVE, GLOBE VALVES

- a) LEADER

BALL COCKS

- a) KINGSTON (b) ARK (c) LUSTER

BIB COCK, STOP COCK, PILLAR COCK, CONCELED STOP COCK, SHOWER

- a) JAQUAR (b) MARC (c) Premium Brand. (d) Kohler

WASTE NOT TAPS

- a) J.C. (b) LUSTER (c) ARK (d) KINGSTAR

VITROUS SANITARY WARE LIKE WASHBASINS, URINALS, W.C. PANS
(PEDESTAL, SQUATTING ETC) FLUSHING CISTERN.

- a) PARRY WARE (b) HINDWARE (c) CERA (d) KOHLER

PLASTIC SEAT WITH LID FOR PEDESTAL W.C. PAN

- a) BESTOLITE (b) DUROSHINE (c) COMMANDER (d) EMCOS

MIRRORS

- a) GOLDEN FISH (b) SWAN (c) KRISTAL

POLYTHENE OVERFLOW PIPES

- a) EMCO (b) PEACOCK

DEEP SEAL NAHANI TRAPS

- a) SILC (b) SUSILAV (c) G.I.W (d) BIC

S.W. PIPES

- a) HIND (b) ORISSA (c) ORIND (d) HIRAKUD BRAND

CEMENT CONCRETE PIPES

- a) INDIAN HUME PIPES CO.

WATER PROOFING COMPOUND

- a) IMPERMU – (2% BY WT. BY CEMENT) M/S SNOCEM INDIA LTD.
CICO- (3% BY WT. OF CEMENT) M/S STRUCTURAL WATER PROOFING COL.

READY MIXED OIL PLANT PREMIERS FOR WOOD WORK , IRON AND STEEL

- a) GODLESS NEROLAC (b) JENSION AND NICHOLSON (c) BLUNDELL EOMITE
(d) I.C.I. (f) SHALIMAR (g) ASIAN.

CPVC – Astral/Supreme

PVC (UNPLASTICISED) PIPES

- a) SUPREME (b) PRINCE (c) JAIN (d) DUROPLAST (e) ORIPLAST
(f) LINGARAJ (g) AMITEX

CHROME PLATE BIB TAPS, SOWER ROSES, GRANITE, STRPTAPS, BOTTLE TAPS ETC.

- a) SOMANI (b) ORIENT (c) JAQAUR (d) ESSCO (e) ARK (f) KINGSTONE
(g) PLAZA (h) PLUMBER

C.P. BOTTLE TRAPS, WATER FITTINGS, SHOWER ROSES, TOWEL RODS

- A) ESSCO (B) JAQUAR (C) ARK (D) KINGSTON (E) RANUTROL

LOW LEVEL PLASTIC FLUSHING CISTERN (10LTR CAPACITY)

- a) COMMANDER – CHAMPION (b) COMMANDER – WATER BIND (c) SLIMLINE
d) PARRYWARE

MANHOLE COVER : NECO OR ANY OTHER APPROVED MANUFACTURES**CP TOWEL RAIL (DELUXE): DRIPLES, JAQUAR, ESSCO OR ANY OTHER
APPROVED MAKE****CP TOWELS RAIL (ORDINARY): LOCAL MAKE OF APPROVED QUALITY
AND DESIGN****SWR FRAINAGE FITTINGS- SANYSTAR/ASTRAL**

PUMP SETS

a) MOTOR : KIRLOSKAR CROMPTION
OR ANY OTHER APPROVED MAKE

b) PUMP : KIRLOSKAR CROMPTION
OR ANY OTHER APPROVED MAKE

SIGNATURE OF THE TENDERER

(With stamp / seal of firm)