# Government Sunder Nursery Management Trust (GSNMT)

#### **NOTICE INVITING TENDER**

For

Proposed MS Structure for

## Solar plant at car parking of Humayun's Tomb World Heritage Site Museum

Nizamuddin, New Delhi

The document contains pages from 1 to 65

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#### NOTICE INVITING TENDER

Sealed Item rate Tenders in the prescribed form are hereby invited for the work of MS structure (supply & fabrication of structural steel works) for installing solar plant at the car parking of **Humayun's Tomb World Heritage Site Museum**(hereinafter referred to as "**HTWHSM**") at Mathura Road, Nizamuddin, New Delhi, Delhi 110013 by **Govt. Sunder Nursery Management Trust** (hereinafter referred to as "**GSNMT**").

| Sr.<br>No. | N.I.T.<br>No.                             | Name of work & location  | Time & date of opening of Technical Bid        | EMD<br>(In Rs.)  | Tender Fee<br>(Non-<br>refundable)<br>(In Rs.) |
|------------|---|--|--|--|--|
| 1.         | HTWHSM/<br>2025-26/<br>Solar<br>plant/001 | Supply & fabrication of structural steel works for installing solar plant at the car parking | Tuesday,<br>December 02,<br>2025 (10:30<br>AM) | Rs.2,33,175/-<br>(2.5% of Rs.<br>93,27,150 –<br>estimated<br>project cost) | Rs.2,000/- (inclusive of tax)                  |

1. Tender documents may be collected at the office of **Govt. Sunder Nursery Management Trust**, New Delhi located at Sunder nursery park, Nizamuddin, New Delhi, 110013 on payment of Application Fee of Rs. 2,000/- (inclusive of all taxes) in shape of Demand Draft in favour of Government Sunder Nursery Management Trust (non-refundable), between 10 AM to 4 PM (working days) as per the schedule given in the Critical Date Sheet hereinunder.

#### **CRITICAL DATE SHEET**

| Sr.<br>No. | Event                     | Schedule  |  |  |
|------------|---------------------------|---|--|--|
| 1.         | Tender Reference No.      | HTWHSM/2025-26/ Solar plant/001   |  |  |
| 2.         | Type of tender            | Open tender under two bid system (Technical & Financial)  |  |  |
| 3.         | Name of tender            | Supply & fabrication of structural steel works for installing solar plant at the car parking  |  |  |
| 4.         | Availability of tender    | <ol> <li>At the office of Government Sunder Nursery<br/>Management Trust, New Delhi located at<br/>Nizamuddin, New Delhi, 110013</li> <li>Sunder Nursery website:<br/>www.sundernursery.org/home.php</li> </ol> |  |  |
| 5.         | Tender inviting authority | GSNMT   |  |  |
| 6.         | Tender fee                | Rs. 2,000/- in shape of Demand Draft in favour of Government Sunder Nursery Management Trust (non-refundable).  |  |  |

| 7.  | Earnest Money           | Rs. 2,33,175/- in shape of Demand Draft in favour of  |  |  |
|-----|-------------------------|---|--|--|
| '   | Larriest Moriey         | Government Sunder Nursery Management Trust            |  |  |
|     |                         | (refundable without interest to unsuccessful bidders) |  |  |
| 0   | Dublich Data            | ,   |  |  |
| 8.  | Publish Date            | Saturday, November 15, 2025                           |  |  |
| 9.  | Bid document purchase   | Start date: Monday, November 17, 2025                 |  |  |
|     | start date and end date | End date: Friday, November 28, 2025 (till 4 PM)       |  |  |
|     |                         |   |  |  |
|     |                         | Bidders who are going to "download" the tender        |  |  |
|     |                         | documents from the official website are requested     |  |  |
|     |                         | to submit the tender value in the GSNMT office,       |  |  |
|     |                         | through a Demand Draft on or before November 28,      |  |  |
|     |                         | 2025 (till 4 pm). Only paid bidders with paid tenders |  |  |
|     |                         | will be considered for the submission of Tender       |  |  |
|     |                         | documents.  |  |  |
| 10. | Response to Query       | Friday, November 28, 2025 (till 5 PM)                 |  |  |
| 11. | Bid submission End date | Saturday, November 29, 2025 (till 5 PM)               |  |  |
|     | and time                |   |  |  |
| 12. | Technical Bid opening   | Tuesday, December 02, 2025 (10:30 AM)                 |  |  |
|     | date and time           | , ,   |  |  |
|     |                         |   |  |  |

- Sealed tenders along with an account payee bank draft for Rs 2,33,175/- (Rs. Two Lacs thirty-three thousand one hundred and seventy-five Only) as earnest money, in favor of Govt. Sunder Nursery Management Trust payable in New Delhi, with the name of the work and the name of the tender written on the envelope will be received at the office of Govt. Sunder Nursery Management Trust until 4pm on 29/11/25. Bids shall be submitted by hand at GSNMT office located at sunder nursery park or through speed post addressed to GSNMT. Tender bid which is not accompanied with the application fee and EMD amount is liable to be rejected.
- 3. The earnest money shall be returned to the unsuccessful tenderers within a period of seven days from the date of tender opening. For the successful tenderer, the earnest money deposit shall form a part of the security deposit. No interest shall be paid on Earnest money.
- 4. The time allowed to carry out the work will be <u>2 months</u> for completion from the 7<sup>th</sup> day after the date on which the letter of intent for award of work is issued to the tenderer.
- 5. The tenderers are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the nature of the site, proposed system of the sub structure, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. The tenderers can send an email at <a href="mailto:nouman.siddiqui@akdn.org">nouman.siddiqui@akdn.org</a> or call at 011-40700715 in case they need any help while visiting the site. A tenderer shall be deemed to have full knowledge of the site, whether he inspects the site or not and no extra charges consequent on any misunderstanding or otherwise shall be allowed. All Bidders are requested to send their queries (if any) via e-mail to (nouman.siddiqui@akdn.org) until 5pm on 28th

### November 2025. Answers to all queries received will be collectively responded to all prospective contractors.

- 6. Tenderers are also requested to check the quantity of various items and satisfy themselves. A tenderer shall be deemed to have full knowledge of the quantities. Any variation in quantities will not be accepted and no extra charges consequent on any misunderstanding or otherwise shall be allowed whether he calculates or not.
- 7. Submission of the tender by a tenderer implies that he has made himself aware with all the conditions and rates at which materials if any will be issued to him by the Employer.
- 8. Submission of a tender by a tenderer implies that he has made himself aware with all the General and Special Laws, Acts, Ordinances, Rules and Regulations of the Area Development Authority, Municipal, District, State, Central Government and any other concerned Government body that may affect work, it's performance or personnel employed therein.
- 9. The contractors should quote in figures as well as in words the rate quoted by them for each item. The amount for each item should be worked out and requisite totals given.
- 10. The employers do not bind themselves to accept the lowest bid nor any tender and reserve the right to accept the whole or any part of the tender. The tenderer shall be bound to perform the same at the rate quoted.
- 11. GST, Excise duty, Octroi, Royalty, or any other Tax, Duty or Levy on materials and work contract tax if any in respect of this contract shall be payable by the contractor, they should be included in respective item rates and the employer will not entertain any separate claim whatsoever in this respect.
- 12. Only unconditional tenders shall be considered for evaluation.
- 13. Contractor is hereby informed that the A1 size dwg. Set provided is for reference along with the tender document. The AutoCAD files of the drawings shall only be given to the successful bidder.
- 14. Not more than one tender for this work shall be submitted by one bidder or bidders having business relationship. Under no circumstance will father and his son(s) or other close relations who have business relationships with one another (i.e., when one or more partner(s)/director(s) are common) be allowed to tender for the same contract as separate competitors. A breach of this condition will render the tenders of both parties liable to rejection.
- 15. The tender shall remain open for acceptance for 30 days from the date of opening of tenders by GSNMT. The time limit for acceptance may be extended by GSNMT at its discretion for such further period as it may notify.
- 16. The intending bidder must read the terms and conditions of NIT carefully. He should only submit his bid if he considers himself eligible and he is in possession of all the documents required.

#### 17. Criteria for eligibility for submission of bid documents:

- (i) CPWD registered contractor Class II (Civil) having work done amounting 1.50 Cr per annum in last three financial year and current financial year.
- (ii) Non registered CPWD Contractors who have completed in the last three financial year and current year single similar nature of works costing 50% of the estimated value of tender as mentioned in NIT plus having work done amounting to Rs. 1.50 Cr per annum in last three financial year and current financial year.
- (iii) Authentic certificate shall be produced by the tenderer which may be an attested certificate from the Employer/Client, Audited balance sheet duly certified by the Chartered Accountant etc.
- (iv) Technical and financial eligibility of the firm shall be adjudged based on satisfactory fulfillment of the eligibility criteria by the firm in its own name and style. Shares of individual partners in terms of their performance in other firms shall not be considered.
- (v) The financial Capacity, Capability and past performance of the tenderer/contractor should be investigated/examined in detail by the tender committee before awarding the contract duly considering the existing workload with the tenderer.

The GSNMT reserves the right to suspend or cancel the bidding process, cancel the contract with the successful bidder in part or in whole at any time if in the opinion of the GSNMT it is in public interest to do so and without assigning any reasons thereto. The decision of the GSNMT in this regard shall be final.

#### 18. **Submission of Tender**:

- (vi) The tendering process shall comprise of two parts i.e. (i) submission of the technical bid and (ii) Financial Bid
- (vii) All the pages of bid documents must be signed and sequentially numbered by the bidder irrespective of nature of content of the documents.
- (viii) All prospective bidders will submit an envelope which will contain tender documents with signature and stamp on each page along with technical bid, demand draft and all required enclosures. The envelope should be addressed to Chief Operation officer, Government Sunder Nursery Management Trust, Nizamuddin, New Delhi 110013 and marked as 'Technical Bid for Supply & fabrication of structural steel works for installing solar plant at the car parking'.
- (ix) The offers submitted by Telegram/Fax/email shall not be considered. No correspondence will be entertained in this matter.

#### 19. Selection of Bidders:

#### STAGE-I

#### Pre-bid visit:

All potential bidders who have obtained Tender Documents on payment of the Tender fee will be required to visit the site & for the purpose of familiarizing themselves with the site conditions for carrying out the required work.

#### **Technical Bid**

GSNMT will go through the Technical bid documents of the bidders and will shortlist the bidders for Stage-II on the basis of documents uploaded along with technical bid, and the eligibility criteria stipulated in the Terms and Conditions annexed hereto at Page 5.

#### STAGE-II

#### **Financial Bid**

After the evaluation of Technical Bids, GSNMT will select the Financial bid out of those bidders found eligible in the Technical Bid.

**Declaration of Successful Bidder:** The GSNMT shall determine, and at its sole discretion, declare the successful bidder at the end.

20. The bidder will be solely and exclusively responsible to adhere to all statutory obligations under Indian law in respect of compliance of all the rules, regulations and directions given by a statutory authority with regard to safety, labour laws, P.F.&E.S.I. remittance or any other prevalent laws both of Central & State Enactments.

#### 21. **INSURANCE**

The successful bidder will obtain a comprehensive insurance policy including but not necessarily limited to fire insurance, personal liability insurance, natural calamity insurance etc., of the licensed area against all risks for a specified amount to cover damages, if any, occurring due to any reason or due to negligence on the part of the successful bidder or its employees. It shall be the responsibility of the successful bidder to ensure that they are in possession of valid insurance at all times during the subsistence of the license period.

#### 22. AUTHORIZATION

Individual signing the tender or other documents connected with the tender must specify whether he signs as:

- (i) A sole proprietor of the concern or constituted attorney of such sole proprietor.
- (ii) A partner of the firm if it is a partnership firm, in which case he must have authority to execute contracts on behalf of the firm and refer to arbitration disputes concerning the business of the partnership either by virtue of partnership agreement or by a power of attorney duly executed by the partners of the firms.
- (iii) Director or Principal Officer duly authorized by the Board of Directors of the company.
- 23. In case of (ii) a copy of the partnership deed or general power of Attorney, in either case attested by a Notary Public should be furnished or an affidavit on stamp paper duly sworn or

affirmed by all the partners admitting execution of the partnership agreement or the general power of attorney should be furnished. The attested copy of the certificate or registration of firm should be attached along with the tender papers. In case of partnership firm where no authority to refer dispute concerning the business of the partnership has been conferred on any partner, the tender and all other related documents must be signed by all the partners of the firm.

24. In case of (iii) the person signing the tender should be authorized by a resolution passed by the board of directors and a copy of the resolution attested by the Principal Officer should be attached.

#### 25. EARNEST MONEY DEPOSIT (EMD) AND SECURITY DEPOSIT

**EMD:** For the successful bidder, the earnest money deposit shall form a part of the security deposit. No interest shall accrue on the EMD amount, which will be adjusted after the successful completion of contract and after adjusting dues if any, of the bidder to GSNMT.

**Security Deposit:** The 5% of the total contract value shall be withheld as retention money from the running bills and the final bill by the employer. The retention money shall be kept for a period of 1 year from the date of completion of work at site. The retention money would be released after the completion of 1 year in accordance with the Contract. Prior to making a claim under the retention money the Employer shall, in every case, notify the Contractor stating the nature of the default in respect of which the claim is to be made. The EMD amount will be adjusted in accordance with bill raised so that the total 5% of the contract value would be retained as security deposit.

**Refund of EMD Amount:** The Earnest Money without interest shall be returned to unsuccessful qualified bidders within 7 (seven) days of the date of closure of the tender process or cancellation of the tender process. The EMD of the second lowest Qualified Bidder will be retained by GSNMT for up to 30 (thirty) days from the date of conclusion of the tender (where a Successful Bidder has been identified) in order to consider that bid in the event the original Successful Bidder is disqualified or the bid is cancelled for any reason.

#### 26. PROHIBITION ON SUB-CONTRACTING

No other bidder can be appointed by the approved bidder for undertaking the work. The bidder shall not engage the services of any sub-bidder or transfer the contract to any other person.

#### **TENDER FORM**

To: Chief operating officer, Govt. Sunder Nursery Management Trust, Nizamuddin East, New Delhi - 110013

I / We have read and examined the following documents relating to the construction of proposed MS Structure for the Solar power plant at car parking area at **Humayun's Tomb Site Museum** at New Delhi, comprising Supply & Fabrication of Steel Works.

- a) Notice Inviting Tender
- b) General Conditions of Contract
- c) Special Conditions
- d) Technical Specifications
- e) Schedule of Quantities
- f) Tender Drawings

I / We hereby tender for the execution of works referred to into the aforesaid documents upon the terms and conditions contained or referred to therein and in accordance in all respect with the specifications, designs, & drawings and other relevant details at the rates contained in the Schedule of Quantities and within the period of completion as stipulated in Annexure I.

In consideration of I /We being invited to tender, I / We agree to keep the tender open for acceptance for a period of 30 days from the date of submission thereof and not to make any modifications in its terms and conditions which are not acceptable to the employer.

| (With Seal) |   |
|-------------|---|
| For         |   |
| roi         |   |
| Witness     |   |
| 1           | 2 |

#### **TECHNICAL BID - APPLICATION FORM**

| · ·  | Earnest Money D | Deposit (EMD) |         |
|--|-----------------|---------------|---------|
| Amount of EMD:   |                 |               |         |
| Bankers' Cheque/ DD No.:   | _               |               |         |
| Dated:   |                 |               |         |
| PROFILE  |                 |               |         |
| 1. Name:   |                 |               |         |
| Complete registered address:   | _               |               |         |
| 3. Legal Status:   | _               |               |         |
| (Individual, Proprietary firm,<br>Partnership firm, Limited<br>Company or Corporation) |                 |               |         |
| Name & Designation of Contact Person   |                 |               |         |
| Mobile No. of Contact person   | _               |               |         |
| 3. E-mail address  |                 |               |         |
| Statutory Details (scanned copy to be attached)  |                 |               |         |
| <ol> <li>Registration No. of the<br/>Firm</li> </ol>                                   | _               |               |         |
| 2. PAN no.   | _               |               |         |
| 3. GST Registration No.  |                 |               |         |
|  |                 | <b>.</b>      | T       |
| Income Tax Returns for the last<br>three Financial Years (Attach<br>scanned copy)      | 2022-23         | 2023-24       | 2024-25 |
| Details of Annual Financial<br>Turnover (gross) with<br>documentary support            |                 |               |         |

Details of previous experience for similar work

| Sr.<br>No. | Name of the work with complete address | Type of Work | Commencement year | Estimated steel quantity fabricated/erected |
|------------|--|--------------|-------------------|---|
|            |  |              |                   |   |
|            |  |              |                   |   |
|            |  |              |                   |   |
|            |  |              |                   |   |

I/We, hereby, declare that: -

- (i) I/We have read and understood & agree to the Bid Documents, including Terms & Conditions forming integral part of the tender document, etc.
- (ii) I/We agree and undertake to be bound by the Bid Documents, and other Terms & Conditions forming integral part of the tender document.
- (iii) That I/we understand that in case of any of the above information/ documents (as given by us) is found to be incorrect, GSNMT may reject the application, cancel the agreement or revoke the contract at any time, without giving any notice and in such a situation, I/we will not be entitled for refund of any part of security and other deposits.
- (iv) I/We have not been barred by any Department / Organisation/ Local Authority from undertaking any type of construction project.
- (v) That the undersigned has been authorized by the firm / company to sign these bid documents. The address given below is the postal/communication address in which all the messages /documents may be addressed / may be sent to us.
- (vi) All the eligibility criteria as per tender document are fully understood and met.

| (VI) All the eligibility chiefla as per tender document are fully understood and |
|--|
| Place:   |
| Date:  |
| (Signature)  |
| Name of Authorized Signatory:  |
| Designation:   |
| Address:   |
| Company seal:  |

#### DOCUMENTS TO BE ENCLOSED WITH TECHNICAL BID

The following documents are to be furnished by the bidder along with Technical bid as per the tender document (As applicable):

- 1. Original copy of filled up Tender form & Technical bid- Application Form.
- Copy of documentary proof of minimum annual turnover during the last three Financial Years. CA Certificate along with audited reports for the last three financial years as a proof.
- Scanned copy of self-attested and stamped copy of valid Goods & Services Tax Registration Certificate.
- 4. Scanned copy of self-attested and stamped copy of Registration certificate of E.P.F.O. & E.S.I. or submit a declaration that you are exempted from these Acts.

Scanned copy of self-attested and stamped copy of the following:

(A)In case of Pvt./ Public Limited company:

- PAN Card of all the Directors.
- 2. Memorandum and Articles of Association (in original).
- 3. Income Tax Returns of the last three financial years duly certified by a Chartered Accountant.

(B)In case of Partnership Firm:

- 1. PAN Card of all the Partners.
- 2. Certified Partnership Deed.
- 3. Income Tax Return of the last three financial years duly certified by a Chartered Accountant.

#### (C) In case of Sole Proprietor Firm:

- 1. Aadhar card/ Election Identity Card/copy of Driving Licence etc. for proof of identity and address.
- 2. PAN Card of the Proprietor.
- 3. Income Tax Return of the last three financial years, duly certified by a Chartered Accountant.

The application should be signed by an authorized signatory duly authorized by the Company/ Partnership Firm along with a certified copy of such authorization.

#### SPECIAL CONDITIONS OF CONTRACT

#### 1.0 GENERAL

The following special conditions shall be read in conjunction with General Conditions of Contract. If there are any provisions in the special conditions which are at variance with the provisions in the other conditions of these tender documents. The provisions in these special conditions shall take precedence.

- 1.1 The work in general shall be carried out as per Technical Specifications attached or CPWD or IS codes if item is not covered under Technical Specifications, unless otherwise specified.
- 1.2 For items not covered under CPWD Specifications, the work shall be done as per latest relevant IS: code (Indian Standard code) of practice and CPWD Specifications. In case of any discrepancy between the specifications of IS: code of practice and CPWD specifications, the IS: code shall take precedence.
- 1.3 The Contractor is expected to fully comply with the safety procedures, norms and guidelines (as applicable) as outlined in NBC 2016.

For items not covered by 1.1 and 1.2 above, the work shall be done as per sound engineering practice as directed by the Employers whose decision in this regard shall have final binding on the contractor.

#### 2.0 LAND AND LABOUR CAMPS

- 2.1 The contractor shall examine the site and satisfy himself regarding the space available for labour camp, workshops, site office, storage of steel and other building materials. Any additional space required by the contractor shall be arranged by him at his own cost.
- 2.2 The contractor shall prepare a Site Utilization Plan showing location of temporary offices, stores, go down, labour camp, fabrication plant forms, workshops in consultation with and approval of Employer before creating these facilities. The contractor shall make all the above arrangements at his own cost and the employer will not entertain any claim whatsoever in this respect.
- 2.3 The contractor shall ensure that the labour camp is vacated on completion of structure and prior to onset of finishing works. In case of his failure to vacate the area, the employer will be at liberty to withhold his payment and initiate legal action for eviction. The legal actions will be initiated against the contractor and not the individual labourers.

#### 3.0 WATER SUPPLY & POWER SUPPLY

The Water required by the contractor shall has to be arranged by him at his own cost. The electricity for construction purposes shall be provided by the organization at the current market tariff for which the contractor would need to pay to the employer in the final bill.

#### 4.0 PROGRAMME FOR WORKS AND PROGRESS REPORTS

The contractor shall submit within 10 days from the date of acceptance of the tender, detailed schedule showing the program and order in which the contractor proposes to carry out the work with dates and estimated completions times for various parts of the work in form of PERT/CPM. Such schedules shall be approved by the Project architect

appointed in charge by the employer before starting the work and shall be binding to the contractor. The contractor shall furnish updated bi-weekly progress reports until completion of the project.

#### 5.0 COORDINATION

The contractor shall co-operate and co-ordinate with jointly procured materials / equipments etc. and other contractors, departmental construction work if any, laying of services etc. He shall study the plans, specifications and time schedules of any other contractors and so plan his work in consultation with the Project architect of Employer and other contractors so that all the related activities of other agencies are dove-tailed and coordinated. The contractor shall forward to the Employer all correspondence and drawings so exchanged with other agencies. Failure on the part of the contractor to check plans and conditions of other agencies affecting his work will render the contractor responsible for bearing the cost of any necessary consequent changes.

#### 7.0 STORES AND MATERIALS

All the stores and materials (confirming to specifications in relevant IS: codes / CPWD specifications) including the materials stipulated for issue by the Employer, required for the satisfactory completion of the work shall be arranged by the contractor from his own sources/open market. No claim whatsoever shall be entertained by the Employer on account of delay in either providing these materials or non-availability of any of the materials in the market. All stipulated material shall be issued at our store near office car parking in Sunder nursery and nothing extra shall be paid for carrying the stipulated material to work site.

7.1 The sources for all the Construction related material shall be approved by the Employer and shall not change until and unless approval by Employer is received in writing. For all these approvals contractor shall maintain a register at site to keep a track record till completion and final payments are made to the contractor.

#### 8.0 CONSTRUCTION PERIOD

The work shall be completed in 2 (two) months, starting from 7 (Seven) days after the issue of the Letter of Intent (LOI)/work order.

#### 9.0 INCOME TAX

Employer will deduct the required amount towards TDS as per the latest Income Tax rules or those modified by the Government from time to time from all payments made to the contractor.

#### 10.0 CONTRACT SIGNING

After acceptance of the tender, the tenderer shall sign the necessary contract papers within 7 days of the intimation. Expenses for all agreement including cost of stamp papers etc. shall be borne by the contractor.

- 11.0 Strict safety measures shall be observed by the contractors till the completion of job. Contractor shall bear all the expenses for the treatment & care of any injured worker(s) as per the prevailing labour laws. The same rules are applicable in case of death of any worker(s)
- **12.0** The contract shall be an item rate contract, based on the item rate value / tender drawings.

#### 13.0 Minimum Work Supervision Staff at Site

Contractor shall depute below mentioned site supervisory staff after the award of the contract; the site supervisory staff shall be present at the site on a daily basis for a minimum duration of 8 hours per day.

a) Project Engineer / Project Manager

01 Nos.

(Degree Holder with 7 year experience or Diploma Holder with 12 years experience, who should be aware of the contractor's role and contractor's general obligations and should be capable of executing such works.)

b) General Foremen

01 Nos.

(Should be qualified with 15 years experience)

14.0 The acceptance of the Tender shall be conditional and not finally binding upon the Employer until the actual Contract signed between the Employer and the Contractor. Should the Contractor fail to sign the Contract within the stipulated time or for any other reason withdraw his participation the Tender, the Employer may withdraw his acceptance of the Tender without any notice or other formality and may enter into a new Agreement for the execution of the Works or any part it comprised in such acceptance and thereupon the amount of Earnest Money Deposit shall be confiscated by the Employer from the Guaranteeing Bank without any necessity for any legal or other formality or reference to judicial proceedings or proof of damage and without prejudice to the right of the Employer inter-alia to award the Tender to the next ELIGIBLE Tenderer, if necessary, or to any other person at any other price or rate and to recover from the Contractor all amounts expended by the Employer in relating such Tender and charging the Contractor the difference in cost between the Contractor's Tender and the person to whom such Tender may be awarded pursuant to this Paragraph or to recover any and all actual damages from the Contractor by reason of default of the Contractor as herein provided.

#### 15.0 RELEASE FROM PERFORMANCE

Payment in event of Release from Performance

If any circumstances outside the control of both parties arises after the issue of the Letter of Acceptance which renders it impossible or unlawful for either party to fulfill his contractual obligations, or under law governing the contract the parties are released from further performance, then the sum payable by the Employer to the contractor in respect to the work executed shall be the same as that which would have been payable under clause if the contract had been terminated under the Provisions of Clause 36.

#### 16.0 STANDARDS

All materials and works shall conform to these Specifications, and when these Specifications are silent on any subject, the latest edition of the standard specifications of the Central Public Works Department and Indian Standard specifications shall apply. Standards issued elsewhere or manufacturer's specifications may be used only if approved by the Employer and for those materials and works only for which appropriate standard Indian specifications do not exist. Only the best materials are to be used and therefore the Contractor should survey the location before filling the tender.

#### 17.0 SAMPLING AND TESTING

All materials needed in the works shall conform to relevant IS standard and may be subjected to inspection and test.

Any material rejected by the Employers shall be removed from the site of work within 24 hours of rejection.

- a) Upon notification that the work has been completed, the Contractor shall make arrangements under the direction and in the presence of the Engineer of inspections and tests as shall be considered necessary.
- b) Contractor shall provide all test equipment, labour and operation services required for these tests.
- c) The above test shall be carried out by the Contractor without extra charge.
- d) The Contractor shall also provide all equipment instruments, labour and such other allied assistance.

#### 18.0 SAFETY CONDITIONS

**18**.1 Comply with the safety rules issued by the employer herein:

Following are the responsibilities of the contractor:

- a) To understand the rules on safety that he and his fellow workers are expected to follow;
- b) To explain these rules to this fellow workers;
- c) To comply with each rule mentioned and the statutory obligation in regard to safety; and
- d) If required by employer, contractor shall depute a qualified safety Engineer-incharge subject to approval by employer.
- e) The Contractor is expected to fully comply with the safety procedures, norms and guidelines (as applicable) as outlined in NBC 2016. Adopt the additional best practices and prescribed norms as in NBC 2016 or those modified by the Government from time to time.

#### 18.2 Safety Regulations

a) In respect of all labour, directly employed in the WORK for the performance of CONTRACTOR's part of this agreement, the CONTRACTOR shall at his own expenses arrange for all the safety provisions as per safety codes of CPWD, Indian Standard Institution, the Electricity Act, the Mines Act, the NBC 2016, and such other acts as applicable or those updated by the Government from time to time. b) The CONTRACTOR shall observe and abide by all fire and safety regulations of the employer. Before starting construction work CONTRACTOR shall make arrangements to the satisfaction of the employer in order to prevent the loss or damage due to fire to any portion of the work done or to be done under this agreement or to any of the employer's existing property.

#### 18.3 General Protocol

- a) Provide clean drinking water to all workers.
- b) Provide adequate number of decentralized latrines and urinals to construction workers.
- c) Provide warning and safety signs as appropriate across the site.
- d) Ensure the safety nets and harnesses are provided for construction workers working on higher floors. Ensure that the walking boards and formwork are stable.
- e) Provide safety equipment like safety helmets, jackets, boots, and gloves.
- f) Provide fire extinguishers on site as per norms stated by the government.
- g) Provide sufficient light for workers to work safely at night. [NBC recommends a minimum illumination level of 100 lux for work on site during night.]
- h) Safety goggles should be worn during activities which are hazardous to eyes like drilling, cutting, and welding.
- i) Welders and gas cutters should have the required safety equipment like gloves, safety boots, hand shields, etc.
- j) Cordon off areas during construction in order to prevent people from hitting the structural components and getting hurt.
- k) Display warning signs wherever required like 'NO SMOKING,' 'PEOPLE AT WORK,' and '440 VOLTS.'
- I) All electrically operated hand tools must be provided double earthing to make them safe for the workers.
- m) Safety belts should always be available on site for use as and when required. The rope used for the belts should be treated to be free of dew and rotting.
- n) All fire extinguishers should be maintained in serviceable condition.
- o) All construction waste on site should be collected daily and disposed of safely.
- p) Workers should not be permitted to wear clothes which enhance their getting involved in an accident. No loose clothing should be permitted.
- q) Workers working at heights should have sufficient provisions provided to them like safety belts, harnesses, and sturdy scaffolding.
- 18.4 Demolition/General Safety: before any demolition work commences and also during the progress of the demolishing work:
  - All roads and open areas adjacent to the work site shall either be closed or suitably protected.

- b) No electric cable or apparatus which is liable to be a source of danger shall remain electrically charged.
- c) All practical steps shall be taken to prevent danger to persons employed from risk of fire or explosions or flooring.
- d) Contractor to clear all debris in through the mechanical transport thoroughly covered.
- 18.5.1 All necessary personal safety equipment as listed in General Protocol and as considered adequate by Engineer, should be kept available for the use of the persons employed on the SITE and maintained in condition suitable for immediate use, and the CONTRACTOR shall take adequate steps to ensure proper use of equipment by those concerned.
  - a) Those engaged in welding and cutting works shall be provided with protective face and eye-shields, hard gloves etc.
  - b) Stone breakers shall be provided with protective goggles and protective clothing, and seated at sufficiently safe intervals.
- 18.5.2 Use of hoisting machines and tackles including their attachments, anchorage and supports shall confirm to the following standards or conditions:
  - a) These shall be of good mechanical construction sound materials and adequate strength and free from patent defect and shall be kept in god working order.
  - b) Every rope used in hoisting or lowering materials or as means of suspension shall be of durable quality and adequate strength and free from patent defects.
  - c) Every crane driver or hoisting appliances operator shall be properly trained and have a valid license and no person under the age of 21 years should be in charge of any hoisting machine including any scaffolding, or give signals to the operator.
  - d) In case of every hoisting machine and of every chain ring hook, shackle, swivel, and pulley block used in hoisting or lowering or as means of suspensions, the safe working load shall be ascertained by adequate means. Every hoisting machine and all gears referred to above shall be plainly marked with the safe working load of the conditions under which it is applicable which shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond safe working load except for the purpose of testing.
  - e) In case of departmental machine, the safe working load shall be notified by Engineer-in-charge. As regards CONTRACTOR's machines, the CONTRACTOR shall notify the safe working load of the machine to the Engineer-in-charge wherever he brings any machinery to SITE of WORK and get it verified by the Engineer-in-charge concerned.
- 18.5.3 All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe conditions and no scaffolds, ladder or equipment shall be altered or removed while in use. Adequate washing facilities should be provided at or near places or work
- 18.5.4 These safety provisions should be brought to the notice of all concerned by displaying on a notice board at a prominent place at the work-spot. The person responsible for compliance of the safety code shall be named therein by the CONTRACTOR.

- 18.5.5 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 Welfare Officer, ENGINEER-IN-CHARGE or Safety Manager of the Administration or their representatives.
- 18.5.6 Precautions against Fire: The CONTRACTOR will have to provide Fire Extinguishers/ Fire Buckets and drums at work site as recommended by Engineer-in-charge. They will have to ensure all precautionary measure and exercise utmost care in handling the inflammable gas cylinder/ inflammable liquid/ paints etc. as advised by Engineer-in-charge. Temporary combustible structures will not be built near or around the work site.
- 18.5.7 General Safety: First aid and Industrial Injuries
  - CONTRACTOR shall maintain first aid facilities for its employees and those of its SUB-CONTRACTORS.
  - b) CONTRACTOR shall make outside arrangements for ambulance services and for the treatment of industrial injuries. Names of those providing these services shall be furnished to employer prior to start of construction and their telephone numbers shall be prominently posted in CONTRACTOR's field office.
  - c) All critical industrial injuries shall be reported promptly to employer and a copy of the CONTRACTOR'S report covering each personal injury requiring the attention of a physician shall be furnished to the employer.
- 18.6. General Rules: Smoking and chewing tobacco within the site area is strictly prohibited. Violators of the no smoking rules shall be discharged immediately.

#### 18.6.1 Contractor's Barricades

- a) CONTRACTOR shall erect and maintain barricades required in connection with his operation to guard or protect.
  - i) Excavation
  - ii) Hoisting Areas
  - iii) Areas identified hazardous by Employers
  - iv) Employers existing property subject to damage by CONTRACTOR's operations.
- b) CONTRACTOR's employees and those of his SUB-CONTRACTOR's shall become acquainted with employer's barricading practice and shall follow the provision thereof.
- c) Barricades and hazardous areas adjacent to but not located on normal routes of travel shall be marked by flasher lanterns at night.

#### 18.6.2 Scaffolding

- a) The scaffolds (made out of steel or aluminium only); supports (steel only) erected will be sound, safe and strong. Material used will be the best of their kind to avoid any mishap or failure.
- b) Under no circumstances shall scaffolds or platforms be overloaded.
- c) The right type of ladders shall be used for every job. Ladders in the conditions mentioned below are prohibited.
  - When the ladder is too short or too long for a job.

- Metal ladder on electrical job.
- When rungs of the ladder are defective, broken or missing.
- Nails or screws protrude out at any place.
- Two ladders are spliced.
- The side rails and rungs have splinters and sharp edges.
- The rungs are not evenly spaced
- The footrest of skid type.
- d) More than one person will not be allowed to climb up or go down the ladder simultaneously.
- e) Platforms used for climbing and/or used as a means of access to scaffolding or foundation work, will have cross battens at suitable distance and will not be less than 45 cm in width. They will be strong enough to hold safely, the weight of the maximum number of persons that may be present at a time or at any time.
- f) While storing any structural material, it must not
  - Obstruct the passage
  - Obstruct the road
  - Create unsafe condition which may result in an accident or a mishap.

Working at a height from where there are chances of a worker falling by a height of 2 meters or more all precautions should be taken to ensure proper hand hold and foot hold to ensure that the chances of fall do not exist. The following precautions may be taken while working at heights:

- a) Safety belts will be used.
- b) If safety belt cannot be used the net will be tied below workplace to prevent the fall of a person on the ground.
- c) The tools or loose material like nuts and bolts will be kept in a proper tool bag.
- 18.6.3 Welding: When welding operations are being carried out following precautions shall be taken:
  - a) Written permission from the employers to carry out welding operations.
  - b) Only a qualified, experienced and tested welder will allowed to work on welding operations.
  - c) A proper electrical connection will be taken using a cable of an appropriate size and capacity.
  - d) A separate man will be stationed (if welding is done at a height 2.00 mtr. and more) to warm passers by and watch for possible fire.
  - e) When welding is being done at height, any equipment and machinery shall be well protected and personnel warned. Inflammable material; will be not be kept within 12 metres of the welding point.
  - f) Proper personnel protective equipment like welding hand screen, leather gloves, leg guard, apron etc. will be given to the person doing welding work and assisting the welders by the contractor.

g) The regulators, valves, accessories of the gas cylinders and generators will be checked regularly and properly maintained.

#### 19.0 MISCELLANEOUS

- 19.1 On completion of works, contractor has to transfer all Guarantees & Warrantees in the employer's name, before issuance of virtual completion certificate.
- 19.2 Contractor shall ensure that the works shall carried out in such a manner that the neighbours are not effected w.r.t. working hours/ sound created due to construction works or any other reasons and contractor shall solely responsible for carrying out the smooth work.
- 19.3 The contractor is allowed to work between 7:00 A.M. and 8:00 P.M.
- 19.4 A high standard of finishing is expected from the contractor when carrying out the finishing works. The contractor shall take special attention and care to deliver the uniform colour and shade for the following items.
  - a) All kind of paint & polish work
  - b) MS Fabrication work
- 19.5 For any doubt/ clarification or discrepancy in specification, contractor is to inform structure engineer and seek his consultation and his decision shall be final and binding to contract.
- 19.6 The Contractor should follow employer's instruction for staging/sequencing of all contractor's works in a phased manner.

#### 20.0 REDUCE AIR POLLUTION DURING CONSTRUCTION

The following air pollution prevention measures are mandatory and must be adopted by contractors during construction:

Provide at least a three-meter-high hoarding around the perimeter of the site, next to the road or public area as per employer's instructions.

Provide dust screens, sheeting, or netting along the perimeter of the building.

Identify areas on site where vehicles have to ply. Limit movement of vehicles only to designated areas on site. Limit vehicle speed on site to a maximum of 10km/hour.

Ensure that the vehicle circulation paths and parking areas are hard paved or covered with gravel, etc.

All stationary vehicles on site should not have their engines idling and should be turned off. Ensure constant monitoring on site to ensure various measures are being implemented properly. Put a dust and air pollution control plan in place during construction.

Use water as a dust suppressant. Spray water over areas where demolition work is being carried out. Spray water to suppress dust on any unpaved road or pathway. Regularly wash the wheels of vehicles plying in and out of the site to prevent any dust from travelling outside.

Cover all loose stored material with geotextile or any impervious fabric or covering.

Cover all dusty loads on vehicles with impervious sheeting before they enter or exit the site.

Store loose materials in enclosed spaces. Provide wind barriers or fences or wind breakers around the area where loose soil, sand, etc., are stored.

All Gen. Sets should be maintained properly. The Gen. Sets used on site should meet the recommended pollution norms. Minimum stack height should be provided for all Gen. Sets based on height of the building and capacity of the Gen sets.

#### **GENERAL CONDITIONS OF CONTRACT**

#### 1.0 HEADINGS AND SUB HEADINGS

Headings and sub-headings to these general conditions shall not be deemed to form part thereof or be taken into consideration in the interpretation or construction thereof, or of the contract.

#### 2.0 SINGULAR AND PLURAL

Where the context requires, words imparting the singular only also include the plural and vice versa.

#### 3.0 DEFINITIONS

- **3.1 "Employer"** shall mean **Govt. Sunder Nursery Management Trust** and includes a duly authorized representative of the Employer, or any other person empowered in this behalf by the Employer to discharge all or any of its functions.
- 3.2 The "Accepting Authority" shall mean the Employer or his nominee on behalf of the Employer.
- 3.3 The "Contract" shall mean the Notice Inviting Tender, the Tender Form, the Tender and the acceptance thereof, the Letter of Agreement between the Employer and the contractor together with all the documents specifically referred to therein including these conditions with the appendices, the special conditions, the specifications, the Designs and Drawings, and the Schedule of quantities with the rates and amounts. All these forms one contract and the documents shall be treated as complementary to one another.
- 3.4 The "Contractor" shall mean the individual or firm or company, whether incorporated or not, undertaking the works and shall include legal representatives of such individuals or persons composing such firm or incorporated / unincorporated company, or successors of such firm or company as the case may be and permitted assignees of such individual or firm or company.
- 3.5 The "Contract Sum" shall mean in the case of Item Rate Contracts, the cost of the work arrived at after extension of the quantities shown in the Bill of Quantities by the item rates quoted by the tenderer for the various items.
- 3.6 A "Day" shall mean a day of 24 hours from midnight to midnight irrespective of the number of hours worked in that day.
- 3.7 A "Week" shall mean seven days without regard to the number of hours worked in any day in that week.
- 3.8 The "Site" shall mean lands and/or other places on, under, in, or through which the work is to be executed under the contract including any adjacent lands or places which may be allotted by the Employer or used for the purpose of the contract.
- 3.9 The "Works" shall mean the works to be executed in accordance with the Contractor or part(s) thereof as the case may be and shall include all extra or additional, altered or substituted works or temporary and urgent works as required for performance of Contract.

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- **3.10 "Temporary Works"** shall mean all temporary works of every kind required in or about the execution, completion or maintenance of Contract.
- **3.11 "Urgent Works"** shall mean any urgent measures which in the opinion of the Employers, become necessary during the progress of the work to obviate any risk of accident or failure or which become necessary for security.
- **3.12 "Market Rate"** shall be the rate as decided by the Employers on the basis of the cost of material inclusive of any taxes, octroi or such statutory imposition at the time of work, and cost of labour at site where the work is to be executed plus 15% as overheads, supervision and profit.
- 3.13 "Excepted Risks" are risk due to riots (other than among Contractor's employee) and civil commotion (in so far as both these are uninsurable), war (whether declared or not), invasion, act of foreign enemies, hostilities, civil war, rebellion, revolution, insurrection, military or usurped power or any acts of Government, damages from aircraft, acts of god such as earthquakes, lighting and unprecedented floods and other causes over which the Contractor has no control and accepted as such by the accepting Authority or cause solely due to use or occupation by the Employer of the part of work in respect of which a certificate of completion has been issued or a cause due to Employer's faulty design of works.
- **3.14 "Act of Insolvency"** means any act of insolvency as defined by the Presidency Towns Insolvency Act or the Provincial Insolvency Act or any amending status.

#### 4.0 CONTRACT DOCUMENTS

- **4.1** The contractor shall be furnished free of charge with one certified true copy of the contract documents at the beginning of the construction period.
- 4.2 The contractor shall give adequate notice of minimum one week in advance, in writing to the Employers, of the drawings or any further specifications they may be required for the execution of the works. One copy of all the drawings necessary for the execution of work will be issued to the contractor during the progress of the work, free of charge. One copy of the drawings furnished to the contractor as aforesaid shall be kept at the site and the same shall at all reasonable times be available for inspection and use by Employers or their representatives. The contractor may request additional copies of the drawings on payment.
- **4.3** None of these documents and drawings shall be used by the contractor for any other work or project or any purpose whatsoever other than that of this contract.

#### 5.0 WORKS TO BE CARRIED OUT

5.1 The work to be carried out under the Contract shall, except as otherwise provided in these conditions, include all materials, labour, equipment, supplies, plant tools, scaffoldings, transportation, superintendence, temporary construction of every nature, taxes, work contract tax, service tax, excise, octroi, insurance, water, electricity and all other services and facilities required in preparation of and in full and entire execution and completion of the work. The description given in the Schedule of Quantities shall, unless otherwise stated be held to include wastage on materials, including overlaps of reinforcement in concrete, carriage and cartage and return of empties, hoisting, fitting and fixing in position

- and all other labour necessary in and for the full and entire execution and completion as aforesaid in accordance with good practice and recognized principles.
- 5.2 Before ordering any material or doing any work, the contractor shall verify the pertinent field dimensions for the project and shall be responsible for the correctness of same. No extra charge or compensation will be allowed on account of difference existing between actual dimensions and dimensions indicated on the drawings. Any difference which may be found shall be submitted to the Employers/Architects for consideration before proceeding with the work. Dimensional variation in any items of work between as shown in drawings and as built shall be rectified by the contractor at his own cost as directed by the Employers.

#### 6.0 SITE AND LOCAL CONDITIONS

- 6.1 By executing the contract, the contractor is responsible for having visited the site of the proposed work, fully acquainted and familiarized himself with the conditions as they exist and the nature of the operation to be carried out under the proposed contract and made all such necessary investigation so that he shall fully understand the facilities, physical conditions and restrictions attending the work under the contract.
- 6.2 The contractor also agrees that he has carefully examined the drawings, specifications and associated documents and the site, and that from his own investigation he has satisfied himself as to the nature and location of the work, the general and local conditions, and all matters which may in any way affect the work or its performance, and that as a result of such examination and investigation he has fully understood the intent and purpose of the contract documents. Claims for additional compensation or extension of time because of contractor's failure to follow the forgoing procedure and to familiarize himself with the contract documents and all conditions which might affect the work will not be allowed.

#### 7.0 SUFFICIENCY OF TENDER

- 7.1 The contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices quoted in the Schedule of Quantities. These rates and prices, shall except as otherwise provided, cover all his obligations under the contract and all matters and things necessary for the proper completion and maintenance of the works.
- 7.2 If there are varying or conflicting provisions made in any one of the documents forming part of the contract and also in case of discrepancy between Schedule of Quantities, specifications, drawings, the tender shall immediately inform the Accepting Authority or consultants for necessary clarification with regard to the intention of the document, before submitting his tender.

#### 8.0 DISCREPANCIES AND ADJUSTMENT OF ERRORS:

8.1 The several documents forming the contract are to be taken as mutually explanatory to one another, larger scale drawings being followed in preference to small scale drawings and figured dimensions in preference to scale and Special Conditions in preference to General Conditions.

- 8.2 In case of discrepancy between Schedule of Quantities, the Specifications and / the Drawings, the following order of performance shall be observed:
- 8.2.1 Detailed construction drawings
- **8.2.2** Description in Schedule of Quantities
- 8.2.3 Special Conditions
- 8.2.4 Particular Specifications
- **8.2.5** General Specifications
- **8.3** If there are varying or conflicting provisions made in any one document forming part of the contract, the Employer shall be the deciding Authority with regard to the intention of the document.
- 8.4 Any error in description, quantity, or rates in Schedule of Quantities or any omission therefrom shall not vitiate the Contract nor 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.
- 8.5 If on checking, there are found to be difference between the rates given by the contractor in words and figures or in the amount worked out by him in the Schedule of Quantities and General Summary, the same shall be adjusted in accordance with the following rules:
- **8.5.1** In the event of a discrepancy between description in words and figures quoted by a tenderer, the rate which corresponds to the amount worked out by the Contractor shall be taken as correct. When the amount of an item is not worked out by the Contractor, or it does not correspond to the rate written either in figures or in words, the rate quoted by the contractor in 'WORDS' shall be taken as correct.
- **8.5.2** In the event of an error occurring in the amount column of Schedule of Quantities as a result of wrong extension of the unit rate and the quantity, the Unit Rate shall be regarded as firm and extension shall be amended on the basis of rate.
- **8.5.3** All errors in totaling in the amount column and carrying forward totals shall be corrected.
- **8.5.4** The total of various sections of Schedule of Quantities as amended shall be carried over to the General Summary and the tendered sum amended accordingly. The tendered sum so altered shall, for the purpose of tender, be substituted for the sum originally tendered and considered for acceptance instead of the original sum quoted by the tenderer. Any rounding off totals in various sections of Schedule of Quantities or in the General Summary by the tenderer shall be ignored.

#### 9.0 SECURITY DEPOSIT

- **9.1** At the time of making payment to the contractor for the work done under this contract, the employer shall deduct 5% of the gross amount of the bill as security deposit (up to a maximum value of 5% of total contract value)
- **9.2** The earnest money of Rs. 2,50,000/- (Rs. Two Lac fifty thousand Only) shall be considered as a part of Security Deposit for the successful bidder.
- 9.4 All compensation or other sums of money payable by the contractor under the terms of this contract or any other contract or any other account whatsoever may be deducted from or paid by the sale of sufficient part of this security deposit or from any sums which may be due or become or due to the contractor by the Employer on any account whatsoever

and in the event of his security deposit being reduced by reason on any deduction or sale as aforesaid, the contractor shall within fourteen days of receipt of notice of demand from the Employers make good the deficit.

#### 10.0 VARIATIONS, DEVIATIONS-EXTENT AND PRICING

- 10.1 The quantities shown against individual items in Schedule of Quantities are approximate and may vary with variation upto ±20% in details / design.
- **10.2** The Employer shall have power to make alteration in, omission from, addition to, or substitution for the original specifications, drawings, designs, and instructions that may appear to him to be necessary or advisable during the progress of the work.
- 10.3 The Employers shall be empowered to omit a part of the works in case of non-availability of a portion of the site or for any other reason, and the contractor shall be bound to carry out the works in accordance with any instructions given to him in writing signed by the Employers and such alterations, omissions, additions, or substitutions shall from part of the contractor may be directed to do in the manner above specified 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 herein after provided.
- 10.4 In the event of any deviation being ordered which in the opinion of the contractor changes the original nature of the contract, he shall never the less carry it out and the disagreement as to the nature of the work and the rate to be paid therefore shall be resolved according to condition 11.0
- **10.5** The time for the completion of the work shall, in the event of any deviations resulting in additional cost over the contract sum being ordered, be extended as follows if requested by the contractor.
- **10.5.1** In the proportion which the additional cost of the altered, additional, or substituted work, bears to the original contract sum: plus
- **10.5.2** 25% of the time calculated in 10.5.1 above or such further additional time as may be considered reasonable by the Employers.

#### 11.0 EXTRA ITEMS

- **11.1** The rates of all authorized extra items of additional, altered or substituted work, shall be worked out as follows:
- 11.1.1 If the rate for additional, altered, or substituted items of work is specified in the Schedule of Quantities, the contractor shall carry out the additional, altered, or substituted items in the same rate. In the case of composite tenders, where two or more schedules of quantities may form part of the contract, the applicable rate shall be taken from the schedule of quantities of that particular part in which the deviation is involved, failing that at the lowest applicable rate for the same item of work in the other schedule of quantities.
- **11.1.2** If the rate for any additional, altered, or substituted item of work is not specified in the Schedule of Quantities, the rate for that item shall be derived from the rate for the nearest similar item specified there in. In case of composite tenders where two or more schedules of quantities form part of the contract, the rate shall be derived from the nearest similar item in the Bills of Quantities of the particular part of works in which the deviation is

- involved, failing that from the lowest of the nearest of the lowest items in other schedules of quantities.
- **11.1.3** Where the rates cannot be derived in the manner described in 11.1.1 and 11.1.2, the same shall be worked out on the basis of CPWD rates of the actual expenditure incurred in the execution of the item inclusive of any taxes, octroi, excise, transportation etc. plus the contractor's overheads, supervision charges and profit as 15%.
- 11.2 The contractor shall, within 7 days of the date of receipt of an order to carry out the above work, submit the rates which he propose to claim for such items of work, supported by rate analysis and vouchers, Employers shall communicate to the contractor the rate admissible for these items. The decision of Employers shall be final and binding on the contractor in this regard. The items shall not be executed unless the rates are approved by the employers.
- 11.3 No extra work shall be carried out without prior written approval from employer.

#### 12.0 SUSPENSION OF WORKS:

- **12.1** The contractor shall, on receipt of the order in writing of the Employer suspend the progress of the works or any part thereof for such time in such a manner as the Employer may consider necessary for any of the following reasons:
- **12.1.1** On account of any default on part of the contractor.
- **12.1.2** For immoral execution of the works or part thereof for reasons other than the default of the contractor.
- **12.1.3** For safety of the works or part thereof.
- **12.2** The contractor shall, during such suspension, properly protect and secure the works to the extent necessary and carry out the instructions given in that behalf by the Employer.
- **12.3** If the suspension is ordered for reason described in 12.1.2 and 12.1.3, then the contractor shall be entitled to an extension of time equal to the period of every suspension PLUS 25 % of the suspension period.

#### 13.0 TIME AND EXTENSION FOR DELAY

- 13.1 The time allowed for execution of the works, or the extended time in accordance with these conditions shall be the essence of the contract. The work shall commence from the 07<sup>th</sup> day after the date of work order issued by the Employer or from the date of handing over of the site whichever is later. If the contractor commits default in commencing the work as aforesaid, the employer shall without prejudice to any other right or remedy be at liberty to forfeit the earnest money absolutely and cancel the contract.
  - The contractor shall produce before starting of the work at site, a time and planned progress chart in the form of PERT/CPM chart. This PERT/CPM chart shall, after acceptance by the Employer, become part of the tender documents and the contractor shall ensure a good progress accordingly.
- 13.2 If the works be delayed by force majeure, or abnormally bad weather, or serious loss or damage by fire, or civil commotion, local combination of workmen, strike or lockout, affecting any of the trades employed on the work, or delay on the part of other contractors or trades men engaged by the Employer in executing work not forming part of the

contract, or non availability of the material and stores, which are the responsibility of the Employer to supply, or non availability of tools and plant to be supplied by the Employer, or any other cause whatsoever, which in the absolute discretion of the Employer, is beyond the contractor's control, then upon the happening of any such event causing delay, the contractor shall immediately give notice thereof in writing to the Architects/Employer but shall never the less use constantly his best endeavor to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Architects/Employer to proceed with the works.

- **13.3** Request for extension of time, to be eligible for consideration, shall be made by the contractor in writing as per hindrance register (Clause no.28) within fourteen days of the happening of the event causing delay. The contractor may also, if practicable, indicate in such a request the period for which extension is desired.
- 13.4 In any such case the Employers, may give a fair and reasonable extension of time for completion of the work. Such extension shall be communicated to the contractor by the Employers in writing within 15 days of the date of receipt of such request.

#### 14.0 PLANT AND EQUIPMENT

The contractor shall arrange at his own expense all tools, plants and equipment required for the satisfactory execution of the work, in such numbers or quantity as to meet the time of completion specified in the contract and to meet the approval of Architects/Employer.

#### 15.0 MATERIALS TO BE PROVIDED

**15.1** Materials to be provided by the contractor.

The contractor shall, at his own expense, provide all materials required for the works other than those which are to be supplied by the Employer.

- **15.1.1** All materials to be provided by the contractor shall be in conformity with the specifications laid down in the contract or relevant IS: Codes or CPWD specifications and the contractor shall, if requested by the Employer furnish proof to the satisfaction of the Architects/Employer that the materials so comply.
- **15.1.2** The contractor shall, at his own expense and without delay, supply to the Architects/Employer samples of materials proposed to be used in works. If samples are not approved, the contractor shall forth with arrange to supply to the Employer for his approval fresh samples complying with the specifications laid in the contract. No claim whatsoever shall be entertained by the Employer on account of expenses involved in arranging material samples for the approval of Architects/Employer.
- 15.1.3 The Architects/Employer shall have full powers to require removal of any or all of the materials brought to site by the contractor which are not in accordance with the Contract specifications or do not conform in character or quality to samples approved by him. In case of default on the part of the contractor in removing the rejected materials the Architects/Employer shall be at a liberty to have them removed by other means. The Architects/Employer shall have full powers to procure other proper materials to be substituted for rejected materials and in the event of the contractor refusing to comply, he may cause the same to be supplied by other means. All costs, which may attend upon such removal and / or substitution, shall be borne by the contractor.

- **15.1.4** All charges on account of octroi, terminal or sale tax and other duties on materials obtained for the works from any source (excluding materials supplied by the Employer) shall be borne by the contractor.
- 15.1.5 The Architects/Employer shall be entitled to have tests carried out as specified in the contract or relevant IS: code or CPWD specifications for any material supplied by the contractor other than those for which as stated above, satisfactory proof has already been furnished, at the cost of the contractor and the contractor shall provide at his expense all facilities which the Architects/Employer the contractor shall provide all facilities required for the purpose and the charges for these tests shall be borne by the contractor only if the tests disclose that the said materials are not in accordance with the provisions of the contract or relevant IS: codes or CPWD specifications.
- **15.1.6** However, the cost of materials consumed in all the tests shall be borne by the contractor in all cases except when otherwise provided.

#### 15.2 General

- **15.3.1** Any defects arising in items of work due to the use of poor quality of materials whether supplied by the Employer or the contractor shall be rectified by the contractor at his own cost without any extra claim.
- **15.3.2** Materials required for the works, whether brought by the contractor or supplied by the Employer, shall be stored by the contractor only at places approved by the Employer. Storage and safe custody of materials shall be the responsibility of the contractor.
- 15.3.3 Employer's official representatives concerned with the contract shall be entitled at any time to inspect and examine any materials intended to be used in or on the works, either on the site or at factory or workshop or other place(s) where such materials are assembled /fabricated/ manufactured or at any place(s) where these are lying or from which these are being obtained and the contractor shall give such facilities as may be required for such inspection and examination.
- 15.3.4 All materials brought to the site shall become and remains the property of the Employer and shall not be removed off the site without the prior written approval of the Employer. But whenever the works are finally completed and advance, if any, in respect of any such material is fully recovered, the contractor shall, at his own expense, forthwith remove from the site all surplus materials originally supplied by him and upon such removal, the same shall become the property of the contractor.

#### 16.0 LABOUR

- 16.1 The contractor shall employ labour in sufficient numbers either directly or through subcontractors, where such subletting is permitted, to maintain the required rate of progress and of quality to ensure workmanship of the degree specified in the contract and to the satisfaction of the Employer. The contractor shall abide by Child Labour (Prohibition and Regulation) Act, 1986.
- 16.2 The contractor shall comply with the provisions of the payment of Wages Act-1936, Minimum Wages Act-1948, Employer's Liability Act-1938, Work Men Compensation Act-1923, Industrial Dispute Act-1947, Maternity Benefit Act-1961, Mines Act-1952, The Employees State Insurance Act-1948, Contract Labour (Regulation and Abolition) Act-1970, Safety Code and Labour Welfare Acts, or rules or any modifications thereof or any other law relating thereto and rules made there under from time to time.

- **16.3** The contractor shall indemnify the Employer against any payments to be made under and for observance of the Regulations aforesaid without prejudice to his right to claim indemnity from his sub-Contractors.
- **16.4** Medical facilities at site: The contractor shall provide medical facilities at site as may be prescribed by the Employer on the advice of employer in relation to the strength of the contractors resident staff and work man directly or through petty contractors or sub contractors employed on the work.
- 16.5 Use of intoxicants: the sale of spirits or other intoxicating beverages upon the work or in any area of the building, encampments or tenements owned, occupied by or within the control of the contractors or any of his employees directly or through petty contractors or sub contractors employed on the work shall be forbidden and contractor shall exercise his influence and authority to the utmost extent to secure strict compliance with this condition.

#### 17.0 SETTING OUT THE WORKS

The contractor shall provide all labour and setting out apparatus required and set out the works and be responsible for the true and perfect setting of the same and for the correctness of the positions, levels, dimension and alignments of all parts thereof. He shall amend at his own cost to the satisfaction of the Employer; any error found at any stage which may arise through inaccurate setting out.

#### 18.0 SITE DRAINAGE & NUISANCE:

- **18.1** Site Drainage: All water that may accumulate on the site during the progress of the works, or in trenches and excavations, from other than the expected risks shall be removed from the site to the satisfaction of the Employer and at the contractor's expense.
- **18.2** Nuisance: The contractor shall not at any time do, cause or permit any nuisance on the site or do anything which shall cause unreasonable disturbance or inconvenience to employers, tenants or occupiers of other properties near the site and to the public generally.

#### 19.0 MATERIALS OBTAINED FROM EXCAVATION

Materials of any kind obtained from excavation on the site shall remain in the property of the Employer and shall be disposed of as the Employer may direct.

#### 20.0 TREASURE TROVE, FOSSIL ETC.

All fossils, coins, articles of value or antiquity and structures and other remains or things of geographical interest discovered on the site shall be the absolute property of the Employer and the contractor shall take reasonable precautions to prevent his workmen or any other persons from removing or damaging any such articles or things and shall immediately upon discovery thereof and before removal acquaint the Employers with such discovery and carry out the Employers' directions as to the disposal of the same.

#### 21.0 PROTECTION OF TREES, WATCHING AND LIGHTING

- 21.1 Trees shall be protected from damages during the course of the works and earth level within 5 meter of each such tree shall not be changed. Where necessary, such tree shall be protected by providing temporary fencing at the contractor's expense.
- 21.2 The contractor shall provide and maintain at his own expense all lights, guards, fencing and watching when and where necessary or required for the protection and safety of all the material, equipment on the site and also the safety and convenience of those employed on the works or the public.

#### 22.0 PATENT RIGHTS

The contractor shall indemnify the Employer against all claims in respect of patent rights and shall defend all actions arising from such claims unless he has informed the Employer before any such infringement and received his permission in writing to proceed and shall himself pay all royalties, license fees, damages, costs and changes that may be legally incurred in respect thereof.

#### 23.0 CONTRACTORS SUPERVISION

- 23.1 The contractor shall either himself supervise the execution of the works or shall appoint a team of qualified engineers approved by the Employer to act in his stead. If the contractor fails to appoint a suitable team as directed by the Employer, the Employers shall have full powers to suspend the execution of the work until such date as a suitable team of engineers is appointed and the contractor shall be held responsible for the delay so caused to the works. The contractor shall furnish qualified, competent and adequate staff as necessary for the proper administration, coordination and supervision of the work.
- 23.2 The contractor shall efficiently supervise his work using his best skill and attention. He shall carefully study and compare all drawings, specifications, and other instructions and shall at once report to the Employer any error or omission which he may discover and shall subsequently proceed with the work in accordance with written instructions from the Employer concerning such error or omission. Directions given to any contractor's superintendent for the project shall be binding as given to the contractor.

#### 24.0 INSPECTION AND APPROVAL

- 24.1 All works embracing more than one process shall be subject to examination and approval at each stage thereof and the contractor shall give due notice to the Employer or his authorized representative when each stage is ready. In default of such notice, the Employer shall be entitled to appraise the quality and extent thereof at the contractor's expense.
- 24.2 No work shall be covered up or put out of view without the approval of the Employer or his Authorized representative, and the contractor shall accord full opportunity for examination and measurement of all elements of the substructure before permanent work is placed therein and all other works which are about to be covered up or put out of view. The contractor shall give due notice to Employer or his authorized representative whenever any such work of foundation is ready for examination and the Employer or his representative shall, without unreasonable delay, unless he considers it unnecessary and advises the contractor accordingly, attend for the purpose of examining and measuring such work or of examining such foundation. In the event of failure of the contractor to give

such notice he shall, if required by the Employer uncover such work at the contractor's expense.

**24.3** Employer or any of his authorized representatives concerned with the contract shall have power at any time to inspect and examine any part of the works and the contractor shall give such facilities as may be required for such inspection and examination.

#### 25.0 REMOVAL OF WORKMEN

The contractor shall employ in and about the execution of works only such persons as are skilled and experienced in their several trades and the Employers shall be at liberty to object to and require the contractor to remove from the works any person employed by the contractor in or about the execution of the works who in the opinion of the Employer misconduct himself or is incompetent or negligent in the proper performance and of his duties and such person shall not be again employed upon the works without permission of the Employers.

#### 26.0 UNCOVERING AND MAKING GOOD

The contractor shall uncover any part of the works and or make openings in or through the same as the Employer may from time to time direct for his verification and shall make good such part to the satisfaction of the Employer and is subsequently found on uncovering, to be executed in accordance with the contract, the expenses of uncovering and or making openings in or through reinstating and making good the same shall be borne by the Employer. In any other case all such expenses shall be borne by the contractor.

#### 27.0 WORK DURING NIGHT OR ON SUNDAYS AND HOLIDAYS

Subject to any provisions to the contrary contained in the contract, if works have to be carried out during night or on Sundays or on authorized holidays, permission in writing of the Employer shall be obtained except when the work is unavoidable or absolutely necessary for the safety of life, property or works in which case the contractor shall immediately advise the Employer accordingly.

#### 28.0 COMPLETION CERTIFICATE

- 28.1 As soon as the work is completed the contractor shall give notice of such completion to the Employer and within 30 days of receipt of such notice Employer shall inspect the work and shall furnish the contractor with a certificate of Virtual Completion, indicating the date of such completion, defects to be rectified by the contractor, items for which payment shall be made at reduced rates and balance minor works if any, to be done by the contractor. The certificate of Virtual Completion shall be issued after it is verified by the Employer.
- 28.2 When the separate periods of completion have been specified for items or groups of items, the Employer shall issue separate Virtual Completion certificates for such items or groups of items. Such certificate shall be issued.
- 28.3 No Certificate of virtual Completion shall be issued, nor shall the work be considered to be completed till the contractor shall have removed from the premises on which the work has been executed all scaffolding, sheds, labour and surplus materials (except such as

are required for rectification defects), rubbish and all huts and sanitary arrangements required for his workmen on the site in connection with the execution of the work and cleaned floor, gutters and drains, eased doors and sashes, oiled locks and fastenings, labeled keys clearly and handed them over to the Employer or his representative and made the whole premises fit for immediate occupations or use to satisfaction of the Employer.

- 28.4 If any time before completion of work, items or groups of items for which separate periods of completion have been specified, have been completed, the Employer with the consent of the contractor may take possession of any part of the same (any such part(s) being hereinafter in this condition referred to us 'the relevant part') then notwithstanding anything expressed or implied elsewhere in this contract.
- **28.4.1** Within thirty days of the date of completion of such item or group of items or possession of the relevant part, the Employer shall issue Virtual Completion certificate for the relevant part.
- **28.4.2** The defects liability period in respect of such items and the relevant part shall be deemed to have commenced from the certified date of Virtual Completion of such items or the relevant part as the case may be.
- **28.4.3** For the purpose of ascertaining compensation for delay under condition 29 in respect of any period during which the works are not complete, the relevant part will be deemed as a separate item or group, with date of Virtual Completion as given in the contract or as extended under condition 13 and actual date of Virtual Completion as certified by the Employer under this condition.

#### 28.5 Hindrance Register

A Hindrance Register shall be maintained at the site of work showing the items affected, the date on which the delay occurred and the date on which the delay was cleared. These entries shall be initialed by Employers as well as the contractor's authorized representative.

#### 29.0 COMPENSATION FOR DELAY

- 29.1 If the contractor fails to maintain the required progress as per clause 13 or to complete the work and clear the site on or before the contract period or extended date-period of completion, he shall without prejudice to any other right or remedy of the Employer on account of such breach, pay as agreed, compensation amount calculated as stipulated in Appendix-I as "Compensation for delay" for the period during which the said work shall remain incomplete and or for the period during which the progress remains unsatisfactory or not conforming to that agreed as per clause 13.
- **29.2** This will also apply to items or groups of items for which separate period of completion has been specified.
- 29.3 The total compensation for delay shall further be subject to an overall maximum of 5% (Five percent) of the contract amount as awarded. In case of compensation for delay, in accordance with the above provision accrue to a maximum limit of 5% of the contract amount, the Employer shall be at liberty to rescind the contract and get it completed entirely at all the risk and cost of the contractor, through any agency the Employer decided to appoint. All extra expenses incurred shall be recoverable from any money due to the contractor or lying to his credit with the Employer.

**29.4** 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 employer.

#### 30.0 DEFECTS LIABILITY PERIOD

30.1 The Defects Liability period shall commence from the date of virtual completion as mentioned in the certificate of Virtual Completion issued by the Employer to the contractor by a letter, hand delivered or sent by registered post. The duration of the defects liability period shall be specified in Annexure - I. The contractor shall be responsible to make good and remedy at his own expense any defects, shrinkage, settlement or other faults which may be develop or may be noticed by the Architects or the consulting Architect or the Employer, within the defects liability period. For materials and workmanship not in accordance with the contract upon directions in writing of the Architects & or Employer and within such reasonable time specified there in, the contractor shall amend and make good these at his own cost. In case of default, the Employer may employ and pay other persons to amend and make good such defects, shrinkage, settlement or other faults, all damages, loss and expenses consequent therein or incidental thereto shall be made good and borne by the contractor and shall be recoverable from him by the Employer or may be deducted from any money due or that may become due to the contractor.

#### 31.0 CONTRACTOR'S LIABILITY AND INSURANCE

- 31.1 From commencement to completion of works, the contractor shall take full responsibility for the care thereof and for taking precautions to prevent or minimize loss or damage to the greatest extent possible and shall be liable for any damage or loss that may happen to the works or any part thereof and to all Employers Tools & Plants from any cause whatsoever and shall at his own cost repair and make good the same so that at completion of the works, all works and all Employer's Tools and Plants shall be in good order and condition and conforming in every respect with the requirements of the contract and instruction of the Employer.
- 31.2 The contractor shall be responsible for all injuries or damages to any person or animals or any property whatsoever, which may arise from carelessness, accident or any other cause whatsoever in any way connected with the carrying out of the contract. The contractor shall fully indemnify the Employer and hold him harmless in respect of all losses and claims and any expenses arising from such injuries or damage to any person or animals or any property whatsoever which may arise out of or in consequence of the construction and maintenance of the works and against all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto.
- 31.3 Before commencing execution of the work, the contractor shall, without in any way limiting his obligations and responsibilities under this condition, insure against any damage, loss or injury which may occur to any property (excluding that of the Employer but including the employer's building rented by the contractor wholly or in a part and any part of which is used by him for storing combustible materials) or to any persons (including any employee of the Employer) by or arising out of the carrying out of the contract, by keeping in force the "All Risk Policy" that shall cover Rs. 100000/- (Rupees one lac only) for each accident for a maximum of ten accidents initially and to be renewed if required to cover subsequent accidents.

- 31.4 The contractor shall at all times indemnify the Employer against all claims, damages or compensation under the provision of payment of Wages Act-1936, Minimum Wages Act-1948, Employer's Liability Act-1938, Workmen's Compensation Act-1923, Industrial Disputes Act-1947, Maternity Benefit Act-1961, Mines Act-1952, The Employees State Insurance Act-1948, Contract Labour (Regulation and Abolition) Act-1970, Safety Code and Labour welfare Act or any modifications thereof or any other law relating thereto and rules made there under from time to time or as a consequence or any accident or injury to any workman or other persons in or about the works, whether in the employment of the contractor or not, except where such accident or injury has resulted from any act of Employer, his agent or servants and also against all costs, charges and Expenses of any law suit, action or proceedings arising out of such accident or injury and against all sum or sums which may, with the consent of the contractor, be paid to compromise or compound any claims, damages or compensation payable under the Workmen's Compensation Act- 1923, or any modification thereof or any other law relating thereto.
- Immediately on signing of the contract, the contractor shall insure the work and keep them insured throughout the contract period including the defects liability period, at his own cost against loss or damage by fire and or earthquake with any Nationalized General Insurance Company in the Joint name of the Employer and Contractor for 15% of the value of the contract and the amount shall be progressively increased in advance as the work progress till it reaches the full amount or the modified amount of the contract. The contractor shall deposit the policy and receipt for the premium with the Employer within one month of the date of the commencement of the work. In the event of any fire and earthquake the contractor shall, as soon as the claim under the policy is settled or the work is reinstated by the Insurance Office should they elect to do so, proceed with all due diligence with the completion of the work in the same manner as though the fire and or earthquake had not occurred and in all respect under the same conditions of the contract. However, in case of rebuilding or reinstatement after fire and or earthquake, the contractor shall be entitled to such extension of time for completion as the Employer may deem fit.
- 31.6 The aforesaid Insurance policy / policies shall provide that they shall not be cancelled till the Employer has agreed to their cancellation. The contractor shall prove to the Employer from time to time that he has taken out all the Insurance policies' referred above and has paid the necessary premiums for keeping the policies alive till expiry of the Defects Liability Period.
- 31.7 The contractor shall ensure that similar insurance policies are taken out by his sub-contractors (if any) and shall be responsible for any claims or losses to the Employer resulting from their failure to obtain adequate insurance protection in connection thereof. The contractor shall produce or cause to be produced by his Sub contractors (if any) as the case may be, which may become due to the contractor or recover the same as a debt due from the contractor.
- 31.8 If the contractor and /or his sub-contractors (if any) shall fail to effect and keep in force the insurance referred to above or any other insurance which he /they may be required to effect under the terms of the contract then and in any such case the Employer may without being bound to, effect and keep in force any such insurance and pay such premium or premiums as may be necessary for that purpose and from time to time deduct the amount so paid by the Employer from any money due or which may become due to the contractor or recover the same as a debt due from the contractor.

#### 32.0 FACILITIES TO THE CONTRACTORS

The contractor shall, in accordance with the requirement of the Employer afford all reasonable facilities to other contractors engaged simultaneously on separate contracts in connection with the works and for departmental labour and labour of any other properly authorized authority or statutory body which may be employed at the site on execution of any work not included in the contract or of any contract which the Employer may enter into in connection with or ancillary to the works.

#### 33.0 NOTICES FROM LOCAL BODIES

- 33.1 The contractor shall comply with and give all notices required under any Governmental authority, rule or order made under any Act of parliament, state laws or any regulation or bye-laws of any local authority relating to the works. The contractor shall before making any variation from the contract shall, before making any variation from the contract drawings necessitated by such compliance, give to the Employer a written notice giving reasons for the proposed variation and obtain the instructions therein from the Employer.
- 33.2 The contractor shall pay and indemnify the Employer against any liability in respect of any fees or charges payable under any Act of Parliament, State laws or any Government Instrument, rule or order and any regulation or bye laws of any local authority in respect of the works, in force before the work is awarded to the contractor.

#### 34.0 SUB-CONTRACTS

The contractor shall not sublet any portion of the contract or the premises/site without prior written permission of the Accepting Authority.

# 35.0 INSTRUCTIONS AND NOTICES.

- **35.1** Subject as otherwise provided in the contract, all notices to be given on behalf of the Employer and all other actions to be taken on its behalf may be given or taken his authorized representative.
- **35.2** All instructions, notices and communications etc. under the contract shall be given in writing and if sent by registered post to the last known place of above or business of the contractor shall be deemed to have been served on the date when in the ordinary course of postal service these would have been delivered to him.
- 35.3 The contractor or his agent shall be attendance at the site during all working hours and shall superintend the execution of the works with such additional assistance in each trade as the Employer may consider necessary. 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.
- 35.4 The Employer shall communicate or confirm his instructions to the contractor in respect of the execution of the work in a 'Works Site Order Book' maintained in the office of the Employer and the contractor or his authorized representative shall confirm receipt of such instructions by signing the relevant entries in this book. If required by the contractor, he shall be furnished a certified true copy of such instruction(s)

#### **35.5** Idle Equipment and Labour

Idle Equipment and Labour on account of foreclosure or handing over the site in phases shall not be paid for.

# 36.0 FORECLOSURE OF CONTRACT IN FULL OR IN PART DUE TO ABANDONMENT OR REDUCTION IN SCOPE OF WORK

- 36.1 The site will be handed over in phases as per Clause 1.3 of General Conditions. If at any time after acceptance of the tender, the Employer 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 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.
- **36.2** 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 Employer for the items hereunder mentioned which could not be utilized on the work to the full extent because of the foreclosure:
- **36.2.1** Any expenditure incurred on preliminary Site work, eg. Temporary access roads, temporary labour hunts, staff quarters and site office, storage accommodation and water storage tanks.
- **36.2.2** The 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, the Employer shall be bound to take over the materials or such portions thereof as the contractor does not desire to retain.
- **36.2.3** For materials taken over or to be taken over by the Employer, cost of such materials is derived taking into account the purchase price, the cost of transportation and deterioration or damage which may have been caused to materials whilst in the custody of the contractor.
- **36.2.4** For contractor's materials not retained by the Employer, reasonable cost of transporting such materials from site to contractor's permanent stores or to his other works, whichever is less shall be paid. If materials are not transported to either of the said places, no cost of transportation shall be payable.
- **36.2.5** Reasonable compensation for transfer of equipment, tools and plants from site to contractor's permanent stores or his other works whichever is less. If these are not transported to either of the said places, no cost of transportation shall be payable.
- **36.2.6** If any material(s) supplied by the Employer are declared surplus, the same shall be returned by the contractor to the Employer at rates not exceeding those at which these were originally issued less allowance for any deterioration or damage which may have been caused whilst the materials were in the custody of the contractors. Cost of transporting such materials from site to the Employer's stores, if so required by the Architects will be borne by the Employer.
- 36.3 The contractor shall, if required by the Architects, furnish to him books of account, wage book, time sheets and other relevant documents as may be necessary to enable him to certify the reasonable amount payable under this condition.

#### 37.0 TERMINATION OF CONTRACT FOR DEATH

- 37.1 If the contractor is an individual or a proprietary concern and the individual or proprietor dies, and if the contractor is a partnership concern and one of the partner dies, then unless the Accepting Authority is satisfied that the legal representative of the individual contractor or of the proprietor of the proprietary concern, and in the case of partnership, the surviving partners are capable of carrying out and completing the contract, the Accepting Authority shall be entitled to cancel the contract as to its uncompleted part without the Employer being in any way liable to payment of any compensation to the estate of the deceased contractor and /or to the surviving partners of the contractor's firm on account of the cancellation of the contract.
- 37.2 The decision of the Accepting Authority that the legal representatives of the deceased contractor or the surviving partners of the contractor's firm cannot carry out and complete the contract shall be final binding on the parties. In the event of such cancellation, the Employer shall not hold the estate of the deceased contractor and /or surviving partners of the contractor's firm liable in damages for not completing the contract.

# 38.0 CANCELLATION OF CONTRACT IN FULL OR PART

The Employer shall be empowered to cancel the contract in full or part without paying any compensation:

- **38.1** If the contractor, at any time makes default in proceeding with the works with due diligence and continues to do so after a notice in writing of 15 days from the Employer.
- **38.2** If the contractor commits defaults in complying with any of the term and conditions of the contract and does not remedy it or take effective steps to remedy it within 15 days after a notice in writing is given to him in that behalf by the Employer.
- 38.3 If the contractor fails to complete the work or items work with individual dates of completion, as per the agreed PERT/CPM chart mentioned in clause 13 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.
- 38.4 If the contractor shall offer or give or agrees to give to any person in the Employer's 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 the Employer.
- **38.5** If the contractor shall obtain a contract with the Employer as a result of ring tendering or other non-bonafide methods of competitive tendering; or
- 38.6 If the contractor being an individual or if a firm, any partner thereof, shall at any time be adjusted insolvent, or have a receiver's order, or order for administration of his estate, made against him, or shall take up any proceedings for liquidation / composition (other than a voluntary liquidation for the purpose of amalgamation or reconstruction) under any insolvency Act in force, or make any agreement for assignment of his effects or composition for the benefit of his creditors, or purport to do so, or if a trust deed be executed by him for the benefit of his creditors; or
- 38.7 If the contractor being a company, shall pass a resolution, or the Court shall make an order, for the liquidation of its affairs or a receiver or Manager on behalf of the debenture holder(s) shall be appointed, or circumstances shall arise which entitle the Court or debenture holder(s) to appoint a receiver or manager.

- 38.8 If the contractor assigns, transfer, sublets (engagement of labour on a piecework basis or of labour with materials not to be incorporated in the work, shall not be deemed to be subletting) or attempts to assign, transfer or sublet the entire works or any portion thereof without the prior written approval of the Accepting Authority, Accepting Authority may by written notice, without prejudice to any other right to remedy which shall have accrued or shall accrue thereafter to the Employer, cancel the contract as a whole or only such item of work in default from the contract.
- **38.9** The Accepting Authority shall on such cancellation have powers to:
- **38.9.1** Take possession of the site and any materials, construction plant, implements, stores, etc. therein; and or
- **38.9.2** Carryout the incomplete work by any means AT THE RISK AND COST OF THE CONTRACTOR
- 38.10 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 work 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 the 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.
- **38.11** Any excess expenditure incurred, or to be incurred by the Employer in completing the works or part of the works or the excess loss or damage suffered or may be suffered by the Employer as aforesaid, after allowing such credit as mentioned herein before shall be recovered from any money due to the contractor on any account; and if such money are not sufficient, the contractor shall be called upon in writing to pay the same within 30 days.
- **38.12** If the contractor shall fail to pay the required sum within the aforesaid period of 30 days, the Employers shall have the right to sell or any or all of the contractor's temporary buildings, equipment, materials etc. and apply the proceeds of sale thereof towards the satisfaction of any sum due from the contractor under the contract, and if thereafter any balance is outstanding from the contractor, it shall be recovered in accordance with the provisions of the contract.
- **38.13** Any sum in excess of the amounts due to the Employer and unsold materials, constructional plant etc. shall be returned to the contractor, provided always that if cost or anticipated cost 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.
- **38.14** If majority stake holder/partner of the Joint Venture dies or goes bankrupt, then the employer reserves rights to cancel the contract.

## 39.0 CLAIMS AGAINST OBLIGATION OF THE CONTRACTOR OR SUB CONTRACTOR

**39.1** The employer may, in order to discharge lawful obligation of and satisfy lawful claims against contractor or a sub contractor arising out of the performance of the contract, pay any amount that is due and payable to the contract directly to the obliges of and claimants against the contractor or the sub contractor.

- **39.2** A payment made pursuant to article 39.1 is to the extent of the payment, a discharge of the employer's liability to the contractor under the contract and may be deducted from an amount payable to the contractor under the contract.
- **39.3** To the extent that the circumstances of the work being performed for the employer permit, the contractor shall comply with all laws in force in the country where the work is being performed relating to the payment periods, mandatory hold backs, and creation and enforcement of mechanics liens.
- **39.4** The contractor shall discharge all his lawful obligation and shall satisfy all lawful claims against him arising out of the performance of the work at least as often as the contract requires the employer to pay the contractor.
- **39.5** The contractor shall, whenever requested to do so by the employers representative, make a statutory declaration depositing to existences and condition of any claims referred to in article 39.4
- **39.6** Article 39.1 shall only apply to claims and obligations that have been received by the employers' representative in writing before payment to the contractor pursuant to the 'Terms of Payment' and within 120 days after a claimant.
- **39.6.1** Employees or workers of contractor or sub-contractor should have been paid in full under his contract with the contractor or subcontractor where the claim is for money that was lawful required to be held back from the claimant; or
- **39.6.2** Performed the last of the services, work or labour, or furnished the last of the material pursuant to his contract with the contractor or sub contractor, where the claim is not for money referred to in article 39.6.1

# 40.0 LIABILITY FOR DAMAGES, DEFECTS IMPERFECTIONS AND RECTIFICATIONS THEREOF

- 40.1 If the contractor or his work men or employees shall injure or destroy any part of the building in which they may be working, or any building, road, fence etc. contiguous to the premises on which the work or any part of it is being executed, or if any damages shall happen to the work while in progress, the contractor shall, upon receipt of a notice in writing in that behalf, make the same good as his own expense. If it shall appear to the Employer or his representative at any time during construction or re-construction or prior to the expiration of the defects liability period, that any work has been executed with unsound, imperfect or unskilled workmanship or that any materials or articles provided by the contractor for execution of the work are unsound or of a quality inferior to that contracted for, or otherwise not in accordance with the contract, or that any defect, arising out of defective or improper materials or workmanship, the contractor shall upon receipt of a notice in writing in that behalf from the Employer forthwith rectify or remove and reconstruct the work so specified in whole or part, and/ or remove the materials or articles so specified and provide other proper and suitable materials or articles at his own expense, notwithstanding that the same may have been inadvertently passed, certified and paid for, and in the event of his failing to do so within the period to be specified by the Architects in his notice aforesaid, the Architects & or Employers may rectify or remove and replace with other the materials or articles complained of by other means AT THE RISK AND EXPENSE OF THE CONTRACTOR.
- **40.2** In case of repairs and rectification works, splashes and droppings from white washing, painting, etc. shall be removed and surfaces cleaned simultaneously with completion of

these items of work in individual rooms, areas etc. where the work is done, without waiting completion of all other items of work in the contract. In the case the contractor fails to comply with the requirements of this condition, the Employer shall have the right to get the work done by other means at the cost of the contractor. Before taking such action, however, the Employer shall give three days notice in writing to the contractor.

# 41.0 URGENT WORKS

If any urgent work (in respect whereof the decision of the Employer shall be final and binding) becomes necessary and the contractor is unable or unwilling at once to carry it out, the Employer may, by his own or other working people, carry it out as he may consider as necessary. If the urgent work shall be such as the contractor is liable under the contract to carry out at his expense, all expenses incurred on it by the employer shall be recoverable from the contractor and be adjusted or set off against any sum payable to him.

#### 42.0 CHANGES IN CONSTITUTION

Where the contractor is a partnership firm, prior approval in writing of the Accepting Authority shall be obtained before any change is made in the constitution of the firm. Where the contractor is an individual or a Hindu

Undivided Family business concern, such approval as aforesaid shall likewise be obtained before the contractor enters into any partnership agreement where under the partnership firm would have the right to carry out the work hereby undertaken by the contractor. If prior approval as aforesaid is not obtained the contract shall be deemed to have been assigned in contravention of condition 38.0 hereof and same action may be taken and the same consequences shall ensure as provided for in the said condition 38.0.

# 43.0 VALUATION AND PAYMENT

- **43.1** The Project architect appointed by the Employer shall, except as otherwise stated, ascertain and determine by measurement the value in accordance with the contract of the work done in accordance therewith.
- 43.2 All items having a financial value shall be entered on A4 size sheets, so that a complete record is obtained of all work performed under the contract.
- **43.3** Measurement shall be taken jointly by the Project architect appointed by the Employer and by the contractor or his authorized representative.
- 43.4 Before taking measurement of any work, the Project architect appointed by the Employer or the person deputed by him for the purpose shall give a reasonable notice of one week's time to the contractor. If the contractor fails to attend or send an authorized representative for measurement after such a notice or fails to countersign or to record the measurements within a week from the date of giving such notice, then in any such event measurements taken by the Project architect appointed by the Employer or by the person deputed by him shall be taken to be the correct measurements of the work.
- **43.5** The contractor shall, without extra charges, provide assistance with every appliance, labour and other things necessary for measurements.

**43.6** Measurement shall be signed and dated by both the parties each day on the site on completion of measurements. If the contractor objects to any of the measurements recorded on behalf of the Employer, a note to that effects shall be made in the Measurement Book against the item objected to and such note shall be signed and dated by both parties engaged in taking the measurements.

# 44.0 METHODS OF MEASUREMENT

Measurements shall be taken as per specification set forth in the Specifications and Schedule of Quantities not withstanding any provision in the relevant Standard Method of Measurement or any general or local custom. In case of items which are not covered by the specifications and Schedule of Quantities, measurement shall be taken in accordance with the relevant Standard Method of Measurement issued by the Indian Standards Institution.

#### 45.0 PAYMENT ON ACCOUNT

- 45.1 The contractor shall submit interim bills, for the work executed, at intervals mentioned in Appendix I on or before the date fixed by the Project architect appointed by the Employer. The Interim bills shall be supported by detail measurements and consumption statements of cement and other materials supplied by the Employer. The Project architect appointed by the Employer shall then arrange to have the bill verified within a span of 10 days from the date of bill submission by the contractor, by taking or causing to be taken where necessary, the requisite measurement of the work and issue the certificate of payment within a span of 12 days from the date of bill submission by the contractor. The Employer shall make the payment to the contractor within 7 days from the date of issue of the certificate of payment.
- **45.2** Payment on account for the amount admissible shall be made by the Project architect appointed by the Employer, certifying the sum to which the contractor is considered entitled by way of interim payment for the following:
- **45.2.1** All works executed, after deducting there from the amount already paid, the security deposit and such other amounts as may be deductible or recoverable in terms of the contract.
- **45.2.2** 75% of the cost (as assessed by the project architect appointed by the Employer) reasonably required in accordance with the contract and have been brought to site for incorporation in the works and are safeguarded against loss due to any cause whatsoever to the satisfaction of the Employer, shall be payable on demand by the contractor, provided the contractor provides an insurance cover for the full cost of such materials.
- **45.3** The advance payment under clause 44.2.2 shall be adjusted as and when materials are utilized in the works.
- 45.4 All interim payment made to the contractor shall be considered as advance payments made to him towards the final bill. Any interim certificate given to the work done or materials delivered may be modified or corrected by any subsequent interim certificate or by the final certificate. No certificate of the project architect appointed by the Employer, supporting an interim payment shall itself be conclusive evidence that any work or materials to which it relates is/ are in accordance with the contract.

**45.5** Pending consideration of extension of date of completion interim payment shall continue to be made as herein provided.

#### 46 TIME LIMIT FOR PAYMENT OF FINAL BILL

- 46.1 The contractor shall submit the final bill WITHIN ONE MONTH of Virtual Completion of the works to be certified by the Architects. No further claim shall be made by the contractor after submission of the final bill and these shall be deemed to have been waived and extinguished. The final bill shall be accompanied by the same detail as for the Interim bills, except for the following additional details:
- **46.1.1** All written guarantees and warranties required by the contract documents.
- **46.1.2** Two copies of as built drawings including one set of ACAD drawings on CD.
- **46.1.3** Operation and maintenance manuals and instructions for equipment and apparatus.
- **46.2** Payment of those items of the final bill in respect of which there is no dispute, and for those items which are in dispute, payment shall be made as per quantities and rates approved by the Employer, within 3 months, the period being reckoned from the date of receipt of the bill by Employer.
- 46.3 After payment has been made of the amount of the final bill payable as aforesaid, the contractor may, if he so desires, reconsider his position in respect of the disputed portion of the final bill and if he fails to do so within 90 days, his disputed claim shall be dealt with as provided in the contract.

#### 47 ESCALATION

47.1 Rates quoted shall be firm for the entire duration of the execution of the project in all respects including extended period (if any). No escalation shall be paid in any circumstances under this contract, any increase in price of the materials and / or labour wages and / or diesel takes place, the contractor shall still be bound to continue and furnish the works at the quoted rates.

# 48 OVERPAYMENTS AND UNDER PAYMENTS

- 48.1 Whenever any claim for the payment of a sum of money to the Employer arises out of or under this contract against the contractor, the same may be deducted by the Employer from any sum then due or which at any time thereafter may become due to the contractor under this contract, and failing that under any other contract, with the Employer or from any other sum due to the contractor from the Employer (which may be available with the Employer) or from his security deposit, or he shall pay the claim on demand.
- 48.2 The Employer reserves the right to carry out post payment audit and technical examination of the final bill, including all supporting vouchers, abstracts etc. The Employer further reserves the right to enforce recovery of any over payment when detected, notwithstanding the fact that the amount of final bill may be included by one of the parties as an item of dispute before an arbitrator appointed under Condition 48 of this contract, and notwithstanding the fact that the amount of the final bill figures in the arbitration award.
- **48.3** If as a result of such audit and technical examination any overpayment is discovered in respect of any work done by the contractor or alleged to have been done by him under

the contract, it shall be recovered by the Employer from the contractor by any or all of the methods prescribed above, or if any underpayment is discovered, the amount shall be duly paid to the contractor by the Employer.

- 48.4 Provided that the aforesaid right of the Employer to adjust overpayments against amount due to the contractor under any other contract with the Employer shall not extend beyond the period of two years from the date of payment of final bill or in case the final bill is a MINUS bill, from the date the amount payable by the contractor under the Minus final bill is communicated to the contractor.
- 48.5 Any amount due to the contractor under this contract for under payment may be adjusted against any amount then due or which may at any time thereafter become due before payment is made to the contractor, from him to the Employer on any other contract or account whatsoever.

#### 49 ARBITRATION

Except where otherwise provided for in the contract all questions and disputes relating to the meaning of the specifications, designs, drawings, and instructions herein 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 or relating to the contract, designs, drawings, specifications, estimates, instructions, order or these conditions or otherwise concerning the works, or execution or failure to execute the same whether arising during the progress of the work or after the completion or abandonment thereof shall be referred to the sole arbitration of a person/ persons mutually agreed upon by both parties and in the eventuality that this engagement is rejected by one of the parties, the matter shall be referred to the competent court in New Delhi, whose award shall be final, conclusive and binding on all parties related to this contract.

- **49.1 Demand of Arbitration:** In the event of any dispute or difference between the parties hereto as to the construction or operation of this contract, or the respective rights and liabilities of the parties on any matter in question, dispute or difference on any account, or as to the withholding by the employer of any certificate to which the contractor may claim to be entitled to, or if the employer fails to make a decision within a reasonable time, the contractor, after 90 days of his presenting his final claim on disputed matters, shall demand in writing that the dispute or difference be referred to arbitration.
- **49.2** The demand for arbitration shall specify the matter which are in question, dispute or difference, only such dispute(s) or difference(s) in respect of which the demand has been made, shall be referred to the arbitration and other matters shall not included in the reference.
- **49.3** If the contractor(s) does/do not refer his/their specific and final claims in writing within a period of 90 days of receiving the information from the PMC that the final bill is ready for payment, he / they will deemed to have waived his/their claim(s) and the employer shall be discharged and released of all liabilities under the contract in respect of these claims.
- **49.4 Obligation during tendency of arbitration:** work under the contract shall unless otherwise directed by the Architects, continue during the arbitration proceedings, and no payment due to or payable by the employer shall be withheld on account of such proceedings, provided, however, it shall be open for arbitrator or arbitrators to consider and decide whether or not such work should continue during arbitration proceedings.

- **49.5 Arbitration:** A Sole Arbitrator who shall be the General Manager or a Gazetted Officer nominated by him in that behalf in case where the claim in question is below Rs. 5,00,000/-(Rupees Five Lakhs) shall be the Sole Judge to resolve the issue.
- 49.6 Two Arbitrators who shall be Gazetted Officers of employer or equal status appointed in the manner laid in coming clause for all claims of Rs.5,00,000/- (Rupees Five Lakh) and above and for all claims irrespective of the amount or value of such claims if the issues involved are of a complicated nature. The General Manager shall be the sole judge to decide whether the issues involved are of a complicated nature or not. In the event of the two Arbitrators being dividing in their opinion, the matter under dispute will be referred to an Umpire to be appointed in the manner laid down in Clause 3(b) for his decision.
- **49.7** It is a term of this contract that no person other than a gazetted Officer should act as an Arbitrator / Umpire and if for any reason, that is not possible, the matter is not to be referred to arbitration at all.
- 49.8 In case where the claim is up to Rs.3,00,000/- (Rupees Three Lakhs), the Arbitrator(s) / Umpire so appointed, as the case may be shall give the award on all matters referred to arbitration including therein breakup of the sums awarded separately on each individual item of dispute. In case where the claim is more than Rs. 300000/- (Rupees Three Lakhs), the Arbitrator(s) / Umpire so appointed, as the case may be, shall give intelligible award (i.e. the reasoning leading to the award should be stated) with the sums awarded separately on each individual item of dispute referred to arbitration.
- 49.9 For the purpose of appointing "two arbitrators" as referred to in sub-clause (a) 11 above, the employer will send a panel of more than three names of Gazetted officers of one or more departments of the employer to the contractor who will be asked to suggest to the General Manager one name out of the list for appointment as the contractors nominee. The General Manager, while appointment as the contractors nominee, will also appoint a second arbitrator as the employers nominee either from the panel or from outside the panel, ensuring that one of the two arbitrators so nominated is invariably from the Account Department. Before entering upon the reference the two Arbitrators shall nominated an Umpire who shall be a Gazetted Officer to whom the case will be referred to in the event of any differences between the two arbitrators. Officers of the Junior Administrative grade of the Account Department of the employer shall be considered as of equal status to the officers in the intermediate administrative grade of other departments of the employer for the purpose of appointment as arbitrator.
- **49.10** If the sole arbitrator appointed under sub-clause a (1) or one or both the arbitrators appointed under sub-clause (b) above resigns his appointment / resign their appointment or vacates his office / vacate their officers or is / are unable or unwilling to act for any reason whatsoever or dies/die, the General Manager may appoint a new arbitrator / arbitrators to act in his / their place in accordance with the provisions of sub clause a(1) or sub clause (b) above, as the case may be such arbitrator / arbitrators, as the case may be, shall be entitled to proceed with reference from the stage at which it was left by the previous arbitrator / arbitrators.
- **49.11** The arbitrator or arbitrators or the Umpire shall have power to call for such evidence by way of affidavits or otherwise as the arbitrator or arbitrators or Umpire shall think proper, and it shall be the duty of the parties here to do or cause to be done all such things as may be necessary to enable the arbitrator or arbitrators or Umpire to make the award without any delay.

- 49.12 There will be no objection that the person / persons appointed as arbitrator/ arbitrators or Umpire is / are Government servant(s). if however the arbitrator/ arbitrators or Umpire is / are employer servants, he / they shall not be one / those who had an opportunity to deal with the matters to which the contract relates or who in the course of his / their duties as employer servant(s) have / has expressed views on all or any of the matters under dispute or difference . the award of the arbitrator / arbitrators / Umpire, as the case may be shall be final and binding on the parties to the contract.
- **49.13** Subject as aforesaid, Arbitration Act 1940 and Rules there under and any statutory modification there of shall apply to the Arbitrator proceedings under this clause.

#### 50.0 LAWS GOVERNING THE CONTRACT

This contract shall be governed by the Indian laws for the time being in force and the court of jurisdiction will be **New Delhi**.

# 51.0 DETERMINATION OF CONTRACT

- **51.1 Right of Employer to determine contract:** The Employer shall be entitled to determine and terminate the contract at any time should, in the employer's opinion, the cessation of work becomes necessary owing to paucity of funds or non-availability of site or parts of site or from any other cause whatever, in which case the value of approved materials at site and of work done to date by the contractor will paid for in full at the rates specified in the contract. notice in writing from the Employer of such determination and the reason therefore shall be conclusive evidence thereof.
- 51.2 Payment on determination of contract: Should the contract be determined under sub clause (1) of this clause and the contractor claims payment for expenditure incurred by him in the expectation of completing the whole of the works, the employer shall admit and consider such claims as are deemed reasonable and are supported by the vouchers to the satisfaction of the Architects. The contractor shall have no claim to any payment of compensation or otherwise how so ever on account of any profit or advantage which he might have derived from the execution of the work in full but which he did not derive in consequence of the determination of the contract. The employers' decision on the necessity and propriety of such expenditure shall be final and conclusive.

# 52.0 Determination of contract owing to default of contractor:

## If the contractor should: -

- a. Become Bankrupt or insolvent, or
- b. Make an arrangement with or assignment in favor of his creditors, or agree to carry out the contract under a Committee or Inspection of his creditors, or
- c. Being a Company or Corporation, go into liquidation (other than a voluntary liquidation for the purpose of amalgamation or reconstruction) or
- d. Have an execution levied on his good or property on the works, or
- e. Assign the contractor or any part there of otherwise than as provided in the Clause g of these conditions, or
- f. Abandon the contract, or

- g. Persistently disregard the instructions on the Architects or contravene any provision of the contract, or
- h. Fail to adhere to the agreed program of work by a margin of 10% of the stipulated period, or
- Fail to remove materials from the site or to pull down and replace work after receiving from the Architects notice to the effect that said materials or works have been condemned or rejected.
- j. Fail to take steps to employ competent or additional staff and labour as required or.
- k. Fail to afford the Architects or Architects representative proper facilities for inspecting the works or any part there of as required
- I. Promise, offer or give any bribe, commission, gift or advantage either himself or through his partner, agent or servant to any officer or employee of employer or to any person on his or on their behalf in relation to the execution of this or any other contract with the employer.

Right of employer after revoking of contract owing to default of contractor.

- a) the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any commitments or made any advances on account of or with a view to execution of the works or the performance of the contract and contractor shall not be entitled to recover or be paid any sum for any work there to for actually performed under the contract, unless and until the Architects shall have certified the performance of such work and the value payable in respect thereof and the contractor shall only be entitled to be paid the value so certified.
- b) The Employer or the Employer's representative shall be entitled to take possession of any materials, tools, implements, machinery and buildings on the works or on the property on which these are being or ought to have been executed, and retain and employ the same in the future execution of the works or any part thereof until the completion of the works without the contractor being entitled to any compensation for the use and employment thereof or for wear and tear or destruction thereof.
- c) The Architects shall, as soon as may be practicable after revoking of the contract fix and determine ex-part or by or after reference to the parties or after such investigation or inquires as he may consider fit to make or institute and shall certify what amount (if any ) had at the time of revoking of the contract been reasonably earned by or would reasonably accrue to the contractor in respect of the work then actually done by him under the contract and what was the value of any unused, or partially used materials, any constructional plant and any temporary works upon the site.
- d) The employer shall not be liable to pay contractor any money on account of the contract until the expiration of the period of the maintenance and thereafter until the costs of completion and the maintenance damages for delay in completion (if any) and all other expenses incurred by the employer have been ascertained and the amount thereof certified by the Architects. The contractor shall then be entitled to receive only such sum or sums (if any) as the Architects may certify would have been due to him upon due completion by him after deduction the said amount, but if such amount shall exceed the sum which would have been payable to the contractor, then the contractor shall upon demand pay to the employer the amount of such excess and it shall be

deemed a debit due by the contractor to the employer and shall be recoverable accordingly.

#### 53.0 RECORDS TO BE KEPT BY CONTRACTOR

- **53.1** The contractor shall:
- **53.1.1** Maintain full record of his estimated and actual cost of the work together with all tender calls, quotations, contracts, invoices, receipts and vouchers relating thereto and
- **53.1.2** Make all records and material available to audit and inspection by the employer representative or person acting on behalf of them, when requested.
- 53.2 The records maintained by the contractor shall be kept intact by the contractor until the expiration of two years after the date of Final Certificate of Completion was issued or until the expiration of such other period of time as the 6 months.
- 53.3 The contractor shall cause all subcontractors and all other persons directly or indirectly controlled by or affiliated with the contractor and all persons directly or indirectly having control of the contractor to comply as if they were the contractor.

#### 54.0 COORDINATION OF TRADERS

- **54.1** Coordinate, organize, control and be responsible for the work of all traders. Each trade must obtain approval of the contractor, prior to performing work ensuring the work does not conflict with the work of other traders and / or existing work.
- 54.2 Where the work of any trade shall be installed in close proximity to or shall interfere with, existing work or the work of the other trades necessary modifications shall be made under the direction of the contractor and the employer's representative's approval at no additional cost to the employer.
- **54.3** All additional costs to remove, replace, correct and / or modify the work of trades to achieve proper coordination shall be paid by the contractor.
- 54.4 It is the responsibilities of the general contractor to coordinate with the mechanical and electrical trades so that all their items, such as electrical switches, lights, pull stations, outlets, etc. are not installed prior to review of their location with the employers' representative. These items when located on a delineated wall surface, or between a patterned grooved revealed or trimmed surface, or on a column, post etc. must be centered and mounted at the same height, or mounted one directly above the other, regardless of the mounting heights shown on the electrical or mechanical drawings and specifications.
- **54.5** All ends of line resistors must be located in non-public or low –use corridors or rooms whether shown on the electrical drawings in these locations or not. All locations must be approved by the employers' representative before installation.
- This project is designed to conform to metric measurement and standards. If any specified materials or equipment are available only in imperial measurements, the contractor shall be responsible for the coordination of all imperial and metric measurement and shall ensure all trades and all parts of the work fit to together properly.
- **54.7** Any discrepancies in the drawings, details, schedules or specifications or between these documents and the site conditions shall be clarified with the Architect prior to commencing

the work. Contractor shall include, at no cost to the employer, the most expensive condition.

#### 55.0 MATTERS FINALLY DETERMINED BY THE EMPLOYER

All disputes and differences of any kind whatsoever arising out of or in connection with the contract, whether during the progress of the work or after its completion and whether before or after the determination of the contract, shall be referred by the contractor to the employer, and the employer shall within a reasonable time after receipt of the contractor's representation make and notify decision on all matters referred to by the contractor in writing, provided that matters for which provision has been made of the General Conditions of the contract or In any clause of the special conditions of the contract shall be deemed as 'excepted matters' and decisions thereon shall be final and binding on the contractor provided further that 'excepted matters' shall stand specifically excluded from the purview of the arbitration clause and not be referred to arbitration.

# ANNEXURE I: REFERENCE TO GENERAL CONDITIONS OF CONTRACT

| 1  | Accepting Authority  | :  | Govt. Sunder Nursery Management<br>Trust, New Delhi  |
|----|--|----|--|
| 2  | Percentage addition to cover profit and overheads of contractor in rate analysis while working out Market Rates. |    | 15 %   |
| 3  | Earnest Money  | •• | Rs. 2,33,175/- (Rupees Two Lacs thirty-three thousand one hundred and seventy-five Only)             |
| 4  | Security Deposit   |    | Deducted @ 5 % of each interim bill Max. 5% of contract amount.                                      |
| 5  | Time allowed for execution of work   | :  | 2 months.  |
| 6  | Compensation for delay   | :  | 1% of the value of unfinished work per week of delay, up to a maximum of 5 (Five) percent            |
| 7  | Defects Liability Period   | :  | 12 months after the date of virtual completion issued by the Employer.                               |
| 8  | Interim Bills  | •  | Monthly subject to a minimum of INR 10 lacs or monthly running bills; whichever is higher            |
| 9  | Escalation   | :  | Not Payable  |
| 10 | Court of Jurisdiction  | :  | New Delhi  |
| 11 | Tax Deduction  | •• | As applicable at the time of signing of contract or as modified from time to time by the Government. |
| 12 | Validity of Contract   | :  | 2 Months from the date of issuing work order   |
| 13 | Insurances   | :  | As Per G C C   |

# **TECHNICAL SPECIFICATIONS CONTENTS**

# **I Formwork**

# II Steel Work

1. M.S. tubular steel structure

# I. FORM WORK

#### 1. SPECIFICATION FOR FORMWORK

#### 1.0 General

# 1.1 Description

This section covers the requirements for providing, fabricating and erecting of formwork including propping, bracing, shoring, strutting, tying, bolting, wedging and all other temporary support to the concrete during the process of setting subsequent removal of forms.

- 1.2 Related work specified else where
  - a) Cast-in-place Reinforced Concrete
  - b) Precast Concrete
- 1.3 Applicable Codes and Standards

The codes and standards generally applicable to the work of this section are listed hereinafter

IS:456 Code of practice for plain and reinforced concrete

IS:4990 Plywood for concrete shuttering work

#### 2.0 Submittals

# 2.1 Type of Formwork

Prior to commencing delivery of material for formwork, the contractor shall prepare samples of different types of about 10 sqm. and obtain approval of the Architect.

# 2.2 Design of Forms

Before fabricating of forms, the contractor shall submit shop drawings and design calculations for proposed formwork to the Architect for his approval. However, the approval of the formwork design is no way will relieve the contractor of his responsibility for adequately constructing and maintaining the forms so that they will function properly.

# 2.3 Tie Bolts

In case the Contractor proposes to use tie bolts running through the concrete, the location and size of such tie bolts shall be submitted to the Architect for his approval.

### 3.0 Materials

- 3.1 Formwork shall be of plywood or steel or any other material capable of resisting damage to the contract faces under normal conditions of erection forms, fixing steel and placing concrete. The selection of materials suitable for formwork shall be made by the Contractor based on the maximum quality consistent with the specified finished and safety.
- 3.2 Plywood

Plywood used for formwork shall be 12mm thick phenol-bonded shuttering quality plywood complying with IS: 4990 and of make approved by the Architect. Waterproof ply is suitable for the formwork for casting floor slabs.

### 3.3 Steel

The bulk of the vertical wall surfaces shall use steel formwork, with shuttering plates sized 610mm (high) x 1220mm (long). Horizontal shuttering lines every 610mm from the top of slab shall be emphasized and approved by the Architect. Formwork at the floor slab level shall pronounce the lines of the slab (250mm thick) and shall therefore require a different shuttering plate than the standard 610mm x 1220mm plate. Steel formwork shall be made of 4mm thick black sheets stiffened with angle iron frame made out of M S Angles 40mm X 40mm X 6mm. Exterior R.C.C. walls to be constructed using steel shuttering with diamond checkered plate pattern.

# 3.4 Vertical Props

Vertical props used for form work shall be of steel pipes adequately broad. These shall be strong enough to beam the level during concrete operations without buckling.

# 4.0 Design criteria

- 4.1 Formwork shall be designed for the loads and lateral pressures due to dead weight of concrete, superimposed live loads of workmen, materials and plants and for other loads as indicated on the drawings.
- 4.2 Forms shall be designed to have sufficient strength to carry the hydrostatic head of concrete as a liquid without deflection tolerances exceeding the acceptable limits.
- 4.3 Where necessary to maintain the tolerances indicated on the drawings, the formwork shall be cambered to compensate for anticipated deflections due to the weight and pressure of the fresh concrete, and also due to any other construction loads. Unless otherwise shown or specified, the camber shall be provided as below:

| Type of Member  | Compression Steel     | Camber         |  |  |
|-----------------|-----------------------|----------------|--|--|
|                 | As % of Tensile Steel | Coefficient    |  |  |
| Simple Span     | 0.00%<br>50.00%       | 0.066<br>0.037 |  |  |
| Continuous      | 0.00%                 | 0.032          |  |  |
| Restrained Span | 50.00%                | 0.020          |  |  |
| Cantilever      | 0.00%                 | 0.086          |  |  |
|                 | 50.00%                | 0.046          |  |  |

Camber in cms=K\*L\*2.54/D

Where K = Camber Coefficient

L = Length of member in meter

D = Depth of member in meter

#### 5.0 Erection of formwork

- 5.1 Forms shall be used wherever necessary to confine the concrete during vibration and to shape it to the required lines. The formwork shall conform to shapes, lines, levels and dimensions of the concrete shown.
- 5.2 Forms shall have sufficient strength to withstand the pressures resulting from placement and vibration of concrete and shall be maintained rigidly in position. Formwork shall be adequately supported by adequate number and size of struts, braces, ties and props to ensure rigidity of forms during concreting. Where props rest on natural of filled up ground to avoid any settlement, the soil shall be thoroughly compacted and bases of props shall be of sufficient size so as to restrict the bearing pressure on the ground to 5 T/Sqm.
- 5.3 Form shall be tight enough to prevent loss of mortar from concrete and to produce a dense, homogeneous and uniformly colored concrete completely free from honeycombing or surface roughness. Joints in formwork shall be designed to prevent leakage, not only between individual elements forming the panels but also forming the horizontal and vertical junction between the panels themselves.
- 5.4 If formwork is held together by bolts or wires, those shall be so fixed that no iron shall be exposed on surface against which concrete is to be laid. The Architect may at his discretion allow the contractor to use tie bolts running through the concrete at his own cost. Hole left in the concrete by these tie-bolts shall be filled as specified by him at the Contractor's expense.
- 5.5 Formwork shall be constructed so as to facilitate loosening and permit removal without jarring the concrete. Wedges, clamps and bolts shall be used wherever practicable instead of nails.
- 5.6 All formwork erected shall be approved by the Architect before concreting is started.

# 6.0 Cleaning and oiling of forms

- 6.1 At the time concrete is placed in the form, the surface of the forms in contact with the concrete shall be free from encrustations of mortar, grout or other foreign material. Temporary openings shall be left at the bottom of formwork to enable sawdust, shavings, wire cutting and other foreign material to be worked out from the interior of the forms before the concrete is placed.
- 6.2 The surface of the forms to be in contact with the concrete shall be coated with an approved coating that will effectively prevent stacking and will not stain the concrete surfaces. After each use the surfaces of forms in contact with concrete shall be cleaned, well wetted and treated with form oil approved by the Architect. Lubricating (machine) oils shall not be used.
  - Oiling shall be done before reinforcement has been placed and core shall be taken that no oil comes in contact with the reinforcement while it is being placed in position.
- 6.3 Immediately before concreting is commenced the formwork shall be carefully examined to see that all dirt, shavings, sawdust and other refuse have been removed and the formwork shall be wetted thoroughly to prevent absorption of water from concrete. The formwork shall be kept wet during concreting and for the whole time that it is lift in place.

# 7.0 Removal of formwork

- 7.1 Formwork shall be removed carefully so as to prevent damage to the concrete. Wooden wedges only shall be used between the concrete surface and the form where force is necessary to separate the form from the concrete. Metal wedges, bars or tools shall not be used for this purpose. Any concrete damaged in the process of removing the forms shall be repaired in accordance with the provision of concrete specifications.
- 7.2 All non-supporting forms shall be loosened and removed during regular working hours, and as soon as the concrete has hardened sufficiently to prevent damage from the removal of the forms. All false work and forms supporting concrete beams and slabs, or other members subject to direct bending stress, shall not be removed released unit the concrete has attained sufficient strength to ensure structural stability and to carry both the dead and live loads including any construction loads which may be placed upon it.
- 7.3 Unless otherwise permitted in writing by the Architect, the forms shall not be stripped in less than the minimum periods specified in IS: 456. However the Architect may increase the above if he considers it necessary for structural stability.
- 7.4 No construction loads exceeding the combination of superimposed dead load plus specified live load shall be supported on any un-shored portion of the structure under construction, unless analysis indicates adequate strength to support such additional loads.
- 7.5 Formwork shall be removed in such a manner so as to impair safety and serviceability of the structure. It shall be removed gradually to prevent sudden n application of loads to the concrete. All concrete to be exposed by form removal shall have sufficient strength so as not be damaged there by.

### 8.0 Reuse of forms

- 8.1 Immediately after the forms are removed they shall be cleaned with jet of water and a soft brush before they are reused.
- 8.2 The contractor shall not be permitted reuse of any forms which in the opinion of the Architect has warned out and has become unfit for formwork. The Architect may in his absolute discretion order rejection of any forms he considers unfit for use in the works, and order their removal from the site.

# 9.0 Formwork for sloped surfaces

- 9.1 Forms for sloped surfaces shall be built so that the formwork can be placed board-byboard immediately ahead of concrete placement so as to enable ready access for placement, vibration inspection and repair of the concrete.
- 9.2 The formwork shall also be built so that the boards can be removed one by one from the bottom up as soon as the concrete has attained sufficient stiffness to prevent sagging. Surfaces of construction joints and finished surfaces with slopes steeper than 4 horizontal: 1 vertical shall be formed as required herein.

#### 10.0 Formwork for curved surfaces

10.1 The contractor shall interpolate intermediate sections as necessary and shall construct the forms so that the curvature will be continues between sections. Where necessary to

- meet requirements for curvature, the form lumber shall be built up of laminated salines cut to make tight smooth form surfaces.
- 10.2 After the forms have been constructed all surface irregularities at matching faces of form material shall be dressed to the specified curvature.

# 11.0 Rates

- 11.1 Rate quoted by the contractor shall apply to work at all floor levels.
- 11.2 Regarding mode of measurements rates and any other items not specifically covered under these specifications, nomenclature of items and other conditions of this tender, the provisions of CPWD specification 1991 92 Vol. 1 VI with up to date correction slip shall apply.

# **II. STEEL WORKS**

# 1. SPECIFICATIONS FOR MS TUBULAR STEEL STRUCTURE

#### 1.0 General

Unless otherwise specified, provisions of I.S. 800 and specifications for structural steel included in this document, with regard to design, fabrication and erection shall be applicable in the use of steel tubes in general.

### 2.0 Materials

All steel tubes shall be hot finished seamless steel tubes (HFS) of the specified strength or as approved by the Architect and shall conform to I.S. 1161. Tubes made by other than hot finishing process or which have been subjected to cold working, shall be regarded as hot finished if they have subsequently been heat-treated and are supplied in the normalized condition.

#### 3.0 Fabrication

- 3.1 The general provisions in I.S. 800 regarding fabrication shall also be applicable to the fabrication of structures using steel tubes. Where welding is specified reference to appropriate provision of I.S. 820 and I.S. 816 shall be made.
- 3.2 The component parts of the structure shall be assembled in such a manner that they shall neither be twisted nor otherwise damaged and shall be so prepared that the specified cambers if any shall be maintained.
- 3.3 All material before being assembled shall be straightened, if necessary, unless required to be of a curvilinear form and shall be free from twist.
- 3.4 Washer shall be specially shaped where necessary, or other means used, to give the nuts and the heads to bolts a satisfactory beaming.
- 3.5 In all cases, where the full bearing area of the bolt is to be developed, the threaded portion of the bolt shall not be within the thickness of the parts bolts together, and washers of appropriate thickness shall be provided to allow the nut to be completely tightened.
- 3.6 Edges shall be dressed to a neat and workmanlike finish and be free from distortion where parts are to be in contact metal-to-metal.
- 3.7 When the end of a tube is not automatically sealed by virtue of its connection by welding to another member, the end shall be properly and completely sealed. Before sealing, the inside of the tube shall be made dry and free from loose scale.
- 3.8 The ends of the tubes may be flattened or otherwise formed to provide for welded, riveted or bolted connections provided that the methods adopted for such flattening do not injure the material. The change of section is gradual.
- 3.9 All tubes shall be painted or oiled or otherwise protectively coated as specified and approved by the Architect.
- 3.10 All tubes or assembly of tubes shall be clearly marked and packed indicating orientation of the unit in its final positions.

# 4.0 Erection

4.1 Erection Equipment

All erection equipment shall be of first class quality and shall not bars be twisted or warped in any way. All wire ropes for cranes or lifting bars shall be of full section, and shall not be bent, linked, twisted or stretched. All lifting beams, bars or trusses shall have their lifting capacity clearly marked on each member.

# 4.2 Handling

Handling of fabricated units shall be kept to a minimum and shall be transported and stacked in such a manner that each unit shall support its own weight to avoid twisting and bending of the members.

# 4.3 Shoring and Bracing

All fabricated units shall be adequately shored and braced in position during erection and shall not be removed until final connections have been made. The contractor shall prepare and submit the shoring drawing, for approval before commencement of the work and shall fully abide by the safety regulations during erections.

#### 4.4 Permanent Connections

Prior to installation of the fabricated steel tube units, the contractor shall check all dimensions, lines and level affecting the work. Any discrepancies between design dimensions and filed dimensions shall be notified to the Architect, and the connections shall not proceed until installation requirement are modified. Connections of the members converging at a joint shall be of 'dry' type assembly and shall be formed, with or without flattening the ends of the tub, using screw bolts and/or screw threaded holes. The contractor shall submit jointing details indicating the assembly type to be used for approved to the Architect. The type of assembly to be used shall be decided by the Architect.

# 5.0 Shop drawings

The contractor shall prepare and submit for approval shop drawings identifying all types of tubular steel units. The drawings shall also show dimensions, flattened portions if any, assembly details, including any connecting plates, angles etc. The Contractor shall also indicate the sequence of fabrication and erection of the units.

# 6.0 Rejection of steel tubes and assembled units

All, tubular steel members and/or fabricated units fabricated out of square, out of dimensions or which are damaged, twisted or bent in fabricating, handling or erection or any other defect observed may be rejected by the Architect.

# PREAMBLE TO BILL OF QUANTITIES

- 1.0 Items enumerated in the bill of quantities shall be executed in complete accordance with the attached technical specifications. Where the technical specification does not include an item, it shall be executed in accordance with the latest CPWD specifications and amendments made thereafter. Nomenclature of items stated thereafter shall be treated as complementary to the specifications.
- 2.0 Items not covered under point 1.0 stated above, shall be carried out as per relevant Indian Standard Specifications or Codes of Practice as applicable.
- 3.0 Items not covered by any of the above mentioned points, shall be executed as per accepted norms and sound engineering practice as directed by the Architects. The decision of the Architects shall be final and binding on the contractor.
- 4.0 Rates of items of work involving construction at different levels shall be inclusive of all leads and lifts and no extra payment shall be admissible on this account unless specifically allowed for in the schedule of quantities
- 5.0 Rates of items of work shall be inclusive of cost of all constituent materials, labour, tools & plant etc. and no extra payment shall be admissible on this account unless specifically allowed for in the schedule of quantities
- 6.0 It shall be born in mind that the contractor has to coordinate his work with other contractors / agencies involved in project. No claims whatsoever shall be entertained for extra work caused by lack of coordination between two or more agencies involved in the project.
- 7.0 Materials to be supplied (if any) at site to the contractor by the Employer are listed in Appendix III. Contractor shall quote rates for relevant items considering the issue rates as mentioned therein.
- 8.0 In the case of discrepancy between Schedule of Quantities, the specifications and / or the Drawings, the following order of preference shall be observed:

Detailed Construction Drawings.

Description in Schedule of Quantities.

Technical Specifications.

CPWD and IS Specifications.

- 9.0 Measurement shall be recorded as per the methods of measurement spelled out in CPWD specifications and IS code 1200 at agreed/achieved progress against mile stones. If not mentioned in the specifications Architect shall be full authorized and entitled for checking the requirements and quantitatively as recorded in the measurement book/bills.
- 10.0 "Provisional Sum" means a sum included in the Contract and so designated in the Bill of Quantities for the execution of any part of the works or of the supply of goods, materials, Plant or services, or for contingencies, which sum may be used, in whole or in part, or not at all, on the instructions of the Architect.

The contractor shall be entitled to get only such provisional sums relate as the Site Incharge / Architect shall determine in accordance with this clause. The Site Incharge / Architect shall notify the contractor of any such determination made this sub-clause, with a copy to the owner.

- 10.0 Rates to include all necessary steel scaffolding (pipes) & all necessary arrangement to complete the particular items specified in the B.O.Q & for all lengths/heights/depth etc. No extra rates shall be claimed for such items.
- 10.1 The rate for each item of work included in the Schedule of Quantities (irrespective of the description of the item) shall unless expressly stated otherwise be the full cost in place and in full working condition and include cost of:
  - a) All materials, fixing material, accessories, operations, appliances tools, plant equipment, transport, labour and incidentals, required preparation for in the full and entire execution and completion of the work called for in the item and as per specification and drawings completely. The absence of the terms "providing", "supplying" and such in the nomenclature of the items shall not vitiate this intent.
  - b) Waste on material and labour.
  - c) Loading, transporting, unloading, handling/double handling hoisting to all levels, setting, fitting and fixing in position protecting, disposal of debris and all other labour necessary in and for the full and entire execution and to fully complete the job in accordance with the contract document, good practice and recognized principles. This also includes materials, appliance, equipment and accessories not specifically mentioned here in or noted in the drawings/documents as being furnished or installed but which are necessary and customary to make complete installation as described herein properly converted in efficient working order.
  - d) Liabilities, obligation and risks rising out of conditions of contract.
  - e) All requirements of specifications, whether such requirements are mentioned in the item or not. The Specifications and drawings where available are to be read as complimentary to and part of the schedule of quantities and any work called for in one shall be taken as required for all.
  - f) All taxes and duties such as sales tax VAT, excise, works contract tax, Service tax on labour, octroi, royalty etc.
  - g) Apart from the Manufacturer's Test Certificates for the material brought at site, third party tests are required shall be tested in laboratories as approved by the Architect.
- 12.2 The Contractor shall be paid for the actual quantity of work executed by him in accordance with the drawings as the contract rates.
- 12.3 Unless otherwise stated all measurements shall be take in accordance with the procedure laid down by Central Public Works Department and Indian Standard Method of Measurement of building and Civil engineering IS 1200, in that order.
- 12.4 Rates have been called for a number of items of work, as alternatives, which for the present do not form part of the total value of tender. The rates for these items shall be quoted, with due care so that in the event of choice of an alternative item of work the said rate shall form part of the contract and shall not vitiate the contract in any way.
- 12.5 The Contractor shall start procurement and bringing of Material/Equipment to the site on the basis of the Schedule of Quantities. However, the final quantities of the materials/equipment to be procured and mobilized shall be based on drawings approved for Construction.
- 12.6 The term "approved equivalent" shall mean equivalents as approved in writing by the Architect.

- 12.7 All work below and up to Ground floor level marked in sections shall be taken to be work up to plinth floor. The super structure work generally starts at the plinth level and includes work up to the top-most roof level.
- 12.8 The rates quoted by the contractor for the various items in the schedule shall cover all leads, lifts locations, etc. as called for in the Drawings and nothing extra shall be paid for additional lifts, leads or locations, (unless specifically provided otherwise) irrespective of the description/nomenclature of the items.
- 12.9 If two or more items of work with same nomenclature appearing in the same or different sections of the Bill of Quantities have different unit rates, then the lower unit rate shall be payable.
- 12.10 The quoted rates of the Contractor are deemed to include the cost of fulfilling the obligations defined in the General, Special Conditions of Contract, Specifications and elsewhere in the Contract.

# BOQ

| BOQ for SOLAR PLANT STRUCTURE AT CAR PARKING, SUNDER NURSERY |  |       |          |      |        |  |  |  |  |
|--|--|-------|----------|------|--------|--|--|--|--|
| S.NO   | DESCRIPTION  | UNIT  | QUANTITY | RATE | AMOUNT |  |  |  |  |
|  |  |       |          |      |        |  |  |  |  |
| 1  | STRUCTURAL STEEL WORK  |       |          |      |        |  |  |  |  |
|  |  |       |          |      |        |  |  |  |  |
| 1.1  | Supplying, fabricating, assembling, hoisting /erecting steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete.   |       |          |      |        |  |  |  |  |
| а  | Hot finished welded type tubes   | MT    | 40000    |      |        |  |  |  |  |
| 1.2  | Labour rate for Fabricating, assembling, hoisting /erecting steel sections as provided by client on site in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete. Material to be provided by client at site, near car parking inside sunder nursery. |       |          |      |        |  |  |  |  |
| а  | Hot finished welded type tubes   | MT    | 15500    |      |        |  |  |  |  |
|  |  |       |          |      |        |  |  |  |  |
| 2  | PAINT WORK   |       |          |      |        |  |  |  |  |
|  |  |       |          |      |        |  |  |  |  |
| 2.1  | Painting with synthetic enamel paint of approved brand and manufacture to give an even shade: Two or more coats on new work  | SQ.M. | 1270     |      |        |  |  |  |  |
|  |  |       |          |      |        |  |  |  |  |
|  | TOTAL  |       |          |      |        |  |  |  |  |

Approved list of materials: Structural steel – Apollo, TATA, Jindal Welding Rod/Electrode - Advani

# **DRAWINGS**







