

TENDER DOCUMENT

FOR CIVIL STRUCTURAL, FABRICATION & FINISHING WORKS FOR THE
CONSTRUCTION OF FIRE ESCAPE STAIRCASES

(03 NOS. 3rd FLOOR TO TERRACE LEVEL)

IN BLOCK-B, C1 & C2

(VOLUME I & II)

AT

INSTITUTE FOR STUDIES IN INDUSTRIAL DEVELOPMENT

[ISID] CAMPUS,

4, VASANT KUNJ INSTITUTIONAL AREA, NEW DELHI

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VOLUME – I

NOTICE INVITING TENDER [NIT]

- 1 Item rate Tender in the prescribed form are here by invited by M/s Institute for Studies in Industrial Development (ISID) for civil structural, fabrication, and finishing works for construction of new fire escape staircases (3rd floor to terrace level) in Block B, C1 & C2 at ISID campus, 4, Vasant Kunj Institutional Area, New Delhi.
- 2 Tender documents shall be downloaded free from <https://isid.org.in/about-us/tenders/>.
- 3 Bidders are required to download the tender document and fill BOQ in excel sheet and take its print out; and submit the physical copy with cover -3). The instructions given below are meant to assist the bidders to prepare their bids in accordance with the requirements and submit their bids physically at ISID:

Bids must be submitted three covers: Cover-1 (Technical Bid – all documents related to technical qualification mentioned in tender documents), Cover-2 (Earnest Money deposit) and Cover-3 (Financial Bid – Copy filled BOQ along with Tender document duly signed & stamped only).

The tenderers shall be required to submit the bids in three envelopes:

- a) **Envelope - 1:** Documents related to Minimum Technical & Financial Eligibility Criteria forming part of Cover-1.
- b) **Envelope – 2:** EMD [Earnest Money Deposit] of Rs. 2,10,000/- (Rupees Two Lac Ten Thousand Only) in form of account payee cheque / DD / BG of any scheduled bank in favour of “M/s Institute for Studies in Industrial Development”, payable at New Delhi. No interest is allowed on the EMD. Tenders received without EMD shall be liable to be rejected. Micro & Small Enterprises exempted as per Govt. rules, Certificate of the MSME to be submit by the tenderer with this tender.
- c) **Envelope – 3:** Original Tender document along with duly filled Rates in Schedule / Bill of Quantities. Each paper should be stamped and signed by the tenderer [power of attorney to sign the tender] as a token of acceptance of un-conditional tender. Conditional tenders shall be rejected without any reasons.

- 4 Sealed documents related to the following minimum Technical & Financial eligibility criteria will be received with the name of the work and the name of the tender written on the envelope at the office of M/s Institute for Studies in Industrial Development, Plot no. 4, Vasant Kunj Institutional Area, New Delhi Upto 17:00:00 hrs. till 14th September 2026.

Only agencies meeting all the following criteria shall be eligible to participate in this tender:

4.1 Work Experience

The agency must have successfully completed similar civil structural, structural steel fabrication, and multi-storey staircase / fire escape works during the last 05 years ending July 2026 with any Central/State Govt Department, Autonomous Body, PSU, or reputed institutional body:

- Three similar completed works each costing not less than **Rs. 50 Lakhs**; OR
- Two similar completed works each costing not less than **Rs. 60 Lakhs**; OR
- One similar completed work costing not less than **Rs. 100 Lakhs**.

4.2 Financial Standing & Turnover

The agency must submit the following duly certified by chartered accountant with valid UDIN:

- **Average Annual Financial Turnover:** Minimum **Rs. 1.25 Crores** during the last three financial years (2023-24, 2024-25, 2025-26), certified by a chartered accountant with valid UDIN.
- **Solvency Certificate:** Valid Bank Solvency Certificate for an amount not less than **Rs. 50.00 Lakhs** issued by a Scheduled Bank within the last 06 months.
- **Net Worth:** Net worth of the agency as on 31st March 2026 must be positive.

4.3 Statutory & Registration Requirements

The agency must submit the following duly signed & stamped:

- Valid GST Registration Certificate and PAN Card.
- Valid Provident Fund (EPF) & ESI Registration.
- Undertaking that the agency is not blacklisted/debarred by any Government organization or PSU.

- 5 Sealed Quoted Tender along with an account payee cheque / DD / BG for Rs. 2,10,000/- (Rupees Two Lac Ten Thousand Only) as Earnest money [EMD] in favour of 'M/s Institute for Studies in Industrial Development' payable at 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 M/s Institute for Studies in Industrial Development, Plot no. 4, Vasant Kunj Institutional Area, New Delhi Upto

17:00:00 hrs. till 14th September 2026. The earnest money shall be returned to the unsuccessful tenderers. For the successful tenderer, the earnest money deposit shall form a part of the security deposit. Micro & Small Enterprises exempted as per Govt. rules, Certificate of the MSME to be submit by the tenderer with this tender. Tenders not accompanied with Earnest Money Deposit will be summarily rejected. EMD may be enclosed with Cover-2 of the tender in a separate cover / envelope.

- 6 Time is the essence of the contract. The time allowed to carry out the work will be **90 days (03 months)** for the completion from the 7th day after the date on which letter of intent for award of work or work order issued to the successful tenderer.
- 7 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, the characteristics of the sub soil, site conditions, proposed installed system, the means of access to the site, the accommodation they may require outside the site and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances as the site is fully occupied, which may influence or affect the rates of the tender. A tenderer shall be deemed to have full knowledge of the site, whether the tenderer inspects the site or not and no extra charges consequent on any misunderstanding or otherwise shall be allowed. All Bidders are mandatorily to do the survey of site & its surroundings.
- 8 Submission of the tender by the 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 M/s ISID and shall become fully, informed as to the extent, quality, type and character of operations involved in the works.
- 9 Submission of a tender by a tenderer implies that he has made himself aware with all the General and Special National & Local 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.
- 10 This is an item rate tender. Rate of all items must be quoted in Indian Rupees. The Tenderers should quote in figures as well as in words the rate quoted by them for each item and should be written in English. The amount for each item should be worked out and requisite totals given.
- 11 M/s ISID do not bind themselves to accept the lowest or any tender and reserve the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rate quoted.
- 12 All Taxes including Central Sales Tax, VAT, Excise duty, Octroi, Royalty, Income Tax 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 and M/s ISID will not entertain any claim whatsoever in this respect over the quoted price.

Goods and Service Tax (GST) shall be paid separately over the total cumulative quoted Amount.

- 13 The bids shall remain valid and open for acceptance throughout the 90 (Ninety) days of the opening of tender. If the tenderer withdraws his tender after the award of works or makes any modifications in terms and condition of the tender which are not acceptable to M/s ISID, then M/s ISID without prejudice to any other right or remedy will be at liberty to forfeit the earnest money.
- 14 If the last date of receipt or opening of the tenders happens to be a holiday, then the receipt and opening of the tenders shall be shifted to next working day without change of time and venue.
- 15 Contractor shall be covered by all statutory compliances regarding labour safety, ESI, PF, Police, MCD, NDMC, NGT etc and provide documentary evidence for the same to M/s ISID & no extra payments shall be paid to the contractor on the above.
- 16 No Escalation shall be admissible and paid to the Contractor on any account and in any case / conditions.
- 17 M/s ISID will not be responsible to compensate for any expense or losses which may be incurred by the Tenderer in the preparation and submittal of his Tender.
- 18 The quantities of various items given in the schedule / bill of quantities are approximate / tentative. The quantities of work may vary at time of allotment / execution of work. M/s ISID reserves the right to omit / delete / add / substitute any item(s) of work from the schedule at the time of allotment or during execution. Contractor will be paid for the actual work done / executed at the site & duly verified by the PMC and concerned official of M/s ISID.
- 19 Any discrepancies, omissions, ambiguities in the tender documents, if any, or any doubt as to their meaning should be reported in writing to M/s ISID, who will review the questions and if information sought is not clearly indicated or specified, M/s ISID will issue clarifications to all the tenderers which will become part of the Tender Document. M/s ISID will not be responsible if the discrepancies, omissions, ambiguities in the tender documents or any doubts as to their meaning are not brought to the notice of M/s ISID before three working days prior to the last date of submission of the tender.
- 20 The successful bidder shall execute an agreement on non-judicial stamp paper with M/s ISID in accordance with the standard format enclosed [Articles of Agreement] within 10 days from the date of issue of work order failing which the bidder's EMD may stand forfeited.
- 21 Tender form / Tender is non-transferable. All the Terms & Conditions attached along with tender documents shall be applicable by the bidder.
- 22 Canvassing in connection with tenders are strictly prohibited and the tenders submitted by the bidders who resort to canvassing will be liable to rejection.
- 23 Only unconditional tenders shall be accepted and considered for evaluation.

24 The complete tender [Envelope-1, Envelope-2 & Envelope-3] should be enclosed in bigger sealed envelope and should be submitted in the Office of M/s Institute for Studies in Industrial Development super-scribing the name of the tender with due date of submission latest by 14/09/2026 on any working day from 10.00 Hrs. [IST] upto 14:00:00 Hrs. [IST]. Addressed to: M/s Institute for Studies in Industrial Development, New Delhi. Tender(s) received beyond the last date of submission will be rejected. No tender will be entertained by E-mail or FAX. In the event of the due date of receipt and opening of tender being declared as a holiday, then due date of receipt / opening of the tender will be the next working day at the same time and venue. The envelope must not carry any indication whatsoever of the name or mark of the Tenderer or any other means of identification.

25 Bidders to read essentially the complete tender document before filling and submission of Tender, since this project is of its own kind where lots of additional requirements are to be complied by the bidders.

26 At any time prior to the date of opening of the bids, M/s ISID may issue an addendum in writing to all persons or firms to whom the Tender Document has been issued, deleting, varying or extending any item of this Document. The receipt of the addendum by the Tenderer shall be acknowledged and so noted in the space provided in the Tender.

Unless it is in formal manner described above, any representation or explanation to the Tenderer shall not be considered valid or binding on M/s ISID as to the meaning of anything connected with the Tender Document

27 Tenderers must be returned properly filled in and completed in all respects in accordance with the Conditions and Provisions of the Tender Documents. No alteration shall be made by the Tenderers to the Tender Documents.

28 For any further information / clarification / queries which the Tenderer may required in order to complete his Tender may be obtained from in writing / email: **tender@isid.org.in**

All information requested by and supplied to one Tenderer will be supplied to all Tenderers.

UNDERTAKING FORM

Date/...../2026

To

**M/S INSTITUTE FOR STUDIES IN INDUSTRIAL DEVELOPMENT
ISID CAMPUS,
PLOT NO. 4, VASANT KUNJ INSTITUTIONAL AREA, NEW DELHI**

I / We have carefully read and examined the following documents and clearly understood relating to the Institutional Building **at ISID Campus, Plot no. 4, Vasant Kunj Institutional Area, New Delhi** comprising Civil structural, fabrication, and finishing works:

- a) Notice Inviting Tender
- b) General Conditions of Contract
- c) Special Conditions of Contract
- d) All Annexures
- e) Technical Specifications
- f) List of Approved makes
- g) Schedules / Bill of Quantities
- h) Tender Technical Drawings**

I / We hereby tender for the execution of works referred to in to 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 / Bill of Quantities and within the period of completion as stipulated. I / We do here by undertaken to execute and complete the whole or part of the work [as desired by **M/s ISID**] at the respective rates quoted.

I / We hereby distinctly and expressly declare and acknowledge that before the submission of my / our tender, I / We have carefully read and followed the general and special conditions / instructions and read the detailed technical specifications and schedule of quantities and clearly understood all the conditions of contract. I / We have also seen the location where the said work is to be done and made all such investigations of the work required in regard

to the materials required to be furnished as to enable me / us to complete the work successfully and manpower requirements & their accommodations etc.

I / We agree to pay Government, Good and Service Tax, General and Sales Tax [State and Central], Excise and Octroi, duties, insurance and all other taxes including Works Contract Tax, Income Tax, VAT, any other taxes etc. as prevailing from time to time, on such items for whom same is to be levies, and the rates quoted by me / us are inclusive of the same.

I / We understand that the time is the essence of the contract and I / we undertake to complete the work within 03 months calculated from 7th days after the date of Letter of Acceptance / LOI and as per Scheduled agreed with M/s ISID/ Project Manager.

In consideration of I / we being invited to tender, I / we agree to keep the tender open for acceptance for a period of 90 days from the date of submission thereof and not to make any modifications in its terms and conditions which are not acceptable to M/s ISID.

Signature

(With Seal)

For

ARTICLES OF AGREEMENT

Articles of agreement made the _____ day of _____ 2026, M/s Institute for Studies in Industrial Development (M/s ISID) having 'ISID Campus' situated at Plot no. 4, Vasant Kunj Institutional Area, New Delhi (which expression shall include its successors and nominees wherever the context or meaning shall so requires or permit) of the one part and

M/s _____

through its Proprietor / Director / Authorized partner _____ S/o _____ having registered Address and having GSTIN: hereinafter called the **"Contractor"** (which expression shall include it's successors and assigns wherever the context or meaning shall so requires or permit) of the other part.

WHEREAS M/s ISID is desirous for construction of Civil structural, fabrication, and finishing works for **Address**, and as provided specifications and schedule / bill of quantities showing and describing the work to be done as prepared by and / or under the direction of consultant.

AND WHEREAS Contractor has supplied M/s ISID with a fully priced copy of the said bill of quantities (which copy is hereinafter referred to as the **"Contract Bills"**) amounting to the **"Contract Sum"** of Rs. _____ (Rupees _____ only), AND WHEREAS the said drawings (hereinafter referred to as the **"Contract Drawings"**) and the contract bill have been signed by or on behalf of the parties hereto:

NOW IT IS HEREBY AGREED AS FOLLOWS:-

1. For the consideration hereinafter mentioned Contractor will upon and subject to the conditions annexed carry out and complete the work shown upon the contract drawings and described by or referred to in the Contract bill and in the said conditions.
2. M/s ISID shall pay Contractor the sum of Rs. _____ (Rupees _____ only) (hereinafter referred to as the: **“Contract Sum”**) or such other sum as shall become payable hereunder at the time and in the manner specified in the said conditions.
3. The said conditions and Appendices thereto shall be read and construed as forming part of this Agreement, and the parties hereto shall respectively abide by and submit themselves to the conditions and perform the Agreement on their parts respectively in such conditions contained in.
4. Only _____ (_____) alterations have been made in these documents and as evidence that these alterations were made before the execution of Contract Agreement, they have been initialed by Contractor and M/s ISID.

AS WITNESS our hand this _____ day of _____ 2026.

Signed by the said in the presence of M/S ISID

M/s Institute for Studies in Industrial Development

Witness: _____

Name : _____

Address: _____

Signed by the said in the presence of CONTRACTOR

M/s

Witness:

Name: _____

Address: _____

NOTICE TO PROCEED WITH THE WORK

To _____

Dear Sir,

Pursuant to our acceptance of your tender for the “Execution of Building Civil structural, fabrication, and finishing works for existing ‘ISID Campus’ situated at 4, Vasant Kunj Institutional Area, New Delhi, you are hereby instructed to proceed with execution of the said works in accordance with the Letter of Awards and instructions of Company/ Project Manager.

Yours faithfully

M/s

.....

Copy to:

Project Manager,

.....
.....
.....
.....

(Name & address details to be entered after appointment of

PMC)

**Letter of Authorization/ Board Resolution/ Power of Attorney for
individual to sign on behalf of the bidder**

To,
The Project In Charge
M/s
.....,
New Delhi

Dear Sir,

The Letter of Authorization / Board Resolution / Power of Attorney in respect of the following, authorizing them to sign the bid proposal and negotiate and furnish information as and when called is enclosed herewith:

- 1.
- 2.
- 3.

Signature of the Authorised Signatory:

Name of the Authorized signatory:

Designation:

Name of the Organization:

CONFIDENTIALITY UNDERTAKING

To,

The Project In Charge

M/s

.....,

Sir,

1. We hereby undertake and ensure that our employees, officers, agents and directors shall make all reasonable efforts to ensure and hold in confidence all the information, documentation (including contract, the tender document and documents contemplated hereby), data or know-how disclosed to us by you and designated in writing as “confidential” (“Confidential information”), and will not disclose to any third party or use confidential information or any part thereof without prior written approval; provided that confidential information may be disclosed to (i) a competent authority pursuant to legal requirements and (ii) to financial institutions, bonafide potential purchasers, our assignee or potential assignees and sub-contractors whose duties reasonably require such disclosure; provided, further, that, except for a bonafide disclosure to independent legal advisers, such sub-contractors shall first have agreed not to disclose the relevant confidential information to any other person for any purpose whatsoever.
2. These restrictions shall not apply, or shall cease to apply, to any part of the confidential information that:
 - a) is in the public domain.
 - b) was otherwise in the rightful possession of the recipient party or an employee, officer, shareholder or director of the recipient party, in each case without any obligation to keep such information confidential, at or prior to time of the disclosure;

c) was obtained by the recipient party in good faith from a third party entitled to disclose it.

3. The restriction contained herein shall survive the termination or expiry of the contract.
4. Disclosure required by law
If we are required by law to disclose the contents of the contract or any information or documents relating to the contract, the contractor must;
 - a) promptly give notice to and consult with you about disclosure; and
 - b) use our reasonable endeavors to minimize any such disclosure.
5. Consent to announcements
No announcement concerning matters contemplated by the contract or in respect of any such activities or actions under the contract or any other ancillary matter can be made by us without your prior written approval, but that approval cannot be unreasonably withheld or delayed or inconsistent with that authorized by Company. The Confidential Information will be safeguarded and Project Manager will take all necessary action to protect it against misuse, loss, destruction, alterations or deletions thereof
6. We shall ensure that all individuals assigned by it to provide services under this Agreement, shall be made aware of the confidential nature of all such confidential information. We shall not be absolved from any liability that may arise as a consequence of breach of confidentiality either by us or any of our employee(s), individual(s), agent(s) or representative(s) or sub-contractor(s).

Signature of the Authorised Signatory:

Name of the Authorized signatory:

Designation:

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

3.0 DEFINITIONS

3.1 “M/s ISID / Owner / Client / Company / Employer” shall mean **“M/s Institute for Studies in Industrial Development”** and includes a duly authorized representative of M/s ISID, or any other person empowered in this behalf by M/s ISID to discharge all or any of its functions.

3.2 The “Accepting Authority” shall mean M/s ISID or his nominee on behalf of M/s ISID.

3.3 The “Contract” shall mean, the Notice Inviting Tender, the Tender Form, Articles of Agreement, the Tender and the acceptance thereof, the Letter of Intent, the Letter of Agreement between M/s ISID and the Contractor together with all the documents specifically referred to therein including these conditions with the appendices, the Special conditions, the General conditions, the Specifications, the Preamble to bill of quantities, the Designs and Drawings, the Schedule / bill 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 “.....” [Name and address] 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 the Item Rate Contract derived from the cost of item rate works from the quantities shown in schedule / bill of quantities.
- 3.6 “**Drawings**”: The work is to be carried out in accordance with drawings, specifications, the schedule of quantities and any further drawings, which may be supplied, or any other instruction, which may be given by M/s ISID/ Consultant during the execution of the work.
- 3.7 “**Consultant**” shall mean “**M/s**” appointed by M/s Institute for Studies in Industrial Development for the Works.
- 3.8 “**PMC / Project Manager Consultant / Engineer-in-charge**” shall mean “**M/s**” appointed by M/s Institute for Studies in Industrial Development for the works. The Project Manager / PMC shall mean any person duly appointed by M/s ISID and authorized to represent and act on behalf of the M/s ISID for purposes of the Work and any other person expressly appointed by the Project Manager and notified to the Contractor. All communications, approvals and decisions to be taken in connection with the Construction Services and those of the M/s ISID shall be communicated to the Contractor and enforced by the Project Manager.
- 3.9 A “**Day**” shall mean a day of 24 hours from midnight to midnight irrespective of the number of hours worked in that day.
- 3.10 A “**Week**” shall mean seven days without regard to the number of hours worked in any day in that week.
- 3.11 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 M/s ISID or used for the purpose of the contract.
- 3.12 The “**Works**” shall mean the works to be executed in accordance with this Contract 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.
- 3.13 “**Temporary works**” shall mean all temporary works of every kind required in or about the execution, completion or maintenance of Contract.
- 3.14 “**Urgent Works**” shall mean any urgent measures which in the opinion of the Consultant, M/s ISID become necessary during the progress of the work to obviate any risk of accident or failure or which become necessary for security.
- 3.15 “**Market Rate**” shall be the rate as decided by the Consultant 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 labor at site where the work is to be executed plus 20% as overheads, supervision and profit.
- 3.16 “**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 M/s ISID of the part of work in respect of which a certificate of completion has been issued.

- 3.17 “EHS plan”** means Environmental, Health and Safety Plan prepared by the Contractor for implementation at Site, based on and including, without limitation to various Clauses of the Conditions of Contract pertaining to Safety, Health and environment; and approved by the Project Manager.
- 3.18 “Vendors”** shall mean and include all suppliers, contractors, Sub-contractors and Nominated Sub-contractors engaged for the purpose of the Work when such Vendors are in contract with the Project Manager / M/s ISID
- 3.19 “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.
- 3.20 “IS”** shall mean Indian Standard as issued by the Indian Standard Institution. Wherever reference is made to “IS” it shall mean the relevant “IS” code on the subject with latest edition as amended till date of submission of tender.

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 four weeks in advance, in writing to the Consultant, of the drawings or any further specifications they may be required for the execution of the works. 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 of available for inspection and use by consultant or his representative. The Contractor may request for additional copy 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, labor, equipment, machineries, supplies, plant tools, scaffoldings, transportation, superintendence, temporary construction of every nature, taxes, work contract tax, good & 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 / Bill 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 Consultant 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 Consultant.

6.0 SITE AND LOCAL CONDITIONS

- 6.1** By executing the contract, the Contractor represent that he has visited the site of the proposed work shall be executed, 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 agree 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 / Bill 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 / bill 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 of one another, another 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 / Bill of Quantities, the Specifications and / the Drawings, the following order of performance shall be observed :
- 8.2.1** Detailed Construction / Technical drawings
- 8.2.2** Description in Schedule / Bill of Quantities
- 8.2.3** Special Conditions
- 8.2.4** Particular Specifications (In case of discrepancy in specifications, the specification of the particular head shall follow)

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 Accepting Authority shall be the deciding Authority with regard to the intention of the document.

8.4 Any error in description, quantity, or rates in Schedule / Bill of Quantities or any omission there from shall not vitiate the Contract or release the Contractor from the execution of the whole or any part of the works comprised therein according to drawings and specifications or from any of his obligations under the Contract.

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 / Bill 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 / Bill 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 / Bill 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 / Bill of Quantities or in the General Summary by the tenderer shall be ignored.

9.a SECURITY DEPOSIT

At the time of making payment to the Contractor for the work done under this contract, M/s ISID shall deduct 5% (Five percent) of the gross amount of the bill as security deposit.

The Earnest money of Rs. 2,10,000/- (Rupees Two Lac Ten Thousand Only) shall be considered as a part of Security Deposit for successful bidder. The deduction shall start after reaching the limit of Rs. 2,10,000/-

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 M/s ISID 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 Consultant make good the deficit.

Refund of Security Deposit – One half of the security deposit shall be released after 6 months of the virtual completion against Bank Guarantee valid up to the completion

of Defect Liability Period and balance shall be released after the completion of defect liability period.

On expiry of the defect liability period Consultant shall on demand from the Contractor, refund to him the remaining portion of security deposit provided Consultant is satisfied that there is no demand outstanding against the Contractor.

9.b PERFORMANCE SECURITY

Amount of Performance Security

i. Within 5 days of receipt of the Letter of Acceptance from the Company, the successful tenderer shall furnish to M/s ISID a security in the form of a bank guarantee for an amount of 5% (five percent) of the total Contract value in the form approved by M/s ISID / PMC valid for a period of 6 months beyond the “Defects Liability Period”.

ii. Failure of the successful tenderer to furnish the required Performance Security shall constitute a ground for the termination of the award of Contract and forfeiture of the Earnest Money, in which event M/s ISID may award the works to any other organization.

Release of Performance Security

i. The whole of the Performance Security amount, shall be liable to be forfeited to M/s ISID at the sole discretion of M/s ISID, in the event of any breach of Contract on the part of the Contractor or if the Contractor fails to perform or observe any of the conditions of the Contract. On due and faithful completion of the entire work, the Bank Guarantee for one half of the Performance Security amount may be released to the Contractor, subject to the issue of Completion Certificate by the Project Manager/ Consultant. This shall not relieve the Contractor from his obligations and liabilities, to make good any neglect / failures, defects, imperfections, shrinkages, works not in accordance with the contract or faults that may be detected during the Defects Liability Period. The balance of the Performance Security Amount shall become due for release and shall be released to the Contractor after six months of the successful completion of the Defects Liability Period. Where different Defects Liability Periods are applicable to different parts of the works, the expression, “successful completion of Defects Liability Period” shall for the purpose of this clause, be deemed to mean the successful completion of the last of such periods.

ii. Provided always that, no release of Bank Guarantee for Performance Security shall become due to the Contractor, unless all the stipulations of the Contract have been fulfilled by the Contractor and all claims and demands made by M/s ISID for and in respect of damage or loss by, from or in consequence of the Works, but excluding the claims made by the Contractor on the M/s ISID, have been finally satisfied.

iii. Provided also that the security deposit, performance security and any other withheld amounts from the running account bills, if any, at any time held with M/s ISID, shall be free of any liability for payment of interest to the Contractor.

11.0 ADVANCE's:

Types of advances :

Subject to the conditions provided herein, the Contractor may avail of the following advances for the execution of the Works:

- a. Mobilization advance
- b. Secured Advance against material

a. Mobilisation Advance:

An interest free advance of 10% of the total contract value shall be paid to the Contractor, upon successful mobilization (duly verified by Consultant / PMC) against Bank Guarantee of a Scheduled Bank duly approved by the Company of equivalent amount.

Such advance shall be given only after the Contractor has submitted the Performance Security and executed the formal Contract and the Company is rightly entitled to check that this Mobilization Advance is utilized for the Contract.

Recovery of mobilisation advance shall be made by deduction from the Contractor's bills commencing after the first 10% (Ten percent) of the gross value of work duly certified is executed and paid, on pro-rata percentage basis calculated @ 15% of the gross value of certified work billed beyond 10% of the completed work in such a way that the entire advance is recovered by the time 80% (eighty percent) of gross value of contract is executed and paid.

The Bank guarantee for the advance shall initially be for the full amount and valid for the contract period, and be kept renewed from time to time to cover the balance amount and likely period of complete recovery.

b. Secured Advance:

Secured Advance for the material worth 60% of the purchase price of the non-perishable materials brought to site for the actual execution of works or the rates allowed herein below; whichever is minimum; shall be adopted for secured Advance purposes and it shall be given along with the monthly RA Bills, subject to the production of vouchers/invoices/bills and the physical verification of materials by PMC. However, the secured advance shall not exceed 45% of the quoted rate for the item, in which it is to be incorporated.

S. no.	Item	Secured Advance (Rate to be allowed)
1.	Structural steel, Built-up sections :	Rs. ----- per Kg.
2.	TMT Bars	: Rs. per Kg.

The Secured Advance paid in the previous bill shall be fully recovered in the R.A. Bill under process. The fresh secured advance in R.A. Bill under process shall be for quantity of materials actually verified by PMC at site and duly entered in measurement book.

The materials for which secured advance has been paid shall be consumed within (three) months of such advances paid.

Written Request for advance

Advance as admissible under the Contract, shall be payable only after the Contractor makes a written request for the same to the Company. The amount payable shall be the amount applied for by the Contractor, subject however to the conditions and limitations given herein.

Interest in Case of Delay

Should there be delay in the progress and completion of work, as a result of which it is not possible to recover the advance and interest thereon, if provided in the Contract, before the date stipulated in the Contract and such delay is due to Contractor's failure / fault in execution of the contract or for any other reason, then the interest to be charged from the Contractor on the remaining portion of the advance beyond the completion date specified in the Contract Data, shall be the prevailing annual Bank lending Rate plus 2%. Such higher interest rate shall also be chargeable during any extended period of Contract, where the need for extension has arisen on account of Contractor's default. In no case shall the interest rate be less than 10%.

Advance to be Used only for This work

The advance(s) referred in clause 10 above and received by the Contractor, shall be used by him strictly for the purpose of the Contract, and for the purpose for which they are paid. If it is found that any of the advances aforesaid have been utilized by the Contractor, in whole or in part for any other purpose or if the contract is for any reason terminated, the Company may at its discretion recall the said advances or the unrecovered portions thereof immediately along with interest at prevailing annual Bank lending rate plus 2%, till the advance and interest thereon are recovered from him. This is without prejudice to any other remedy that may be available to the Company.

11.0 VARIATIONS, DEVIATIONS-EXTENT AND PRICING

- 11.1** The quantities shown against individual items in Schedule / Bill of Quantities are approximate/tentative and may vary to any extent with variation in details / design / site.
- 11.2** The Consultant / Institute for Studies in Industrial Development shall have power to make alteration in, omission from, addition / deletion to, or substitution for the original bill / schedule of items, quantities, specifications, drawings, designs, and instructions that may appear to him to be necessary or advisable during the progress of the work.
- 11.3** The Consultant shall be empowered to omit a part of the works in case of non-availability of a portion of the site or due to non-availability of funds 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 Consultant / M/s Institute for Studies in Industrial Development and such alterations, omissions, additions, deletions 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. However, no work which radically

changes the original nature of the contract shall be ordered by the Consultant as a deviation.

- 11.4** In the event of any deviation being ordered which in the opinion of the Contractor changes the original nature of the contract, he shall nevertheless 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 12.0
- 11.5** 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.
 - 11.5.1** In the proportion which the additional cost of the altered, additional, or substituted work, bears to the original contract sum: plus
 - 11.5.2** 25% of the time calculated in 11.5.1 above or such further additional time as may be considered reasonable by the Consultant.

12.0 EXTRA ITEMS

- 12.1** The rates of all authorized extra items of additional, altered or substituted work, shall be worked out as follows:
 - 12.1.1** If the rate for additional, altered, or substituted items of work is specified in the Schedule / Bill 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 / Bill 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 / Bill of Quantities.
 - 12.1.2** If the rate for any additional, altered, or substituted item of work is not specified in the Schedule / Bill 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.
 - 12.1.3** Where the rates cannot be derived in the manner described in 12.1.1 and 12.1.2, the same shall be worked out on the basis of Market 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 20%.
 - 12.2** 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 proposes to claim for such items of work, supported by rate analysis and vouchers, Consultant shall communicate to the Contractor the rate admissible for these items. The decision of Consultant / PMC shall be final and binding on the Contractor in this regard. The items shall not be executed unless the rates are approved by the Consultant.
- ## **13.0 SUSPENSION OF WORKS:**
- 13.1** The Contractor shall, on receipt of the order in writing of the Consultant suspend the progress of the works or any part thereof for such time in such a manner as the Consultant may consider necessary for any of the following reasons:

13.1.1 On account of any default on part of the Contractor.

13.1.2 For immortal execution of the works or part thereof for reasons other than the default of the Contractor.

13.1.3 For safety of the works or part thereof.

13.2 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 Consultant.

13.3 If the suspension is ordered for reason described in 13.1.2 and 13.1.3, then the Contractor shall be entitled to an extension of time equal to the period of every suspension Plus 25% of the suspension period.

14.0 TIME AND EXTENSION FOR DELAY

14.1 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 be commencing from the 07th day after the date of Letter of Intent / Work order issued by the Consultant or from the date of handing over of the site whichever is later. If the Contractor commits default in commencing the work as aforesaid, M/s ISID shall without prejudice to any other right or remedy be at liberty to forfeit the earnest money absolutely and cancel the contract.

14.2 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 Consultant, become part of the tender documents and the Contractor shall ensure a good progress accordingly.

14.3 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, construction bans, affecting any of the trades employed on the work, or delay on the part of other Contractors or tradesmen engaged by M/s ISID in executing work not forming part of the contract, or non-availability of the material and stores, which are the responsibility of M/s ISID to supply or non-availability of Tools and plant to be supplied by M/s ISID, or any other cause whatsoever, which in the absolute discretion of M/s ISID, 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 Consultant 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 Consultant to proceed with the works.

14.4 Request for extension of time, to be eligible for consideration, shall be made by the Contractor in writing as per hindrance register (Clause no. 29.5) 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.

14.5 In any such case the accepting Authority may give a fair and reasonable extension of time for completion of the work. Such extension shall be communicated to the Contractor by the Consultant in writing within one month of the date of receipt of such request by the Consultant.

15.0 PLANT AND EQUIPMENT

The Contractor shall arrange at his own expense all machineries, tools, plants and equipment's etc. 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 consultant.

16.0 MATERIALS TO BE PROVIDED

16.1 Materials to be provided by the Contractor.

The Contractor shall, at his own expense, provide all materials required for the works.

16.1.1 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 Consultant furnish proof to the satisfaction of the Consultant that the materials so comply.

16.1.2 The Contractor shall, at his own expense and without delay, supply to the Consultant / Client samples / made mock-ups of materials proposed to be used in works. If samples / mock-ups are not approved, the Contractor shall forth with arrange to supply to the Consultant for his approval fresh samples / fresh mock-ups complying with the specifications laid in the contract. No claim whatsoever shall be entertained by M/s ISID on account of expenses involved in arranging material samples for the approval of consultant.

16.1.3 The Consultant 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 Consultant shall be at a liberty to have them removed by other means. The Consultant 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.

16.1.4 All charges on account of octroi, terminal or sale tax and other duties on materials obtained for the works from any source shall be borne by the Contractor.

16.1.5 The Consultant 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 Consultant 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.

16.1.6 However, the cost of materials consumed in all the tests shall be borne by the Contractor in all cases except when otherwise provided.

16.2 General

16.2.1 Any defects arising in items of work due to the use of poor quality of materials supplied by the Contractor shall be rectified by the Contractor at his own cost without any extra claim.

16.2.2 Materials required for the works, brought by the Contractor, shall be stored by the Contractor only at places approved by the Consultant. Storage and safe custody of materials shall be the responsibility of the Contractor.

16.2.3 M/s ISID's official and Consultant 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.

16.2.4 All materials brought to the site shall become and remains the property of M/s ISID and shall not be removed off the site without the prior written approval of the Consultant. 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.

17.0 LABOUR

17.1 The Contractor shall employ labor in sufficient numbers either directly or through sub-Contractors, 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 Consultant. The Contractor shall not employ in connection with the works any person who has not completed his fifteenth year of age.

17.2 The Contractor shall comply with the provisions of the payment of Wages Act-1936, Minimum Wages Act-1948, Employers 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 Labor (Regulation and Abolition) Act-1970, Safety Code and Labor Welfare Acts, or rules or any modifications thereof or any other law relating thereto and rules made there under from time to time.

17.3 The Contractor shall indemnify M/s ISID 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.

17.4 Medical facilities at site: The Contractor shall provide medical facilities at site as may be prescribed by the Consultant / PMC on the advice of M/s ISID in relation to the strength of the Contractors resident staff and workman directly or through petty Contractors or Sub-Contractors employed on the work.

17.5 Use of intoxicants: The sale of ardent spirits or other intoxicating beverages upon the work or in any 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 almost extent to secure strict compliance with this condition.

18.0 SETTING OUT THE WORKS

The Contractor shall provide all labor 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. Contractor shall amend at his own cost to the satisfaction of the Consultant; any error found at any stage which may arise through inaccurate setting out.

19.0 SITE DRAINAGE:

19.1 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 immediately to the satisfaction of the Consultant / PMC and at the Contractor's expense.

19.2 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 M/s ISIDs, tenants or occupiers of properties & other neighboring of M/s ISIDs, tenants or occupiers of properties near the site and to the public generally.

20.0 MATERIALS OBTAINED FROM EXCAVATION

Materials of any kind obtained from excavation on the site shall remain in the property of M/s ISID and shall be disposed of as the Consultant / PMC may direct.

21.0 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 M/s ISID 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 Consultant with such discovery and carry out the Consultant's directions as to the disposal of the same at the expense of M/s ISID.

22.0 PROTECTION OF TREES, WATCHING AND LIGHTING

22.1 Trees / Plants designated by the Consultant shall be protected from damages during the course of the works and earth level within 01 meter of each such tree / plant shall not be changed. Where necessary, such tree shall be protected by providing temporary fencing at the Contractor's expense.

22.2 The Contractor shall provide and maintain at his own expense all lights, guards, fencing, green netting, safety taps, construction signage's, watch & ward 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.

23.0 PATENT RIGHTS

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

24.0 CONTRACTORS SUPERVISION

24.1 The Contractor shall himself supervise the execution of the works and shall appoint a qualified engineer approved by the Consultant / PMC to act in his stead. If the Contractor fails to appoint a suitable agent / engineer as directed by the Consultant / PMC, the Consultant / PMC shall have full powers to suspend the execution of the work until such date as a suitable agent 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.

- 24.2** 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 Consultant, any error or omission which he may discover and shall subsequently proceed with the work in accordance with instructions from the Consultant concerning such error or omission. Directions given to any Contractor's superintendent for the project shall be binding as given to the Contractor.

25.0 INSPECTION AND APPROVAL

- 25.1** 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 Consultant or his authorized representative when each stage is ready. In default of such notice, the Consultant shall be entitled to appraise the quality and extent thereof at the Contractor's expense.
- 25.2** No work shall be covered up or put out of view without the approval of the Consultant 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 Consultant or his authorized representative whenever any such work of foundation is ready for examination and the Consultant 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 Consultant uncover such work at the Contractor's expense.
- 25.3** Consultant / PMC 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.

26.0 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 Consultant 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 Consultant 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 Consultant.

27.0 UNCOVERING AND MAKING GOOD

The Contractor shall uncover any part of the works and or make openings in or through the same as the Consultant may from time to time direct for his verification and shall make good such part to the satisfaction of the Consultant 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 M/s ISID. In any other case all such expenses shall be borne by the Contractor.

28.0 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 Consultant / M/s ISID 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 Consultant accordingly.

29.0 COMPLETION CERTIFICATE

29.1 As soon as the work is completed the Contractor shall give notice of such completion to the Consultant and within 30 days of receipt of such notice Consultant 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 Consultant.

29.2 When the separate periods of completion have been specified for items or groups of items, the Consultant shall issue separate Virtual Completion certificates for such items or groups of items. Such certificate shall be issued.

29.3 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 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 Consultant or his representative and made the whole premises fit for immediate occupations or use to satisfaction of the Consultant.

29.4 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 Consultant 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 as 'the relevant part') then notwithstanding anything expressed or implied elsewhere in this contract.

29.4.1 Within thirty days of the date of completion of such item or group of items or possession of the relevant part, the Consultant shall issue Virtual Completion certificate for the relevant part.

29.4.2 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.

29.4.3 For the purpose of ascertaining compensation for delay under condition 30 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 14 and actual date of Virtual Completion as certified by the Consultant under this condition.

29.5 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 Consultant / PMC as well as the Contractor's authorized representative.

30.0 COMPENSATION FOR DELAY

- 30.1** If the Contractor fails to maintain the required progress or to complete the work and clear the site on or before the contract period or extended date-period of completion, he/they shall without prejudice to any other right or remedy of M/s ISID 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 14.
- 30.2** This will also apply to items or groups of items for which separate period of completion has been specified.
- 30.3** 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, M/s ISID 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 M/s ISID decided to appoint. All extra expenses incurred shall be recoverable from any money due to the Contractor or lying to his credit with M/s ISID.
- 30.4** The amount of compensation may be adjusted or set off against any sum payable to the Contractor under this or any other contract with M/s ISID.

31.0 DEFECTS LIABILITY PERIOD

- 31.1** The Defects Liability period shall commence from the date of virtual completion as mentioned in the certificate of Virtual Completion issued by the PMC 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 Consultant or the consulting Consultant or M/s ISID, within the defects liability period. For materials and workmanship not in accordance with the contract upon directions in writing of the Consultant and within such reasonable time specified there in, the Contractor shall amend and make good these at his own cost, unless the Consultant shall decide that the Contractor ought to be paid for such amendments and for making good. In case of default, M/s ISID 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 M/s ISID or may be deducted from any money due or that may become due to the Contractor.

32.0 CONTRACTOR'S LIABILITY AND INSURANCE

- 32.1** 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 M/s ISID Tools & Plants from any cause whatsoever (except the Expected Risks) and shall at his own cost repair and make good the same so that at completion of the works, all works and all M/s ISID'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 Consultant.

- 32.2** 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 M/s ISID 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. The Contractor shall not be bound to indemnify M/s ISID against any compensation or damage caused by the Expected Risks.
- 32.3** 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 M/s ISID but including M/s ISID'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 M/s ISID & any employee of the Consultant / PMC) by or arising out of the carrying out of the contract, by keeping in force the "All Risk Policy" that shall cover Contractor's All Risk Policy for an amount of **110%** of Contract value; validity up to end of Defect Liability Period. The Contractor shall also obtain Third party insurance for a Minimum sum of Rs. 10,00,000/- (Rupees Ten Lakhs only) for each accident for a maximum of ten accidents initially and to be renewed if required to cover subsequent accidents.
- 32.4** The Contractor shall at all times indemnify M/s ISID against all claims, damages or compensation under the provision of payment of Wages Act-1936, Minimum Wages Act-1948, M/s ISID'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 Labor (Regulation and Abolition) Act-1970, Safety Code and Labor 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 M/s ISID, 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.
- 32.5** 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 M/s ISID 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 M/s ISID 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 Consultant may deem fit.

- 32.6** The aforesaid Insurance policy / policies shall provide that they shall not be cancelled till the Consultant have agreed to their cancellation. The Contractor shall prove to the Consultant 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.
- 32.7** 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 M/s ISID 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.
- 32.8** 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 M/s ISID 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 M/s ISID from any money due or which may become due to the Contractor or recover the same as a debt due from the Contractor.

33.0 FACILITIES TO THE CONTRACTORS

The Contractor shall, in accordance with the requirement of the Consultant afford all reasonable facilities to other Contractors engaged simultaneously on separate contracts in connection with the works and for departmental labor and labor 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 M/s ISID may enter into in connection with or ancillary to the works.

34.0 NOTICES FROM LOCAL BODIES / AUTHORITIES

- 34.1** The Contractor shall comply with and give all notices required under any Governmental authority, rule or order made under any Act of Parliament, State & National laws or any regulation or bye-laws of any local authority relating to the works. The Contractor shall before make any variation from the contract shall necessitated by such compliance, give to the Consultant and consulting Consultant a written notice giving reasons for the proposed variation and obtain the instructions therein from the Consultant and Consulting Consultant.
- 34.2** The Contractor shall pay and indemnify M/s ISID 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.

35.0 SUB-CONTRACTS

The Contractor shall not sublet any portion of the contract without prior written permission of the Consultant / M/s ISID.

36.0 INSTRUCTIONS AND NOTICES

- 36.1** Subject as otherwise provided in the contract, all notices to be given on behalf of M/s ISID and all other actions to be taken on its behalf may be given or taken by the Consultant or his authorized representative.
- 36.2** 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.
- 36.3** 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 Consultant may consider necessary. Orders given to the Contractor's agent / engineer shall be considered to have the same force as if they had been given to the Contractor himself.
- 36.4** The Consultant / PMC shall communicate or confirm his instructions to the Contractor in respect of the execution of the work in a 'Site Order Book' maintained in the site office 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)
- 37.0 FORECLOSURE OF CONTRACT IN FULL OR IN PART DUE TO ABANDONMENT OR REDUCTION IN SCOPE OF WORK**
- 37.1** If at any time after acceptance of the tender, M/s ISID 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 Consultant 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, overheads 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.
- 37.2** 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 Consultant for the items hereunder mentioned which could not be utilized on the work to the full extent because of the foreclosure:
- 37.2.1** Any expenditure incurred on preliminary Site work, eg. Temporary access roads, temporary labor huts, staff quarters and site office, storage accommodation and water storage tanks.
- 37.2.2** M/s ISID 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, M/s ISID shall be bound to take over the materials or such portions thereof as the Contractor does not desire to retain.
- 37.2.3** For materials taken over or to be taken over by M/s ISID, 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.
- 37.2.4** For Contractor's materials not retained by M/s ISID, 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.

37.2.5 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.

37.2.6 If any material(s) supplied by M/s ISID are declared surplus, the same shall be returned by the Contractor to M/s ISID 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 M/s ISID's stores, if so required by the Consultant will be borne by M/s ISID.

37.3 The Contractor shall, if required by the Consultant, 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.

38.0 TERMINATION OF CONTRACT FOR DEATH

38.1 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 M/s ISID 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.

38.2 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, M/s ISID 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.

39.0 CANCELLATION OF CONTRACT IN FULL OR PART

M/s ISID shall be empowered to cancel the contract in full or part without paying any compensation:

39.1 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 Consultant.

39.2 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 Consultant.

39.3 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 Consultant.

39.4 If the Contractor shall offer or give or agrees to give to any person in M/s ISID'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 M/s ISID.

- 39.5** If the Contractor shall obtain a contract with M/s ISID as a result of ring tendering or other non-bonafide methods of competitive tendering; or
- 39.6** 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
- 39.7** 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; or
- 39.8** If the Contractor assigns, transfer, sublets (engagement of labor on a piecework basis or of labor 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 M/s ISID, cancel the contract as a whole or only such item of work in default from the contract.
- 39.9** The Accepting Authority shall on such cancellation have powers to:
- 39.9.1** Take possession of the site and any materials, construction plant, implements, stores, etc. therein; and or
- 39.9.2** Carryout the incomplete work by any means AT THE RISK AND COST OF THE CONTRACTOR
- 39.10** On cancellation of the contract, in full or in part, the Consultant 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 M/s ISID. 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.
- 39.11** Any excess expenditure incurred, or to be incurred by M/s ISID in completing the works or part of the works or the excess loss or damage suffered or may be suffered by M/s ISID 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.
- 39.12** If the Contractor shall fail to pay the required sum within the aforesaid period of 30 days, the Consultant 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.

39.13 Any sum in excess of the amounts due to M/s ISID 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.

40.0 CLAIMS AGAINST OBLIGATION OF THE CONTRACTOR OR SUB CONTRACTOR

40.1 The M/s ISID 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.

40.2 A payment made pursuant to article 40.1 is to the extent of the payment, a discharge of the M/s ISID's liability to the Contractor under the contract and may be deducted from an amount payable to the Contractor under the contract.

40.3 To the extent that the circumstances of the work being performed for the M/s ISID 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 mechanic's liens.

40.4 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 M/s ISID to pay the Contractor.

40.5 The Contractor shall, whenever requested to do so by the M/s ISID's representative, make a statutory declaration depositing to existences and condition of any claims referred to in article 40.4

40.6 Article 40.1 shall only apply to claims and obligations that have been received by the M/s ISID's representative in writing before payment to the Contractor pursuant to the 'Terms of Payment' and within 120 days after a claimant.

40.6.1 should have been paid in full under his contract with the Contractor where the claim is for money that was lawful required to be held back from the claimant; or

40.6.2 Performed the last of the services, work or labor, 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 40.6.1

41.0 LIABILITY FOR DAMAGES, DEFECTS IMPERFECTIONS AND RECTIFICATIONS THERE OF

41.1 If the Contractor or his work men or employees shall injure or destroy any part of the building & building's equipment's, accessories 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 Consultant 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 Consultant forthwith rectify or remove and re-construct 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 Consultant in his notice aforesaid, the Consultant 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.

41.2 In repairs and rectification works, splashes and droppings from white washing, painting, concreting, plastering, excavation etc. shall be removed and surfaces needs to be cleaned simultaneously by the Contractor with completion of these items of work in individual rooms, common areas etc. where the work is done, without waiting for 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 Consultant shall have the right to get the work done by other means at the cost of the Contractor. Before taking such action, however, the Consultant shall give notice to the Contractor.

41.3 Contractor to clean the site properly including cleaning of Windows Glasses, All Common areas equipment's, piping, gates, doors, stairs, terraces etc. before handing over the site to the Consultant / M/s ISID.

42.0 URGENT WORKS

If any urgent work (in respect whereof the decision of the Consultant shall be final and binding) becomes necessary and the Contractor is unable or unwilling at once to carry it out, the Consultant 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 M/s ISID shall be recoverable from the Contractor and be adjusted or set off against any sum payable to him.

43.0 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 39.0 hereof and same action may be taken and the same consequences shall ensure as provided for in the said condition 39.0.

44.0 VALUATION AND PAYMENT

44.1 The Consultant shall, except as otherwise stated, ascertain and determine by measurement the value in accordance with the contract of the work done in accordance therewith.

44.2 All items having a financial value shall be entered in measurement Book(s), prescribed by PMC / M/s ISID, so that a complete record is obtained of all work performed under the contract.

- 44.3** Measurement shall be taken by the Contractor only in presence of Consultant / PMC, and by the M/s ISID or his authorized representative.
- 44.4** Before taking measurement of any work, the Consultant or the person reputed 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 Consultant or by the person deputed by him shall be taken to be the correct measurements of the work.
- 44.5** The Contractor shall, without extra charges, provide assistance with every appliance, labor and other things necessary for measurements.
- 44.6** 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 M/s ISID, 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.

45.0 METHODS OF MEASUREMENT

Measurements shall be taken as per specification set forth in the Specifications and Schedule / Bill of Quantities notwithstanding 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 / Bill of Quantities, measurement shall be taken in accordance with the relevant Standard Method of Measurement issued by the Indian Standards Institution.

46.0 PAYMENT ON ACCOUNT

- 46.1** The Contractor shall submit interim bills, for the work executed, at intervals mentioned in Appendix I on or before the date fixed by the Consultant. The Interim bills shall be supported by detail measurements and consumption statements of cement and other materials supplied by M/s ISID. The Consultant shall then arrange to have the bill verified within a span of 15 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 18 working days from the date of bill submission by the Contractor. M/s ISID shall make the payment to the Contractor within 10 working days from the date of issue of the certificate of payment.
- 46.2** Payment on account for the amount admissible shall be made by the Consultant, certifying the sum to which the Contractor is considered entitled by way of interim payment for the following:
- 46.2.1** 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.
- 46.2.2** 75% of the cost (as assessed by the Consultant) reasonably required in accordance with the contract and have been brought to sight for incorporation in the works and are safeguarded against loss due to any cause whatsoever to the satisfaction of the Consultant, shall be payable on demand by the Contractor, provided the Contractor provides an insurance cover for the full cost of such materials.

- 46.3** The advance payment under clause 46.2 shall be adjusted as and when materials are utilized in the works.
- 46.4** 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 Consultant, 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.
- 46.5** Pending consideration of extension of date of completion interim payment shall continue to be made as herein provided.

47 TIME LIMIT FOR PAYMENT OF FINAL BILL

- 47.1** The Contractor shall submit the final bill within One month of Virtual Completion of the works to be certified by the Consultant. 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:
- 47.1.1** Detailed Measurements from 1st running account bill to final bill.
- 47.1.2** All written guarantees and warranties required by the contract documents.
- 47.1.3** Two copies of as-built drawings and one set of drawings on reproducible tracing film and soft copy of as-built drawings in pen drive.
- 47.1.4** Operation and maintenance manuals, Do's & Don'ts and instructions for equipment and apparatus.
- 47.1.5** All testing and commissioning reports duly signed & stamped.
- 47.1.6** Inventory of materials, accessories and equipment's.
- 47.1.7** Purchase Bills & Manufacturer's Test Certificates (MTC) for Cement, Steel, Waterproofing materials etc.
- 47.2** 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 Consultant, within 3 months, the period being reckoned from the date of receipt of the bill by consultant.
- 47.3** 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.

48 ESCALATION

- 48.1** 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 labor wages and / or diesel takes place, the Contractor shall still be bound to continue and furnish the works at the quoted rates. No escalation claim shall be entertained for any statutory increase by the Local Authorities, State / Central Government during the project period including extended period.

49 OVERPAYMENTS AND UNDER PAYMENTS

- 49.1** Whenever any claim for the payment of a sum of money to M/s ISID arises out of or under this contract against the Contractor, the same may be deducted by M/s ISID 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 M/s ISID or from any other sum due to the Contractor from M/s ISID (which may be available with M/s ISID) or from his security deposit, or he shall pay the claim on demand.
- 49.2** M/s ISID reserves the right to carry out post payment audit and technical examination of the final bill, including all supporting vouchers, abstracts etc. M/s ISID 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 50 of this contract, and notwithstanding the fact that the amount of the final bill figures in the arbitration award.
- 49.3** 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 M/s ISID from the Contractor by any or all of the methods prescribed above, or if any underpayment is discovered, the amount shall be duly paid by the Contractor by M/s ISID.
- 49.4** Provided that the aforesaid right of M/s ISID to adjust overpayments against amount due to the Contractor under any other contract with M/s ISID 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.
- 49.5** 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 M/s ISID on any other contract or account whatsoever.

50 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 the Consultant, whose award shall be final, conclusive and binding on all parties related to this contract.

- 50.1 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 M/s ISID of any certificate to which the Contractor may claim to be entitled to, or if the M/s ISID 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.

- 50.2** 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.
- 50.3** If the Contractor(s) does/do not prefer 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 M/s ISID shall be discharged and released of all liabilities under the contract in respect of these claims.
- 50.4** **Obligation during tendency of arbitration:** work under the contract shall unless otherwise directed by the Consultant, continue during the arbitration proceedings, and no payment due to or payable by the M/s ISID 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.
- 50.5** **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) and in case where the issue involved are not of a complicated nature, the General Manager shall be the Sole Judge to decide whether or not the issues involved are or a complicated nature.
- 50.6** Two Arbitrators who shall be Gazetted Officer of M/s ISID 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.
- 50.7** 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.
- 50.8** 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. 3,00,000/- (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.
- 50.9** For the purpose of appointing “two arbitrators” as referred to in sub-clause (a) 11 above the M/s ISID will send a panel of more than three names of Gazetted officers of one or more departments of the M/s ISID 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 M/s ISIDs 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 nominate 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 M/s ISID shall be considered as of equal status to the officers in the intermediate administrative grade of other departments of the M/s ISID for the purpose of appointment as arbitrator.

- 50.10** 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 offices 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.
- 50.11** 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.
- 50.12** It will 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 M/s ISID 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 M/s ISID 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.
- 50.13** 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.

51.0 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**.

52.0 DETERMINATION OF CONTRACT

- 52.1 Right of M/s ISID to determine contract:** M/s ISID shall be entitled to determine and terminate the contract at any time should, in M/s ISID's opinion, the cessation of work becomes necessary owing to paucity of funds 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 be paid for in full at the rates specified in the contract. notice in writing from M/s ISID of such determination and the reason therefore shall be conclusive evidence thereof.
- 52.2 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, M/s ISID shall admit and consider such claims as are deemed reasonable and are supported by the vouchers to the satisfaction of the Consultant. The Contractor shall have no claim to any payment of compensation or otherwise how so ever on account of any profit, overheads 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. M/s ISID's decision on the necessity and propriety of such expenditure shall be final and conclusive.

53.0 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 Consultant 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
- i. Fail to remove materials from the site or to pull down and replace work after receiving from the Consultant 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 labor as required or.
- k. Fail to afford the Consultant or Consultant representative proper facilities for inspecting the works or any part there of as required
- l. 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 M/s ISID or to any person on his – or – on their behalf in relation to the execution of this or any other contract with M/s ISID.

Right of M/s ISID after rescission 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 Consultant 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 Consultant or the Consultant 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 Consultant shall, as soon as may be practicable after removal 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 rescission 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) M/s ISID shall not be liable to pay Contractor any moneys 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 M/s ISID have been ascertained and the amount there of certified by the Consultant. The Contractor shall then be entitled to receive only such sum or sums (if any) as the Consultant 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 M/s ISID the amount of such excess and it shall be deemed a debit due by the Contractor to M/s ISID and shall be recoverable accordingly.

54.0 RECORDS TO BE KEPT BY CONTRACTOR

54.1 The Contractor shall:

54.1.1 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

54.1.2 Make all records and material available to audit and inspection by M/s ISID representative or person acting on behalf of them, when requested.

54.2 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.

54.3 The Contractor shall cause all sub-Contractors 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.

54.4 The Contractor to submit and maintain following records and handover to Engineer-in-charge / PMC on following basis which shall indicate but not be limited to the following:

- a) Manpower deputed / strength record – Daily basis.
- b) Records of all drawings / details / sketches issued – Monthly basis.
- c) Record of all type of material Inward/ outward – Monthly basis.
- d) All the F.Q.A. test records – As & When conducted / Monthly basis.
- e) Proper records of delays/ Hindrances (If any) – Monthly basis.
- f) Site security 24 x 7 – From Mobilization till Handing over
- g) Manufacturer test certificate for all materials supplied– With each RA Bills.
- h) Records of all tests being conducted – As & When conducted / Monthly basis
- i) Check lists – Monthly basis.

- j) Consumption of material – Monthly basis.
- k) Bottleneck if any and action proposed – Weekly basis
- l) Actual v/s planned progress in percent – Weekly basis.
- m) Critical activity to be undertaken & completed in current month – Monthly basis.
- n) Project progress photographs – Daily basis
- o) Monthly Project Report in graphical / pictorial form.

55.0 Coordination of Traders

- 55.1** 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.
- 55.2** 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 M/s ISID's representative's approval at no additional cost to M/s ISID.
- 55.3** All additional costs to remove, replace, correct and / or modify the work of trades to achieve proper coordination shall be paid by the Contractor.
- 55.4** It is the responsibilities of 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 M/s ISID 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.
- 55.5** 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 their location must be approved by M/s ISID representative before installation.
- 55.6** This project is designed to conform to imperial measurement and standards. If any specified materials or equipment are available only in metric 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 together properly.
- 55.7** Any discrepancies in the drawings, details, schedules or specifications or between these documents and the site conditions shall be clarified with M/s ISID representative prior to doing the work. Contractor shall include, at no cost to M/s ISID, the most expensive condition.

56.0 Matters Finally Determined by the M/s ISID :

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 M/s ISID, and M/s ISID 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.

57.0 Undertaking:

I / We have read the Special Conditions of Contract & General Conditions of Contract and agree to abide by all terms and conditions of same.

I / We hereby state that nobody of my / our organization is / are a relative of any Director / employee of and also further state that no Director / Member of is / are a Director / Partner of my / our company / organization / partnership / proprietary concern in any way.

My / our firm / establishment is having requisite licenses and approvals from the concerned authorities under various applicable laws.

I / We have not engaged any person(s) of doubtful antecedent and if any such person (s) found by M/s ISID or PMC, I / We am / are agreeing for punishment as deemed fit by M/s ISID.

Seal & Signature of Tenderer

ANNEXURE - I
REFERENCE TO GENERAL CONDITIONS OF CONTRACT

1	Accepting Authority	:	M/s Institute for Studies in Industrial Development, New Delhi
2	Percentage addition to cover profit and over heads of Contractor in rate analysis while working out Market Rates.	:	20% (Twenty percent)
3	Earnest Money	:	Rs. 2,10,000/- (Rupees Two Lac Ten Thousand Only)
4	Mobilization Advance	:	Interest free advance of 10% of the total Contract Value against Bank Guarantee of equal amount, shall be recovered from R.A. Bills on pro-rata basis
5	Secured Advance	:	As per GCC / SCC
6	Security Deposit	:	Deducted @5 % of each interim bill.
7	Time allowed for execution of work	:	03 months from the 7 th day of the date of award of LOI / Work Order.
8	Performance Guarantee	:	5% of the Contract value in the form of Bank Guarantee
9	Compensation for delay	:	1% of the value of unfinished work per week of delay, up to a maximum of 10 (Ten) percent of total awarded contract value
10	Defects Liability Period	:	12 months after the date of virtual completion issued by Consultant.
11	Interim Bills	:	Fortnightly subject to a minimum of Rs.15,00,000/- (Rupees Fifteen Lacs Only)
12	Escalation	:	Not Payable
13	Court of Jurisdiction	:	New Delhi
14	Tax Deduction	:	As applicable at the time of signing of contract.
15	Validity of Contract	:	Entire construction period from the date of issuing work order / LOI
16	Insurances	:	As Per GCC / SCC

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 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/ Consultant Specifications/ drawings attached if item is not covered under Technical Specifications. Unless otherwise specified in the nomenclature of the individual item.
- 1.2 For item not covered under Specifications, the work shall be done as per latest relevant IS: code (Indian Standard code) of practice. In case of any discrepancy between the specifications of IS: code of practice and CPWD specifications in IS: code shall take precedence.

For items not covered by para 1.1 and 1.2 above, the work shall be done as per sound engineering practice as directed by the Consultant / PMC whose decision in this regard shall be final binding on the Contractor.

2.0 The Contractor to submit the following documents in accordance with the Contract Conditions to the Project-in-charge / PMC within the timelines specified below:

- 1. Insurances (WC and CAR) within 10 days from the date of issue of Letter of Intent.
- 2. Detailed Construction Programme within 07 days from the date of issue of Letter of Intent based on the Tender drawings and BOQ.
- 3. Detailed Site Layout with the Logistic plan within 07 days from the date of issue of Letter of Intent.
- 4. Preliminary Plant and Equipment deployment schedule within 07 days of issue of Letter of Intent.
- 5. Preliminary Site Organization and planned Staff deployment schedule within 07 days of issue of Letter of Intent.
- 6. Methodology of Taking-up Construction / Repairs & strengthening activities within 07 days of issue of Letter of Intent.
- 7. List of Queries and clarifications on the issued drawings - within 10 days of issue of Letter of Intent.
- 8. List of Queries / Clarifications on the Tender document & BOQ - within 10 days of issue of Letter of Intent.
- 9. List of requirements of drawings / details on programme basis - within 10 days of issue of Letter of Intent.

3.0 LAND AND SITE UTILIZATION

- 3.1 The Contractor shall examine the site and satisfy himself regarding the space available for workshops, godown, site office, storage of materials and other building materials. Any additional space required by the Contractor shall be arranged by him at his own cost. NO LABOUR CAMP IS ALLOWED WITHIN THE SITE PREMISES.

- 3.2 The Contractor shall prepare a Site Utilization Plan showing location of temporary site offices, stores, godowns, fabrication plant forms, workshops in consultation with and approval of Consultant / Consultant before creating these facilities. The Contractor shall make all the above arrangements at his own cost and M/s ISID will not entertain any claim whatsoever in this respect.
- 3.3 The Contractor shall ensure that the offices, stores, godowns etc. are vacated on completion / termination of the contract. In case of his failure to vacate the area, M/s ISID will be at liberty to with hold his payment and initiate legal action for eviction. The legal actions will be initiated against the Contractor and not the individual laborers.

4.0 WATER SUPPLY

Water for construction purposes shall be available. The Contractor shall have to bear the water charges and electrical charges during the period of construction. No additional payment shall be entertained to Contractor by M/s ISID in any circumstances. The Contractor shall obtain certificate(s) showing that the water obtained by him from whatever source is suitable for construction in accordance with relevant clauses of relevant IS codes.

5.0 POWER SUPPLY

Temporary Power connection shall be available at site. The Contractor shall make his own arrangements for further distribution to suit his requirement. The Contractor shall bear all the electrical expenses during the period of construction. If required at site, Contractor shall arrange DG Set (As per norms) at their own without any extra cost to the Client / M/s ISID and shall maintain the pace of project as per the Completion timeline requirements.

6.0 MOCK UPS / SAMPLES

To determine the acceptable standard of workmanship, the Contractor shall execute a portion of the items of work as samples and Mockups as per the instructions of Consultant or as directed by Consultant for the approval of the Consultant before taking up actual execution of the particular items of work. These samples / Mockups on approval of the Consultant shall be the guiding samples for the execution of the particular items of work. These approved samples of work shall be kept without any damages until the completion of the construction activity. Work not conforming to the approved samples shall be rejected. Rates quoted for the items shall include for such preliminary work and shall not be paid separately.

7.0 SAMPLING AND TESTING

All materials need in the works shall conform to relevant IS standard and may be subjected to inspection and test. Samples of all materials proposed to be employed in the permanent works shall be submitted to the Engineer / Consultant for approval before they are brought to the site. These samples shall be submitted 15 days in advance of the material to be used at site. If the sample is approved, the material shall be arranged and brought to site within ten days. Samples provided to the Engineer / Consultant for their retention are to be in labeled boxes suitable for storage. The submitting of samples and provision of correct brands does not absolve the Contractor from any responsibility towards the provisions of this Contract, guarantees, materials or workmanship.

8.0 PROGRAMME FOR WORKS AND PROGRESS REPORTS

The Contractor shall submit within 07 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 got approved from the Consultant / PMC before starting of the work and shall be binding on the Contractor. The Contractor shall furnish fortnightly or other periodical progress reports and update the program time to time as per the cycle fixed by PMC.

9.0 MAINTENANCE OF SCHEDULE OF WORK

If Contractor is not performing the work at a rate which will maintain the Schedule of Work, Contractor shall, at its expense and without entitlement to any additional compensation, cause Contractor's Personnel to work such overtime and shall furnish such additional personnel and other resources and Materials as may be required to comply with the Schedule of Work.

10.0 COORDINATION

The Contractor shall co-operate & co-ordinate with M/s ISID's supplied materials / equipments etc. and other working Contractors, departmental construction work if any, laying of services etc. Contractor shall study the plans, specifications and time schedules of other Contractors and so plan his work in consultation with the Consultant / PMC and other Contractors so that all the related activities of other agencies are dove-tailed and co-ordinated. The Contractor shall forward to the Consultant all correspondences 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. No extra charges shall be payable to the Contractor on this account and all the expenses to be included while filling up the rates.

11.0 STORES AND MATERIALS:

All the stores and materials (confirming to specifications in relevant IS: codes / CPWD specifications) except the materials stipulated for issue by M/s ISID, 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 M/s ISID on account of delay in either providing these material or non-availability of any of the materials in the market.

- 12.0** The sources for all the Construction related material shall be approved by the Consultant / PMC and shall not change until and unless approval by Consultant / PMC 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.

13.0 CONSTRUCTION PERIOD:

The works shall be completed in 03 months, starting from 7th (Seventh) day after the issue of the LOI / work order.

14.0 PROFESSIONAL PERFORMANCE

Contractor shall perform the Work in a professional manner, using sound engineering and design principles and management and supervisory procedures, and in accordance with the highest standards of care employed by leading national engineering firms in the

industry. Contractor represents that it has the required skills and capacity to perform the Work in the foregoing manner.

15.0 INCOME TAX :

M/s ISID will deduct the required amount towards TDS as per the latest Income Tax rules, from all payments made to the Contractor.

16.0 TAXES AND DUTIES

16.1 The Contractors / Sub-Contractor's tendered rates shall be deemed to include all taxes, duties, levies, cess, charges, octroi / entry tax including sales tax, service tax, Value Added tax (VAT), loading / unloading / handling etc. charges of any nature and by whatever name called on all materials incorporated in the works. The Contractor / Sub-Contractor shall not entitle to make any claim in this account. M/s ISID shall not entertain any claim on this account. M/s ISID shall be entitled to deduct taxes at source (in accordance with applicable laws) from all payments made to Contractor / Sub-Contractor and the necessary TDS certificated shall be issued to the Contractor / Sub-Contractor for such tax deductions. Any such withholding of tax by M/s ISID shall have no effect on the rates and prices for the works and such rates and prices shall not be liable to increase because of any withholding of tax.

16.2 Only GST@18% shall be paid separately on quoted total cumulative amount.

16.3 In the event any fresh taxes or levies are imposed by the State or the Central Government during the execution of the work these shall be paid extra. Any fines, interest, penalty imposed because of delay in payment of Taxes shall be borne by the Contractor / Sub-Contractor.

17.0 CONTRACT SIGNING :

After acceptance of the tender, the tenderer shall sign the necessary contract papers within 15 days of the intimation. Expenses for all agreement including cost of stamp papers etc. shall be borne by the Contractor.

18.0 MOBILIZATION ADVANCE

An interest free advance of 10% of the total value of work shall be paid to the Contractor, upon successful mobilization (duly verified by Consultant) against Bank Guarantee of equivalent amount. The same shall be deducted from the Contractor's Running A/C Bills till 80% of work is completed, on pro-data basis.

19.0 Strict safety measures shall be observed by the Contractors till the completion of job. A Fine of Rs. 50,000/- shall be deducted from the Contractor RA Bill for minor accident and Rs. 2,00,000/- shall be deducted for each major accident & contractor shall be completely liable & responsible.

20.0 This contract is an item rate contract, based on the item rate value / tender drawings, specifications. The Contractor to work out the quantities and rate for each individual item and workout the total amount.

21.0 Contractor to visit the site to assess the actual conditions of the site before quoting their rates.

22.0 The acceptance of the Tender shall be conditional and not finally binding upon M/s ISID until the actual Contract signed between M/s ISID 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, M/s ISID 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 the initial Guarantee shall be confiscated by M/s ISID 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 M/s ISID 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 M/s ISID 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.

23.0 STANDARDS

All materials and works shall conform to Tender 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 Consultant 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.

Besides the above, all work shall be executed as per latest National Building Code specifications and installation details as amended up to date.

24.01 Minimum Work Supervision Staff at Site

Contractor shall depute (minimum) below mentioned site supervisory staff after the award of the contract:

b) Civil structural, fabrication, and finishing works

- i) Project Manager 01Nos.
(Degree Holder with minimum 10-15 years of experience or Diploma Holder 15-20 years of experience, who should be aware of the Contractor's role and Contractor's general obligations and should be capable of executing all such works.)
- ii) Project Engineer 01Nos.
(Degree Holder with minimum 05-07year experience or Diploma Holder 10-year experience, who should be aware of the Contractor's role and Contractor's general obligations and should be capable of executing such works.)
- iii) Site Supervisor 01 Nos.
(Degree Holder with minimum 03-05 year experience or Diploma Holder 10-year experience, who should be aware and should be capable of executing such works.)
- iv) Security Guard 01Nos.
(Shall have at least 7 to 10 years of experience in the field of above mentioned work)

24.02 Meetings/ Reports

Contractor shall give **Daily report** on deployment of category wise labour and equipment along-with the progress of work done on in the proforma prescribed by the Engineer.

The below-mentioned documents/reports shall be prepared and submitted by the Contractor for review/approval at various stages of the contract.

The following **Meetings** shall be held at regular intervals as given below:

A. Weekly Review Meeting

Level of Participation : Contractor / Contractor's Project Manager, PMC Site Engineer, Company / M/s ISID Representative.

Agenda : (a) Weekly programme v/s actual achieved in the past week and programme for next week.

(b) Remedial Actions and hold up analysis.

(c) Company's query/ approval.

Venue : Site office

B. Monthly Review Meeting

Level of Participation : Senior officials of PMC, Company / M/s ISID, Contractor.

Agenda : a) Progress status / Statistics.

b) Completion Outlook.

c) Major hold ups / slippages.

d) Required Assistance.

e) Critical issues.

f) Company's query / approval

Venue : Site office

The following **Reports** need to be prepared and submitted by the Contractor as given below:

C. Monthly Progress Report

This report (02 copies) shall be prepared and submitted by the Contractor on a monthly basis within Three (03) calendar days of the end of the month, covering overall scenario of the work. The report shall include but not be limited, to the following:

a) Brief introduction of the work.

b) Activities executed / achievements during the month.

c) Scheduled v/s actual percentage progress and progress curves for sub-ordering, manufacturing / delivery, sub-contracting, construction.

d) Areas of concern / problem / hold ups, impact and action plans.

e) Resource deployment status.

f) Annexure giving status summary for Material Requisitions and deliveries, sub-contracting and construction.

g) Preparation of estimates.

D. Weekly Progress Report

This report will be prepared and submitted by the Contractor on weekly basis and will cover following items:

- a) Activities programmed and completed during the week.
- b) Resources deployed (manpower and machinery).
- c) Quantity achieved v/s. targeted.
- d) Record of Man days lost.
- e) Construction percentage progress, scheduled and actual.
- f) Remedial action taken for damaged works
- g) Presentation of programme for subsequent week
- h) Discussion and review on necessary preventive and corrective action
- i) Implementation of instructions by the Contractor in time bound manner so as to eliminate the cause of non-conformities including adherence to quality and safety requirements.

E. Prioritisation Review

The Contractor is required to execute the works as per the approved schedule. However, during the period of execution, incase the necessity arises to change the priority of the construction schedule, as per the requirement of the Company, the Contractor is bound to follow the changed priority which shall be communicated to the Contractor during Review Meetings and Contractor shall have no claim whatsoever on this account.

- 25.0** Contractor shall ensure that the works shall carried out in such a manner that the neighbors, residents & staff & institution of existing building are not affected 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.
- 26.0** The Contractor is allowed to work net 9:00 A.M. to 5:00 P.M. or as per statutory conditions or as per the time allowed by M/s ISID.
- 27.0** Contractor to ensure that at all necessary stages of execution of work, the Consultant to inspect the work before pouring any concrete. Contractor to get stage clearance certificate from the Consultant.
- 28.0** For any doubt / clarification or discrepancy in specification, Contractor to inform the Consultant / PMC and seek his consultation and his decision shall be final and binding to contract.
- 29.0** The Contractor shall be solely responsible for the following:
 - a) To comply statutory laws etc.

- b) To co-ordinate/ liaison with Police / NDMC / NGT / Neighbor / any other issues during entire construction period, no extra payment shall be allowed or paid by M/s ISID in any case.
- 30.0** Contractor will set up a laboratory at site to test all basic ingredient materials at his own cost. In case if Contractor is not able to set up a lab then all the necessary tests shall be carried out through Third Party Tests (Approved lab by Consultant / PMC) at his own cost. No extra payment shall be paid to the Contractor.
- 31.0** The Contractor shall provide complete site protection before commencing excavation as per the instructions of the Consultant. The Contractor shall be fully responsible for all dewatering, well-pointing, shoring, strutting and the protection of adjacent structures during excavation. The rates quoted shall include all dewatering, and the measures for the protection of existing boundary edges. (credit to the Client)
- 32.0** Contractor will arrange to fabricate and erect sign board at his own cost showing name of work, name of M/s ISID, name of Consultant, name of PMC, name of Contractor date of commencement and completion as per site suitable size and approved by consultant.
- 33.0** The Contractor shall ensure round the clock security along with senior level supervision and maintain at his own expense gatekeepers and security to ensure at all times effective protection of their own materials and works, materials and workmen, until completion of the project, at his own risk and cost inclusive of all the necessary infrastructure like fencing & barricades etc.

34.0 SAFETY CONDITIONS

34.1 Comply with the safety rules issued by M/s ISID/ Consultant herein as under:

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 his fellow workers.
- c) To comply each rule mentioned and the statutory obligation in regard to safety.
- d) If required by M/s ISID Contractor shall depute a qualified safety Engineer-in-charge / PMC to the approved of M/s ISID.

34.2 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 and such other acts as applicable.
- b) The Contractor shall observe and abide by all fire and safety regulations of M/s ISID. Before starting construction work, Contractor shall consult with Engineer-in-charge / PMC and must make arrangements to the satisfaction of M/s ISID and loss or damage due to fire to any portion of the work done or to be done under this agreement or to any of M/s ISID's existing property.

34.3 Excavation and Trenching

- a) All trenches, manholes or opening in the floor of ground, whether the plant of otherwise, will be adequately fenced to the satisfaction of M/s ISID, except at exits and entrances for the labourers. On suspension of the work the exits will be closed by the barriers every day. If this is not done, necessary action will be taken or penalty will be imposed as directed by M/s ISID.
- b) No under-cutting or excavation will be done without written permission of M/s ISID.
- c) Excavation for the sides of the pits will be protected by proper shorting and strutting to the entire satisfaction of M/s ISID.
- d) No work on any road, foot-path or any place used as a traffic lane or parking space will be carried out without provision of proper fencing and warnings (signaling red flag during day time and red light during night time).
- e) None of employees of the Contractor will work under/ near or pass beneath the load which is being hoisted or lowered, unless a watchman is specially deputed to give warning should any hazard occur.
- f) All the loads being hoisted or lowered by the Contractor will be properly secured. The condition of the lifting tackles, wire ropes, chains shall be such as to comply with the requirements of the Factories Act.
- g) All machinery, equipment, tools (including the lifting tack less) will be of good strength, sound material and safe for their use. They will also be maintained properly.
- h) When the work is being done on cranes, railway tracks or roads, proper warning signs will, be displayed on all sides from where a vehicle or personnel may pass. The warning should be bold and easily visible. Stop blocks will be fixed on EOT craned if work is being done on the rail of the cranes in compliance with Factories Act.
- i) No blasting operations will be done at site.
- j) The Contractor generally follow IS-4081 Safety code for blasting and related drilling operation (other than mine)

34.4.0 Demolition / General Safety

34.4.1 Before any demolition work is commenced and also during the progress of the demolishing work.

- a) All roads and open area 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. No floor, roof or other part of the building shall be so overloaded with debris or materials as to render it unsafe.

- d) Contractor to clear all debris in through the mechanical transport thoroughly covered.

34.4.2 All necessary personal safety equipment as considered adequate by Engineer-in-charge / PMC 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) Workers employed on mixing asphaltic materials, cement and lime mortar shall provide with protective footwear and protective gloves.
- b) Those engaged in white washing and mixing or stacking cement bags or any materials which are injuries to the eyes shall be provided with protective goggles.
- c) Those engaged in welding and cutting works shall be provided with protective face and eye-shields, hard gloves etc.
- d) Stone breakers shall be provided with protective goggles and protective clothing, and seated at sufficiently safe intervals.
- e) When workers are employed in sewers and manholes, which are in use the Contractor shall ensure that the manhole covers are opened and are ventilated at least form and hour before the workers are allowed to get into the manholes, and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or board to prevent accident to the public.
- f) Fire Extinguishers are placed wherever fabrication works are going on.
- g) Regular Housekeeping/ Anti mosquitoes'/ Bees' chemical to be sprayed at site.
- h) Contractor to submit their Safety Manual to PMC to maintain safety at site.
- i) Proper Lighting arrangements are made to light up the site during night & at dark areas.
- j) Proper Safety taps & barricades are being used at site.
- k) Contractor to maintain all safety standards at site to conduct TOOL BOX MEETING at site on weekly basis.
- l) The Contractor shall not employ men below the age of 18 years and women on the work of painting with products containing lead in any form. Wherever men above the age of 18 year are employed on the work of lead painting, the following precautions should be taken.
 - 1) No paint containing lead or lead product shall be used except in the form of paste of readymade paint.
 - 2) Suitable face masks should be supplied for use by the workers when paint is applied in the form of spray or having lead paint dry rubbed and scrapped.

- 3) Overalls shall be supplied by the Contractor to the workmen and adequate facilities shall be provided to enable the working painters to wash them during and on cessation of work.

34.4.3 Use of hoisting machines and tackles including their attachments, anchorage and supports shall conform 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 good 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 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 / PMC. As regards Contractor's machines, the Contractor shall notify the safe working load of the machine to the Engineer-in-charge / PMC wherever he brings any machinery to Site of work and get it verified by the Construction Manager concerned.

34.4.4 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 it is in use. Adequate washing facilities should be provided at or near places or work

34.4.5 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.

34.4.6 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 / PMC or safety Engineer-in-charge / PMC of the Administration or their representatives.

34.5.0 Precautions against Fire

The Contractor will have to provide Fire Extinguishers/ Fire Buckets and drums at work site as recommended by Engineer-in-charge / PMC. 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 / PMC. Temporary combustible structures will not be built near or around the work site.

34.6.0 General Safety

First aid and Industrial Injuries

- a) Contractor shall maintain first aid facilities at site for its employees and those of its SUB-CONTRACTOR.
- 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 M/s ISID 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 M/s ISID and a copy Contractor's report covering each personal injury requiring the attention of a physician shall be furnished to M/s ISID.

34.6.1 General Rules

Smoking & chewing tobaccos within the site premises is strictly prohibited, Violators of the no smoking / no tobaccos rules shall be discharged immediately.

34.6.2 Contractor's Barricades

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

34.6.3 Scaffolding

- a) The scaffolds (made out of steel, aluminium only), supports (steel only) erected will be sound, safe and strong. Material used will be best of their kind to avoid any mishap or failure.
- b) Under no circumstances scaffolds or platforms will be overloaded.
- c) Right type of ladder will be used 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 through the 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 all do not exist.

The following precautions may be taking while working at heights:

- a) Safety belts will be used.
- b) If safety belt cannot be used the net will be tied below the work place to prevent fall of a person on the ground.
- c) The tools or loose material like nuts, bolts will be kept in a proper tool bag.

34.6.4 Welding

When welding operations are being carried out following precautions shall be taken:

- a) Written permission from the M/s ISID to carry out welding operations.
- b) Only a qualified experienced and test welder will allowed to work on welding operations.
- c) A proper electrical connection will be taken using a cable 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 warn passers by and watch for possible fire.
- e) When welding is being done at height, the equipments, machineries will be well protected and personnel warned. Inflammable material; will be not be kept within 12 metre 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.

ANNEXURE – II

BANK GUARANTEE IN LIEU OF MOBILIZATION ADVANCE

(On Non-Judicial Stamp Paper to be stamped in Accordance with Stamp Act,
the Stamp Paper to be in the Name of Executing Bank)

To

.....

.....

.....

In consideration of the having its registered office
at (hereinafter called
the “M/s ISID” which expression shall unless repugnant to the subject or context include its
successors and assigns) having agreed under the terms & conditions of the Award Letter No.
..... dated issued by the M/s ISID which have been
unequivocally accepted by

.....
(hereinafter called “Contractor” in connection with the work of
“.....” (hereinafter
called “Contract”) to make at the request of the Contractor a lump sum advance of Rs.
..... /- (Rupees Only) for utilizing it for
the purpose of the Contract on his furnishing a guarantee acceptable to M/s ISID.

1. NOW THEREFORE, we the Bank, a body corporate
constituted under the Banking Companies (Acquisition and Transfer of Undertaking) Act
1969 and having one of our branches at
..... (hereinafter referred
to as “Bank” which expression shall unless repugnant to the subject or context or meaning
thereof, include its successors, administrators, executors and assigns) do hereby
guarantee irrevocably and unconditionally the due recovery by M/s ISID of this said
advance as provided according to the terms & conditions of the said Contract. If the said
Contractor fails to utilize the said advance for the purpose of the contract and / or the said
advance thereon as aforesaid is not fully recovered by M/s ISID, we,
..... Bank do hereby unconditionally and
irrevocable undertake and agree to pay to M/s ISID on demand, the amount of Rs.
..... (Rupees
..... Only) as aforesaid,
without and demur, reservation, contest, recourse or protest and / or without any reference
to the Contractor.
2. We, the foresaid Bank, further undertake that M/s ISID shall be the sole judge of and as
to whether the Contractor has not utilized the said advance or any part thereof for the
purpose of contract and the extent of loss, damage, judgment, settlement, liability costs,
charges and expenses caused to or suffered by or that may be caused to or suffered by

M/s ISID on account of the said advance of the said advance not being recovered in full and the decision of M/s ISID that the said Contractor has not utilized the said advance or any part thereof for the purpose of the contract and as to the amount or amounts of loss, damage, costs, charges and expenses caused to or suffered by or that may be caused to or suffered by M/s ISID shall be final and binding on us.

3. We, the said Bank further undertake that Guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said contract and till they said advance has been fully recovered and its claims satisfied or discharged an till M/s ISID certifies that the said advance has been fully recovered from the said Contractor, and accordingly shall have no claim under this Guarantee after 30 (thirty) days from the date of satisfactory completion of the said contract (as per the mutually agreed Work schedule) i. e. up to and inclusive of (date) unless a notice of the claim under this Guarantee has been served on the Bank before the expiry of the said period i. e. (date) in which case the same shall be enforceable against the Bank notwithstanding the fact, that the same is enforced after the expiry of the said period.
4. The Bank further undertake that M/s ISID at its option shall be entitled to enforce this guarantee against the Bank as a principal debtor, in the first instance without proceeding against the Contractor and notwithstanding any security or other Guarantee that M/s ISID may have in relation to the Contractor's liabilities.
5. M/s ISID shall have the fullest liberty without affecting in any way the liability of the Bank under this Guarantee or indemnity, from time to time to vary any of the terms and conditions of the said Contract or the advance or to extend time of performance by the said Contractor or to postpone for any time and from time to time any of the powers exercisable by it against the said Contractor and either to enforce or forbear from enforcing any of the terms and conditions governing the said Contract or the advance available to M/s ISID and the said Bank shall not be released from its liabilities under these presents by any exercise by M/s ISID of the liberty with reference to the matters aforesaid or by reason of time being given to the said Contractor or any other forbearance, act or omission on the part of M/s ISID or any indulgence by M/s ISID to the said Contractor or any other matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so releasing the Bank form its such liability.
6. We, the said Bank, lastly undertake not to revoke this Guarantee during its currency except with the previous consent of M/s ISID in writing and agree that any change in the constitution, liquidation or dissolution of the said Contractor or the said Bank shall not discharge our liability hereunder. If any further extension of this Guarantee is required the same shall be extended to such required periods on receiving instructions from Contractor on whose behalf this guarantee is issued.
7. The right of M/s ISID to recover the said amount of Rs. (Rupees Only) from us in manner aforesaid will not be affected or suspended by reason of the fact that any dispute or disputes have been raised by the said Contractor and / or that any dispute or disputes are pending before any authority, officer, tribunal or arbitrator (s) etc.
8. Notwithstanding anything stated above, our liability under this guarantee shall be restricted to Rs. (Rupees Only) and our

guarantee shall remain in force up to (date) or any extension sought by Contractor and unless a demand or claim under the guarantee is made on us in writing within 30 (thirty) days after the aforesaid date i. e. on or before (date) all your rights under the guarantee shall be forfeited and we shall be relieved and discharged from all liabilities there under

Date :

Place :

Signature

(Name)

Designation

Bank's Common Seal

Authorization No.

In presence of

Witness

1.

2.

ANNEXURE - III
BANK GUARANTEE FOR PERFORMANCE SECURITY

To:

_____ (Name of Company)
_____ (Address of Company)

1. In consideration of M/s (hereinafter called “the COMPANY”) having agreed under the terms and conditions of Agreement No. _____ dated _____ made with _____ M/s _____ (hereinafter called “the said contractor”) for the _____ works (hereinafter called “the said Agreement”) for compliance of his obligation in accordance with the terms and conditions in the said agreement.

We, _____ (indicate the name of the Bank) (hereinafter referred to as “Bank”) hereby undertake to pay to COMPANY an amount not exceeding Rs. _____ (Rupees _____ only) on demand by the COMPANY.

2. We, _____ (Indicate the name of the Bank) do hereby undertake to pay the amount due and payable under this Guarantee without any demure, merely on a demand from COMPANY stating that the amount claimed is required to meet the recoveries due or likely to be due from the said contractor(s). Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount _____ not _____ exceeding Rs. _____ (Rupees _____ only).
3. We undertake to pay to the COMPANY any money so demanded notwithstanding any dispute or disputes raised by the contractor (s) in any suit or proceeding pending before any court or Tribunal relating thereto our liability under this present being absolute and unequivocal. The payment made by us under this bond shall be valid discharge of our liability for payment to there-under and the contractor(s) shall have no claim against us making such payment.
4. We _____ (Indicate the name of Bank) further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the COMPANY under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till the COMPANY certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said contractor(s) accordingly discharges this guarantee.

5. We _____(indicate the name of Bank) further agree with the COMPANY that the COMPANY shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor(s) from time to time or to postpone for any time or to suspend any of the powers exercisable by the COMPANY against the said contractor(s) and to forebear or enforce any of the terms and conditions relating to the said agreement shall not be relieved from our liability by reasons of any such variation or extension being granted to the said contractor(s) or for any forbearance act of omission on that part of the COMPANY or any indulgence by the COMPANY to the said contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effected or so relieving us.
6. The guarantee will not be discharged due to the change in the constitution of the Bank or the contractor(s).
7. We _____(indicate the name of Bank) lastly undertake not to revoke this guarantee except with the previous consent of the COMPANY in writing.
8. This guarantee shall be valid upto _____unless extended on demand by COMPANY. Notwithstanding anything mentioned above, our liability against this Guarantee is restricted to Rs. _____ (Rupees _____only) and unless a claim in writing is lodged with us within six months of the date of expiry or the extended date of expiry of this guarantee, all our liabilities under the Guarantee shall stand discharged.

Yours truly,

Signature and Seal:_____

Name of Bank:_____

Address:_____

Date:_____

ANNEXURE – IV

(To be submitted with each R.A. Bills)

COMPLIANCE CERTIFICATE

CERTIFICATE OF COMPLIANCE FOR HEALTH, SAFETY AND ENVIRONMENT FOR THE PERIOD ENDING

We presently executingworks at vide Contract dated in pursuance of our responsibility of compliance of all laws, rules, regulations, Notifications, circulars etc. In relation to Health, Safety and Environment in respect of the Acts as specifically mentioned in, the Contract and any other such Laws that may be applicable from time to time, do hereby confirm and certify that these is No default / contraventions / noncompliance in respect of the above which may impose civil and criminal liabilities on the Contractor / M/s ISID. In that event any violation or non-compliance is discovered at a later date, we shall solely be answerable and Liable to the Authorities, Courts and other Forums constituted under the relevant acts. We fully agree to compensate and indemnify the Contractor/M/s ISID, its Directors, Employees, agents, Representatives and all those connected with the Contractor/M/s ISID from all losses, costs, and Risks suffered by it due to such defaults/violations on our part.

Date :

Place :

Signature

(Name)

Designation

In presence of

Witness

1.

2.

ANNEXURE – V

(To be submitted with each R.A. Bills)

NO CLAIMS CERTIFICATE

CERTIFICATE OF NO CLAIMS FOR THE PROJECT ENDING

Wepresently executing works at
.....vide Contract no.
dated do hereby certify and confirm that our Interim Bill No.
Dated for the period from to includes all claims during the
aforesaid period.

We further certify that we have no claim towards any issue other than the amount claimed in the
aforesaid Interim Bill.

We further certify that we have no claims whatsoever arising from any action of the Contractor
/ Contractor's Representative / Respective vendors / Sub-vendors / Suppliers / Engineer / labours
etc. during the aforesaid period which may have resulted in any delay in the execution of Works.

Date :

Place :

Signature

(Name)

Designation

(To be signed and stamped by the authorized representative of the Contractor).

ANNEXURE – VI

(To be submitted with each R.A. Bills)

DEED OF INDEMNITY **For Labour Compliances**

THIS DEED OF INDEMNITY is made and executed at, on this Day of2026

IN FAVOUR OF

M/s _____, a Company registered under the Companies Act, 1956 having its Registered Office at _____, (hereinafter called the “Contractor” which expression shall, unless repugnant to this context or meaning thereof, shall , include its successors and permitted assigns).

BY

M/s _____, a Company registered under the Companies Act, 1956, having its Registered Office at _____ (hereinafter called the “Sub-Contractor” which expression shall, unless repugnant to the context or meaning thereof, shall include its successors and permitted assigns) through Mr. Authorised Signatory, duly authorised by the Board of Directors vide resolution dated _____

WHEREAS the CONTRACTOR intends to execute its _____ (name of the project) _____ at _____ (herein after referred to as “The Project” or “Works” as per the plans duly approved by the concerned authorities.

AND WHEREAS the CONTRACTOR has engaged the SUB-CONTRACTOR to provide its service to the Company in respect of the Project.

AND WHEREAS in pursuance of the terms of service, the SUB-CONTRACTOR has agreed to comply with all the “applicable Laws, Regulations, Orders, Notifications, Departmental Instructions and all other Government and Local Authorities concerning The Project and its business affairs.

AND WHEREAS the SUB-CONTRACTOR has also agreed to comply with the provisions of various Acts, Rules, Guide lines relating to labour related laws engaged by it in execution of the Project.

AND WHEREAS the CONTRACTOR, believing the aforesaid representation and assurance given to it, has agreed to engage the SUB-CONTRACTOR to provide its services to the CONTRACTOR in respect of the project, provided that the SUB-CONTRACTOR executes a proper Deed of Indemnity in favour of the CONTRACTOR.

NOW THEREFORE, THIS DEED OF INDEMNITY WITNESSES AS follows:

1. That in consideration of the CONTRACTOR acceptance of the representations made and assurances given to it as above and the CONTRACTOR has engage the SUB-CONTRACTOR to provide its service to the CONTRACTOR in The Project and the SUB-CONTRACTOR hereby agrees and undertakes to indemnify the CONTRACTOR against any and every loss and damages, fines which the CONTRACTOR may at any time suffer

consequent to non-compliance of any Laws, Enactment, Regulations, Orders, Notifications and all other legal requirements of the Central, State and Other Government and Local Authorities and/or provisions of any Acts, Rules, Guidelines including but not limited to the Acts and Rules relating to labour/workman engaged by it in The Project by the SUB - CONTRACTOR / its Contractors / Sub-Contractors / labour / workmen / Contractor labour / agents / employee etc.

2. The SUB-CONTRACTOR will indemnify the CONTRACTOR for any fine or penalty to be suffered / paid by the CONTRACTOR due to non-compliance of the provisions of any of the labour related laws as applicable. Be it also clarified, understood and agreed that this indemnification is not restricted only during the subsistence of the contract but even for the post-cessation of the Contract.
3. That it is one of the conditions of the Contract that the SUB-CONTRACTOR shall comply with all the provisions of the labour related laws, as may be applicable from time to time for the discharge and completion of the said contract by the SUB-CONTRACTOR including but not limited to the observance and compliance of the Contract Labour(Regulation & Abolition) Act, 1970; Child Labour (Prohibition and Regulation) Act, 1986 ; the Employees Provident Fund & Miscellaneous Provision Act, 1952; Industrial Disputes Act, 1947; Minimum Wages Act, 1948; Employees State Insurance Act, 1948; Payment of Bonus Act, 1952; Payment of Gratuity Act, 1972; Payment of Wages Act, 1936, Employees' Compensation Act, 1923; the Maternity Benefit Act , 1961; Inter State Migrant Workmen(RECS), 1979 and the Employees Deposit Linked Insurance Scheme, 1976, Building and Other Construction Workers's (Regulation of Employment and Conditions of Services) Act. 1996 and/or any other Labour Laws or any other Laws/ rule/ notifications /guidelines / norms/ policies issued / directed by the concerned authorities from time to time in this regard. The SUB-CONTRACTOR has assured the CONTRACTOR to be answerable and liable for all actions taken by any Competent Authority for violations committed by the SUB-CONTRACTOR.
4. That in further consideration of the CONTRACTOR having agreed to engage the SUB-CONTRACTOR to provide its services to the CONTRACTOR in The Project

I, _____, S/O _____, R/O _____ in the capacity of a Director of _____ do hereby irrevocably and unconditionally guarantee the payment of entire liability that may be fastened upon the CONTRACTOR and which shall become due and payable by the SUB-CONTRACTOR from time to time pursuant to these presents and to keep the said CONTRACTOR and its employees safe, harmless and indemnified against all losses, damages or liability, which the

CONTRACTOR Company may be burdened with as a result of non-compliance of any Laws, Regulations, Orders, Notifications etc, and / or all other legal requirements of the Central, State and other Government / Local Authorities and / or provisions of any Acts, Rules, Guidelines including but not limited to the Acts and Rules relating to labour / workmen/ Contractors / sub- Contractors engaged by it in execution of The Project, by the SUB-CONTRACTOR in respect of its Contractors/ Sub-Contractors/ labour / workmen / Contractor labour / agents/ employees etc., without any protest or demur and forthwith on demand in writing made by the said CONTRACTOR to pay all sums of money as shall be required to be paid both by the Guarantor as well as the SUB-CONTRACTOR and the SUBCONTRACTOR hereby agree and declare that:

- i. This Undertaking –cum-Indemnity shall be a continuing document and shall remain in full force, so long as any sum or sums of monies remain unpaid to the said

CONTRACTOR under the terms of these presents and this Undertaking shall not, either wholly or partially, be discharged by any partial payments by the SUB-CONTRACTOR to the said CONTRACTOR.

- ii. Undertaking –cum-Indemnity shall be in addition to and not in lieu of any other indemnity, guarantee and /or security or securities which the said CONTRACTOR may now or at any time have from the SUB- CONTRACTOR in any other respect of the execution of The Project, (the intention being that notwithstanding any other indemnity, guarantee and/or securities that the said CONTRACTOR may have, the liabilities of the SUB-CONTRACTOR hereunder shall stand independently.
- iii. The CONTRACTOR shall have full authority to take recourse to and /or enforce this Undertaking-cum-Indemnity or any other remedy that the CONTRACTOR may have as aforesaid at its sole discretion.
- iv. The CONTRACTOR shall be at liberty, without making any reference to the SUBCONTRACTOR to take other security or securities for the liability of any SUB-CONTRACTOR and to vary the terms and grant time and indulgence to the SUB-CONTRACTOR in respect of this Undertaking-cum-Indemnity and also to realize or forbear from enforcing all or any of the obligations of the SUB-CONTRACTOR upon any securities now or hereafter held by the CONTRACTOR. Further, no such dealings, variation or granting of time and / or other indulgence to and /or arrangements and /or forbearance whatsoever shall have the effect of releasing and /or absolving the SUB-CONTRACTOR from this liabilities to the CONTRACTOR and/or Prejudicing and /or impairing its rights against the SUB -CONTRACTOR under this Undertaking-cum-indemnity.

IN WITNESS WHEREOF, the parties to this deed have set and scribed their hands on the day, month and years first noted above, in presence of the following witnesses.

(AUTHORISED SIGNATORY)

FOR.....

Dated:

Witnesses:

1. _____

2. _____

ANNEXURE – VII

(To be submitted with Final R.A. Bills)

The water proofed roof shall be tested with 150 mm standing water as directed for 7 days.

A guarantee for a period of 10 (Ten) years against leakage/ dampness shall be given by the contractor on a non-judicial stamp paper worth Rs.10/- as per below format :

GUARANTEE FOR DAMP PROOFING AND WATER PROOFING

Whereas (.....) a firm/ company/ corporation whose address is (.....) hereinafter called the Specialist Contractor, has manufactured and sold and caused to have applied, pursuant to its specifications and inspection the necessary materials, labour and all incidentals to provide Damp proofing/ Water proofing treatment of Terrace roofs of approximately (.....) square meters in the buildings described below:

M/S ISID : M/s Institute for Studies in Industrial Development

BUILDING : ISID Campus

LOCATION : 4, Vasant Kunj Institutional Area, New Delhi

DATE OF COMPLETION OF TREATMENT :/...../2026

BY : M/s

ADDRESS OF FIRM :

AND WHEREAS, Specialist Contractor represents and wished to guarantee, subject to limits stated herein, that its treatment is effectively water tight for a period of Ten (10) years despite normal wear and tear by the elements, as well as guaranteeing it against defects, its workmanship or materials;

AND WHEREAS M/s..... located at (hereinafter known as Contractor) through whom the Specialist Firm has carried out the work as Sub-contractor, has agreed to be a co-guarantor under this Guarantee and will be equally responsible to ensure that the Specialist Firm shall carry out its obligations under this Guarantee.

NOW THEREFORE said Specialist contractor guarantees to the said M/s ISID that as set forth below, during a period of Ten years from the date of completion of said treatment described above, Specialist Contractor will at his own expense make or cause to be made any repairs that may be necessary, as a result of defects in workmanship or materials supplied by the Specialist contractor or of normal wear and tear by the elements and will maintain said treatment in water tight conditions free from all leaks arising from such causes.

For purposes of this Guarantee damage to the treatment caused by hurricanes, lightning or other unusual natural phenomena shall not be deemed to be “NOMINAL WEAR AND TEAR BY THE ELEMENTS”.

INSPECTION AND REPAIRS

Upon written notice by the Company/ PMC to Specialist Contractor of need of repair of treatment, the Specialist Contractor shall, within three days, inspect the treatment. Following such inspection:

1. Specialist Contractor, at his own expense and regardless of cost, shall make such repairs as are required by the guarantee.
2. In case the Company/ PMC or his agent has notified Specialist Contractor and confirmed in writing that repairs are required and such repairs are not covered by the Guarantee (including repairs required by Company's/ PMC's alteration, extension or addition to the treatment) Specialist Contractor, after having obtained Company's/ PMC's consent thereto, in writing, shall make or cause to be made, such procedures as established by Specialist Contractor and approved by the Company/ PMC and this Guarantee shall thereupon remain in effect for the unexpired portion of its original term. If Company/ PMC fails to so consent or if repairs are made by one other than the Specialist Contractor or Specialist Contractor's designer, this Guarantee with respect to such area shall be automatically terminated.
3. In the event that (1) Company/ PMC notifies Specialist Contractor and has confirmed in writing the need of repair of treatment, and (2) Specialist Contractor is unable to promptly inspect and repair the same, and (3) an emergency condition exists which requires prompt repair in order to avoid substantial damage to Company/ PMC, then Company/PMC may take such temporary repairs as may be essential and any such action shall not be a breach of the provisions of this Guarantee.

If the Specialist firm fails to rectify the defects when called upon to do so within the stipulated period, then the Specialist Contractor/Building Contractor will indemnify the Company/PMC and his successors against all loss, damage, cost expense or otherwise which may be incurred by him by reason of any default on the part of the Specialist Contractor in the performance and observance of this guarantee and the Company/PMC will then be free to deduct the costs so incurred from any pending dues of the Specialist Contractor/ Contractor or in any other manner whatsoever available to him. As to the amount of loss and/or damage and/ or cost incurred by the Company/PMC, the decision of the Company/PMC shall be final and binding on both the parties.

INSPECTION SERVICE

Specialist Contractor agrees to re-inspect the completed treatment not earlier than 24 months after completion of the treatment, and if it is determined that there are defects in the treatment, then Specialist Contractor shall make, or cause to be made at its own expense, such repairs as are necessary to remedy said defects within the scope of its responsibility under the terms of this Guarantee.

IN WITNESS WHEREOF

Specialist Contractor and the Contractor has caused this instrument to be signed and sealed by its duly authorized officer this day of

Witness: By

Title:

Name of Specialist Contractor

Seal:

Date:

Countersigned in full for the acceptance of the above

Witness: By

Title:

Contractor

Seal:

Date:

VOLUME – II

TECHNICAL SPECIFICATIONS

A. PREAMBLE

The Special / Particular Instruction and Conditions of Contract as described in this document are intended to amplify the General & Special Conditions of Contract and shall be read in conjunction with specifications of work, drawings and all other documents forming part of this Contract wherever the context so requires. The following clauses shall be considered as an extension and not in limitation of obligation of the Contractor. Where any portion of the Special Conditions of Contract is repugnant to or at variance with any provisions of the General Conditions of Contract then unless a different intention appears, the provision of the Special Conditions of Contract shall be deemed to override the provisions of the General Conditions of Contract only to the extent such repugnancies or variations in the Special Conditions of Contract as are not possible of being reconciled with the provisions of General Conditions of Contract. All expenses incurred by the Contractor in connection with obtaining information for submitting this tender including his visits to the site or efforts in compiling the tender shall be borne by the Contractor and no claims for reimbursement whatsoever shall be entertained. Notwithstanding the sub-division of the documents into separate sections and volumes every part of each shall be deemed to be supplementary to and complementary of every other part and shall be read with and into the Contract. Wherever it is mentioned in the specification, that the Contractor shall perform certain work or provide certain facilities, it is understood that the Contractor shall do so at his own cost.

Notwithstanding the sub-division of the specification into various headings, every part of it is to be deemed supplementary to every other part and is to be read with it, so far as it may be practicable so to do, or when the context so admits.

In this contract, reference is made to the Indian Standards or CPWD specification as approved by Project Manager and these references shall be deemed to include the latest editions or issue of standards, specifications or By-Law including all revisions upto the date of invitation of Tenders. The contractor shall ensure that all materials and workmanship in so far as they apply to this contract shall comply in every specifications or any other equivalent or specification approved by the Project Manager.

The Contractor shall keep at site copies of all relevant standards and codes of practice referred in these specifications throughout the period of contract. These shall be the latest editions and shall include all revisions/addendums thereof.

Approved Makes / Manufacturers: Names of approved makes / manufacturers are given in the specifications.

Reference in the specifications to approved manufacturers shall be construed as establishing a standard of quality and not as limiting competition.

The Contractor shall include in his prices for supplying the item or materials from the approved manufacturers listed or equal and approved.

All items or materials shall be delivered to the site in the manufacturers original unopened containers with the manufacturers brand and name clearly marked on.

All items or materials shall be assembled, mixed, fixed, applied or otherwise incorporated in the works in accordance with the printed instructions of the manufacturer of the item or materials.

Date of construction to be written on all respective items for monitoring curing.

Contractor shall follow the pour card / check list for all the concrete / finishing / services items on prescribed formats.

1.0 Rates for Items of Work to be all Inclusive

- i. The rates entered in the accepted Bill of Quantities of the Contract, shall be all inclusive and provide for works duly and properly completed in accordance with terms and conditions of the Contract and processes as mentioned in specifications and drawings (including revised drawings), relevant codes whether mentioned or not in the nomenclature of the item in Bill of Quantities. All rates quoted in the tender shall be also deemed to include, except specifically provided otherwise in the Contract:
 - All materials, labours, engineers, tools and plant, stores, centering, shuttering, scaffolding etc.
 - All supervision, design, manufacture, transportation, supply, storage, erection, installation, wastage, testing, commissioning, sampling etc.
 - Construction / Erection, maintenance and removal of all temporary works.
 - All watching, lighting, pumping and draining unless otherwise provided for.
 - All barriers and arrangements for safety of the property, utilities, public or employees / workers during the execution of works.
 - All sanitary and medical arrangements for labours, staff.
 - The setting out of all works of construction, repair and up-keep of all centre lines, benchmarks, reference pillars etc.
 - Site clearance except specifically provided otherwise in the Contract.
- ii. All rates quoted in the Bill of Quantities shall be deemed to be inclusive of all types of direct and indirect taxes imposed by Central / State Govt. and local bodies such as Excise Duty, Sales Tax, Value Added Tax (VAT), Works Contract Tax, Good & Service Tax, Royalties, Duties, Cess, Octroi and other levies as applicable on the date 15 days prior to the last date of submission of bids, and also include all import duties. The rates shall also be inclusive of all taxes, duties and other charges imposed outside the country on the production, manufacture, sale and transport of the Contractor's equipment, plant, materials and supplies to be used on or furnished under the contract and on the services performed under the contract. No additional amount shall be paid or claim be entertained on this account by Company / Project Manager.
- iii. The Contractor shall bear the cost of all royalties, fees and other payments in respect of patents, patents right and license(s) which may be payable to patentee, licensee or other person or corporation and shall obtain all necessary licenses / permissions. In case of any breach (whether willfully or inadvertently) by the Contractor of this provision, the Contractor shall indemnify Company, Project Manager and their employees against all claims, proceedings, damages, costs, charges, loss and liability which they or any of them may sustain, incur or be put to by reason or in consequence

directly or indirectly of such breach and against payment of any royalties, damages or other money which the Company / Project Manager may have to make to any persons or pay in total to the patent rights in respect of the users of any machine, instruments, process, articles matter or thing constructed, manufactured, supplied or delivered by the Contractor under this contract.

- iv. The quoted rate for reinforcement steel shall include for Welding as required besides the cutting, bending, binding and placing in position etc.
- v. The quoted rates shall be all inclusive. Nothing extra on any account whatsoever shall be payable over the quoted rates, except as specifically provided in the Contract.
- vi. The Company reserves the right to interpolate or extrapolate the rates for any new item of work not covered in Bill of Quantities from the similar items already available with the Company. All the works shall be measured upon completion and paid for, at the rates quoted and accepted in the Bill of quantities. In case any activity though specifically not covered in Bill of quantities, but the same is covered under scope of work / specifications / drawing etc., then no extra claim on this account shall be entertained.

2.0 Abnormal Rates

The Contractor is expected to quote after careful analysis of cost involved for the performance of the completed work considering all specifications and the Conditions of Contract. This will avoid loss of profit or gain in the case of curtailment or change of the specifications for any items.

If it is noticed that the rates quoted by the tenderer for any items are unusually high or unusually low it will be sufficient cause for rejection of the tender unless the Company is convinced about the reasonableness of the rates on scrutiny of the analysis for such rate to be furnished by the tenderer on demand.

Notwithstanding anything stated hereinabove, the rates once accepted by the Company shall be final and shall not be subject to any claim either on account of un-workability of rates on any other ground whatsoever.

Bidders are requested to quote their best prices considering the fact that price negotiations, if required, may be held with lowest tenderer only.

No claim on account of idle labour whatsoever shall be entertained on any circumstances.

3.0 Accepted Rate Applicable till the Completion of Work

The rates as per the accepted Bill of quantities, shall be firm and hold good till the completion of the works, and no additional claim or amount shall be admissible on account of fluctuations in market rates, increase in Taxes, Levies, Fees, Royalties etc. unless specifically provided for in the Contract.

The Company shall not entertain any claim whatsoever in this respect. Also no road permits / forms etc. shall be issued by the Company.

4.0 Tax Deduction at Source

Income Tax and Works Contract Tax shall be deducted from the payments released by Company to the Contractor against execution of work as per law of the land. The deductions shall be made as per prescribed rates prevalent from time to time unless a tax exemption certificate is produced by the Contractor.

Amount of tax deduction shall be deposited with the concerned authorities and tax deduction certificate shall be issued by Company. The Company shall deduct at source taxes/duties under any other law/statute as may be applicable at the time of making payments. The Contractor shall furnish to the Company / Engineer registration no. under works, tax and PAN (for TDS), as applicable.

5.0 Post Payment Audit

It is an agreed term of the contract that the Company reserves to itself the right to carry out a post payment audit or technical examination of the works, and the final bill including all supporting vouchers, abstracts, etc. If as a result of such examination, any over payment to the Contractor is discovered to have been made in respect of any work done, the Contractor will be bound to refund the same to the Company or the same may be adjusted against any dues of the Contractor. If any under payment is discovered, the same shall be paid by the Company to the Contractor. Such payments or recoveries, however, shall not carry any interest.

6.0 Cement and Steel (Supply of Materials)

All Cement and Reinforcement Steel bars shall have to be procured by the Contractor.

7.0 Company's Material

If any material is supplied by Company to the Contractor free of cost basis, the Contractor shall receive these materials at site as per the specifics given below;

- i. For the procurement of the same the Contractor has to raise the necessary indents at least 30 days prior to the requirement of material at site as per procedure laid down by Engineer from time to time. Contractor shall be responsible for raising the correct indent and ensure that neither any excessive inventory is maintained at the site nor the site is deficient for want of material. In either case the Contractor shall be held responsible for any shortage or excess material.
- ii. Materials will be issued only for permanent works and not for making templates, other temporary works, enabling works etc. and the same shall not be taken into account for purpose of material reconciliation.
- iii. the Contractor shall bear all other costs including the lifting, carting from issue points at work site / Contractor's store, custody and handling etc. and no separate payment for such expenditure will be made.
- iv. the Contractor shall return the surplus material back to the Company in original condition and also return of serviceable / scrap materials to Company during the handing over process and no separate payment for such expenditure will be made including loading unloading and transportation charges which shall be borne by the Contractor

- v. in case of any damage to the material due to negligence of the Contractor resulting in its not being suitable for use at site the Contractor shall have to replace the same material at his own cost and without in any way affecting the time schedule of the project.
- vi. Every month, the Contractor shall submit an account of all the materials issued by the Company, in the proforma prescribed by the Engineer. On completion of the work, the Contractor shall submit Material Reconciliation Statement for all materials issued by the Company.
- vii. The following scrap allowances are permissible. The Contractor shall account fully for the material issued to him for the work either by way of incorporation in the work, return of unused and serviceable materials and scrap allowance given below both for returnable scrap and for unaccountable scrap. The accounting shall be dia wise. The weight coefficient for various dia of reinforcement shall be as per relevant IS code.

Material	Salvageable	Unaccountable
Reinforcement Steel	1.5%	0.5%
Structural Steel	2.5%	0.5%
Cement	Nil	3.0%

- viii. All unused and scrap materials in lieu of materials supplied by the Company shall be the property of the Company and shall be returned by the Contractor. Contractor shall make his own arrangements for weighing the surplus materials to be returned to the Company.
- ix. The cement stores shall be open for supervision and verification by the Engineer or his authorized representative at any time, when the Engineer feels the need to do so.
- x. Any shortfall on account of theft or damages of materials supplied by the Company, recovery will be made @ of last purchased rate as per Company records plus 15% as handling & supervision charges from the due payment to the Contractor.

8.0 Mobilisation of Resources

The contractor is required to enclose the proposed project organogram and Bio Data of key personnel like Project / Construction Manager, Planning Engineer, Billing Engineer & Safety Officer etc for Company / Project Managers' review and approval. The contractor shall provide all details for labour, machinery, tools & plants and any other construction equipments to carry out the work in workmanlike manner and complete the same. No expenses for mobilization and de-mobilization at the completion of work in all respects shall be paid and are deemed to be included in the rates quoted.

9.0 Quantum of Work:

- i. The Company does not guarantee the quantum of work and reserves the right to appoint one or more Contractor for the whole or part of work at any stage / time. No claim for compensation from the Contractor shall be entertained for any variation whatsoever of the estimated quantities and amount. This clause supersedes all such clause / clauses of General Conditions of Contract pertaining to variation in the total value of work.
- ii. The day-to-day instruction for the work and any clarifications regarding specifications for the various items shall be given by the Project Manager or his

authorised representatives at site. These instructions and clarifications shall be final and binding on the Contractor.

- iii. All the areas where the existing grading is disturbed in the course of the work by the Contractor shall be made good by him to the satisfaction of the Project Manager.
- iv. No property of the Company shall be tampered with. In case of default, the damage as assessed by the Project Manager whose assessment shall be final and binding on the Contractor, shall be payable by the Contractor, who will have to remit the amount of damages within (07) seven days of intimation by the Project Manager, failing which the contract shall be terminated and all remaining works shall be got done from other agencies at the risk and cost of the Contractor.
- v. The Contractor has to work during nights as well as during holidays and Sundays according to the exigencies of the works, without extra cost to the Company.
- vi. Any breach of the above conditions shall entail immediate withdrawal of the work which will be got carried out through other agencies and all amounts which may be due to the Contractor are liable to be forfeited.
- vii. The work shall be carried out strictly as per the direction and to the entire satisfaction of the Project Manager.
- viii. The work involves working in all locations and under all conditions and for all surfaces, plain, curve etc. No plea on any account for reconsideration of rates will be entertained on these or any other account whatsoever.
- ix. It is likely that clearance for the full work covered by the work order may not be given in a single instance. For all such delays in the work no extra claim shall be entertained. Suitable extension of time for completion of work will however be considered for such delays.
- x. The Contractor will have to work in close co-operation and co-ordination with other agencies on the site as well as with the various departments of the Company. No extra claim on this account shall be payable by the Company.
- xi. In case of any delay on the part of the Contractor to start any job / work, the Company reserves the right, without prejudice to the provisions in this behalf in the General Conditions of Contract, to get such job / work executed at the Contractor's risks and costs.
- xii. That in the eventuality of award of work, the Contractor shall not be entitled to receive any payments from the Company unless the Contractor either furnishes its Permanent Account Number or a Declaration under Section 197A to the Company with its first running account bill.

10.0 Measurements of the Work Done

Project Manager shall, except as otherwise provided, ascertain and determine by measurement the value of work done in accordance with the contract. Measurement of all items having financial value shall be entered in Measurement Book and/or level field book so that a complete record is obtained of all works performed under the contract. All measurements and levels shall be taken jointly by the Project Manager or his authorised representative and by the Contractor or his authorised representative from time to time during the progress of the work and such measurements shall be signed and dated by the Project Manager and the Contractor or their representatives in token of their acceptance.

Measurement shall be based on “Approved for Construction” drawings, to the extent that the work conforms to the drawings and details are adequate. If the Contractor objects to any of the measurements recorded, a note shall be made to that effect with reason and signed by both the parties. If for any reason the Contractor or his authorised representative is not available and the work of recording measurements is suspended by the Project Manager or his representative, the Project Manager and the Company shall not entertain any claim from Contractor for any loss or damages on this account.

If the Contractor or his authorised representative does not remain present at the time of such measurements after the Contractor or his authorised representative has been given a notice in writing three (3) days in advance or fails to countersign or to record objection within a week from the date of the measurement, then such measurements recorded in his absence by the Project Manager or his representative shall be deemed to be correct and accepted by the Contractor.

The Contractor shall, without extra charge, provide all assistance with every appliance, labour and other things necessary for measurements and recording levels. Except where any general or detailed description of the work expressly shows to the contrary, measurements shall be taken in accordance with the procedure set forth in the specifications notwithstanding any provision in the relevant Standard Method of measurement or any general or local custom.

In the case of items which are not covered by specifications, or elsewhere in the contract document, measurements shall be taken in accordance with the relevant standard method of measurement issued by the Bureau of Indian Standards and if for any item no such standard is available then a mutually agreed method shall be followed. The Contractor shall give adequate notice to the Project Manager or his authorised representative of the work before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct dimensions thereof be taken before the same is covered up or placed beyond the reach of measurement. The Contractor shall not cover up and place beyond reach of measurement any work without obtaining the consent in writing of the Project Manager or his representative. However if any work is covered up or placed beyond the reach of measurements without such notice having been given or the Project Manager’s consent being obtained in writing the same shall be uncovered at the Contractor’s expense, or in **default thereof no payment or allowance shall be made for such work or the materials with which the same was executed.**

It is also a term of this contract that recording of measurements of any item of work in the measurement book and/or its payment in the interim, on account or final bill shall not be considered as conclusive evidence as to the sufficiency of any work or material to which it relates nor shall it relieve the Contractor from liabilities from any over measurement or defects noticed till completion of the defects liability period.

A. SITE DEVELOPMENT AND EARTH WORK

The rate of items in this section to include:

1. Stacking of excavated earth within the site including handling & re-handling.

2. Site clearance such as clearing of shrubs, brushwood, undergrowth, roots and small trees not exceeding 30cm in girth measured at 1m above ground.
3. Setting out the work, profiles, bench marks etc.
4. Excavation either straight or curved in plan or to any desired shape or slope.
5. Provision of adequate barriers, Signages, lighting, and gangways across excavated area open trenches etc. for protection of workmen and public.
6. Getting out and throwing spoil clear of area being excavated or disposing clear of edge of excavation to avoid falling in, as directed by the Project Manager.
7. Trimming all sides, plumb and square, levelling all bottoms, clearing out loose earth, slips and falls from excavations before concreting.
8. Work at all depths and locations, unless otherwise specified.
9. Bailing, pumping out or removing all water which may accumulate in the excavation from all causes.
10. Necessary shoring, strutting, battening, benching. Contractor to submit methodology & design.
11. Signing guarantee Proforma for anti-termite treatment i.e. satisfactory performance for minimum of 10 years from the date of final completion of project on an approved proforma. The guarantee shall be executed and extended by the Contractor and not by the anti-termite agency.
12. Conducting laboratory or field test for soil compaction.
13. Compacted volume of earth shall be measured for payment at true location of filling/back filling.
14. All excavated material shall be the property of the M/s ISID or otherwise as specified in the Items.
15. Excavation and disposal for basement shall be done by mechanical means and equipment.
16. Manual dressing to achieve the final level as directed by structural engineer.
17. Royalty & other taxes payable.
18. Compliance with all stipulation of technical specification.

B. CONCRETE WORKS (PLAIN AND RCC)

The rates for all items under this section include:

1. Generally, all concrete work shall be as per IS-456 (latest edition) characteristic strength (28 days) shall be 20 N/sq. mm, 25 N/Sq mm, 30 N/Sq mm and 35N/sqmm as may be specified on drawings. The rate of all items to include for mix designs for various strengths and workability and routine cube testing at various stages for strength as required. Cost of concrete admixtures is included in the quoted rates, the use of which shall be approved by the Project Manager. The rates shall include for providing all materials, mixing, placing, compacting, cutting, finishing, placing inserts, holding down bolts and flanges, sleeves, puddle flanges, embedding all services pipes, boxes, hooks etc. as shown in drawings at correct location level with required changes in form work,

reinforcement etc., complete. All RCC works and all concrete shall be machine vibrated. Formwork and reinforcement are measured separately. All concrete shall be with 20mm and down graded nominal size stone aggregates except specified otherwise. Curing of the concrete shall be as per IS-456 (Latest Edition). All RCC work will be measured and paid as laid, quantity for both the case by using RMC or by using cast in situ concrete with batching plant. No payment will be made according to the supply quantity.

2. The rate of reinforcement work shall include for handling/ storing clearing of rust, straightening, bending and placing, binding, fixing in proper position at any height/level with 18 gauge annealed binding wires, necessary chairs, spacer bars, wastage and cement mortar cover blocks at proper positions to maintain proper cover as per IS-456 (Latest Edition). Reinforcement shall be bent in accordance with IS-2502.
3. Inverted cantilever, Circular / Curved, offsets, Projection, fins, bands, nibs and sloping members on slab, beams, columns, staircase including drilling, cutting, bonding agent complete to the satisfaction of Project Manager etc.
4. Holes and openings in RCC slab/walls, parapet, masonry works, pockets in machine foundation, beam, parapets, for rainwater pipe or spouts and plumbing pipes shall be left at the time of concrete casting or raising masonry and making good after fixing fixtures.
5. If in the opinion of the Project Manager, any surface other than specified for obtaining patterns in exposed surface in concrete under specific items, is asked to be left unrendered and painted, then the item will not be measured as item concerning exposed surface and no extra for any reason will be allowed.
6. Jointing new work with the existing concrete/brickwork including shuttering and approved bonding agent for construction joints.
7. Reinforcement shall be paid separately by weight actually placed in position as per the bar bending schedule, to be prepared by the contractor and approved by the Project Manager. The weight shall be taken as per IS Code for the particular diameter. Rates quoted for reinforcement shall include for cutting, bending, binding the reinforcement bars in any shape, hoisting to all leads and lifts and placing in any position as per detailed drawings, including providing pre-cast cement concrete cover blocks of required thickness for keeping bars in position. 18 gauge annealed binding wire for tying for reinforcement shall be provided by the contractor. The contractor should cover for this in his overall rate for the reinforcement rates including removing rust, Mill scales, oil, grease, paint etc. from reinforcing bars.
8. Generally, in items for form work rate to include for form work, centring, shuttering, boxing propping including special nuts, bolts etc. in perfect line, level, plumb and if required to provide camber, slope and removal thereof. Colourless shuttering oil or grease of approved quality shall be applied to forms before placing steel. Rate to include for any shapes including offsets/ chamfering in columns, residues, grooves, drip moulds, irregular shapes etc. Mode of measurement shall be in sq.m regardless of shape, size and thickness of members. Stripping time for the formwork, centring and dropping shall be as per IS-456 (Latest Edition).
9. Work at all heights, depths & levels irrespective of individual storey.
10. Work in narrow widths, Piece meal/ small work, screed under floor etc.

11. All staging upto any height and scaffolding work shall comprise of MS Pipes/ Structural steel sections with necessary coupling arrangement. (NO WOODEN BALLIES / PROPS WILL BE PERMITTED). Adequate size foundation blocks / base plates shall be provide below staging members to disperse the loads as per the founding strata.
12. Contractor shall set up on site concrete pump, hoists, microchips controlled Batching plant of capacity 10 cum per hour or more complete with silos/ stock piles for cement and aggregates, and also a D.G. set to be provided for uninterrupted supply of concrete.
13. Providing grooves, drip moulds, moulds, chamfers, curved surfaces, and ornamental works in RCC members as per drawing and finishing to specified shape.
14. Forming all expansion and / or construction joints as directed.
15. Contractor to consider in his quoted rates the necessary arrangement e.g. providing and fixing of required quantity of woven mesh at the junction of Beam and Column or any other RCC members to separate two different grade of concrete mixes. No payment shall be made for over flowed richer mix of one RCC member into the other.
16. Use of greater than minimum specified quantities of cement to achieve specified or required mix design.
17. Use of plasticizer / super plasticizer (approved by Project Manager) and / or additional cement for pumpable concrete.
18. Non-destructive test for defective concrete as directed by Project Manager, and their remedial measures thereof.
19. Leaving dowels for anchorage of brickwork and other RCC members.
20. Mix designing and testing of all the ingredients of concrete from approved laboratory for each grade, pumpable & non-pumpable concrete.
21. Compliance with all requirements of technical specification.

C. MASONRY WORKS:

The rates for all items under this section to include:

1. All scaffolding, platforms, ladders, staging and plant required in the execution of work to any height or depth and lift.
2. Hacking and roughening of concrete or other surfaces in contact with masonry for bondage.
3. Leaving out dowels from concrete members for anchorage.
4. Labour providing in beam bed blocks of concrete.
5. Rough cutting and waste.

6. Levelling up and preparing tops of walls for damp proof courses, plinth beams, precast units etc.
7. Raking out joints to specified depths either for plaster or pointing or finishing the joints flush as the work proceeds, as directed.
8. Bedding and pointing wall planes, cills, lintels etc. in or on walls, bedding and pointing drops, window and like structures in cement mortar.
9. Forming chases for edges of concrete floors or other units, for sealing in or other waterproofing layers etc.
10. Holes (cut and formed or left), for fixing pipes, bolts and other inserts and making good including grouting if necessary.
11. Building in holdfasts and such other inserts.
12. Work in steps, pillars (round and squared) and also in circular work.
13. Keeping the work well wetted for ten days.
14. Work at all heights, depths and locations, unless otherwise mentioned.
15. Work in parts / joining old / new work including, toothing applying cement slurry etc complete.
16. Washing and cleaning of brick surface with such chemical as are deemed necessary by the Project Manager for any efflorescence observed in the brick work.
17. Opening for exhaust fan/ rain water pipes/ spouts etc as shown in drawing and/ or as directed at site. No deduction for such opening shall be made.
18. Layout and layout course with flat brick/brick on edge / string course wherever required.
19. Any efflorescence observed in Brick Work should be watched on with clean water and treated with such chemicals as are deemed necessary by Project Manager. The Brick Work shall be dismantled if deemed necessary by Project Manager and rebuilt with new bricks including making good all disturbed and damaged work.
20. Rate to include for any shapes, fins, projections, shafts, Work in narrow widths, Piece meal/ small work etc. Piece meal work necessitated by coordination & requiring of work of other agencies.

D. STRUCTURAL STEEL WORKS:

The rates for all items under this section also to include:

1. Steel forging, reducing to required shape, size and figure, drilling, tapping, counter sinking for screws, filling etc. and satisfactory workmanship required to fabricate, finish, erect and fix in position, all structural steel and iron in a good and perfect manner.

2. Providing all bolts and nuts including holding down and anchor bolts, round, squared or tapered washers, anchor plates, rivets, packing pieces, gusset plates, cleats, wedges, brackets, separators etc. (net weight to be computed and paid).
3. All wastage's and cut pieces.
4. Welding as per specifications and drawings but weight of welds not to be paid.
5. Weight of various members to be taken as standard ISI weights. No allowances being made for rolling margins in steelwork.
6. Providing all spikes, nails, service bolts, clamps, jigs etc.
7. Making all necessary templates, patterns moulds and platforms for layout etc.
8. All smithy work, unloading, getting in, hoisting, erecting and fixing in position at all heights, levels and locations, curve portion.
9. Rigidly inserting and setting in lead or other specified material and fixing into concrete and /or building into brick work while the work proceeds and for all fixing, anchoring, plugging, screwing, bolting etc. including non-shrink grout and sealants as may be required or directed.
10. The priming coat is required to be of high grade loosing approved quality of Red Oxide primer to provide a coating having a good rust preventive properties and shall adhere well to the metal surfaces, affording a good foundation for subsequent coats.
11. Bending to required shape of square bars, pipes, angles, plates etc as per drawing.
12. Compliance with requirements of technical specification

Materials

All steel shall be straight, sound, free from defects such as twists, segregation, cracks, surface flaws, laminations, imperfect edges and other defects.

The Contractor shall, if so requested, furnish the EIC with copies of test certificates showing that all principal materials comply with the requirements of IS 226 and/or other applicable Standards. If the EIC requires further tests to be carried out the Contractor shall provide all necessary test pieces and/or samples at his own cost and shall transport them to an approved testing laboratory.

All material shall be properly stored on raised platforms that shall be kept clean and properly drained. Structural steel shall be so stored and handled that members are not subjected to excessive stresses and damage. Long members, such as columns, shall be supported so as to prevent excessive deflection.

Steelwork entirely embedded in concrete shall not to be painted but coated with two coats of Portland cement wash of the consistency of cream, the second coat being applied immediately prior to encasing.

Where two surfaces will be in permanent contact after assembly each of them shall receive, immediately before being assembled after being thoroughly scraped one coat of red lead paint and surface shall be brought together while the paint is still wet.

For all exposed structural steelwork, two coats of approved enamel paint shall be applied. Paint and painting will be included in the rate for steel fabrication.

All finished iron and steelwork shall be cleaned of all scale, rust or dust and shall be thoroughly coated with one coat of freshly mixed red-lead paint before erection well worked into joints and open spaces.

Fabrication

Prior to the commencement of fabrication or erection of any steelwork the Contractor shall provide the EIC with shop drawings showing details of fabrication, provisions for assembly and methods of erection for approval.

Where welding is to be used shop drawings shall give full particulars of "weld preparation" and the procedure for carrying out the work. Four copies of each drawing shall be submitted to the EIC for verification before commencement of fabrication and no work shall be carried out before obtaining approval. All work shall be fabricated in accordance with the approved drawings.

All the steelwork shall be fabricated in shops, duly approved by the EIC, and assembled at the Site. Before commencement of fabrication of any steelwork all plates and sections shall be carefully examined for laminations and other defects likely to affect the finished structure. Sections and plates shall be straightened and made true by approved methods so that when assembled adjacent surfaces of connections will be in close contact throughout.

Accuracy shall be maintained during fabrication to ensure that all parts fit together properly during erection. All corresponding parts shall be similar and interchangeable.

All structural steelwork members shall be clearly marked with an erection number. The Contractor shall show on the fabrication drawings the positions where erection numbers are to be found and the method of marking it. Metal die-stamps shall not be used for making erection marks.

All fabricated members shall be inspected by the EIC prior to erection. The Contractor shall be responsible for informing the EIC as soon as any structural member is ready for inspection and shall afford all the facilities necessary for inspection by the EIC.

Any material or workmanship at any stage of construction which, in the opinion of the EIC, does not comply with the specified requirements shall be rejected and not incorporated in the Works.

Templates used shall be of steel. Where actual parts have been used as templates for drilling similar pieces the EIC shall decide whether they are fit to be used.

Erection clearances for cleated ends of members connecting steel to steel shall not be greater than 2mm at each end. Erection clearances at ends of beams without cleats shall not be more than 3 mm at each end. For practical reasons, where greater clearances are considered necessary, suitably designed seatings or connections shall be provided.

Shearing or flame cutting may be used at the Contractor's option provided, however, a mechanically controlled cutting torch is used for the flame cutting and the resulting edge is reasonably clean and straight.

Sheared members shall be free from distortion at sheared edges. When gas cutting is adopted flame cut edges shall be machined to a depth of 3 to 5mm depending upon the thickness of the member.

Chipping of angle flanges and edges of plates wherever necessary shall be done without damaging the parent metal. Chipped edges shall be ground to a neat finish and sharp corners and hammered rough faces shall be rounded off.

Edge preparation for welding may be done by machine controlled flame cutting with edges free of burns, clean and straight.

The butting surfaces at all joints shall be planed so as to butt in close contact throughout the finished joint.

All flame-cut edges shall be planed, unless they are clean, square and true to shape.

Holing

Holes for bolts shall be drilled. All holes, except as stated hereunder, shall be drilled to the required size or sub-punched 3mm less in diameter and reamed thereafter to the required size. The thickness of the material for sub-punching shall not be greater than 16mm. All matching holes for bolts shall register with each other so that a gauge 0.8mm less in diameter than the diameter of the hole can pass freely through the members assembled for bolting in the direction at right angles to such members. All holes for turned and fitted bolts shall be drilled undersize by 1mm and, after assembly, reamed to a tolerance of +0.13 mm/-0.00 mm unless otherwise specified.

All punching and sub-punching shall be clean and accurate and all drilling shall be free from burns.

No holes shall be made by a gas cutting process.

Assembly

All parts of bolted and welded members shall be held firmly in position by means of jigs or clamps while bolting or welding. No drifting of holes shall be permitted except to draw the parts together and no drift shall be larger than the nominal diameter of bolt. Drifting carried out during assembly shall not distort the metal or enlarge the holes.

Trial assemblies, witnessed by the EIC, shall be carried out at the fabrication stage to ensure accuracy of workmanship.

Welding

General

Welding of structural steelwork shall be carried out by the metal-arc process and shall be in accordance with the relevant Indian Standards and Codes of Practice.

Welding Electrodes

Welding electrodes shall comply with IS 814 and shall be chosen so as to produce welds with mechanical properties which are at least equal to those required for the base material and this should be approved by EIC.

Welding electrodes shall be kept in a dry state in unbroken packets and shall be accompanied by the manufacturer's certificate, date of manufacture and guarantee of compliance with IS 814 and the same shall not be used in damp or damaged condition.

Welding Plant

Welding plant shall be capable of maintaining the voltage and current specified by the manufacturer of the electrodes. The Contractor shall supply instruments for verifying the voltage and current as and when required by the EIC.

When an automatic process of welding is adopted the deposited metal must have mechanical properties equal to those obtained by the use of electrodes complying with IS 814.

Manual Welding

Manual welding shall be carried out only by qualified welders equipped with plant suitable for the purpose. All welders shall be qualified in accordance with IS 8171 and details of such qualifications shall be submitted to the EIC.

Welding Procedures and Trials

Before welding of any of the permanent work is carried out the Contractor shall furnish welding procedures for each welding operation.

Welding trials shall be carried out and completed on representative samples of the materials before the start of fabrication as directed by the EIC.

Welding trials are intended to establish welding procedures prior to the commencement of fabrication and for this purpose assemblies shall be made from plate or section cuttings large enough to simulate joints selected for trial. Trials shall be representative of actual fabrication conditions including :

- (a) Preparation and fit-up.
 - (b) Preheating.
 - (c) Welding position.
- Restraint (so far as is practicable)

Welding trials on material 20mm thick will be taken to include all material under 20mm thick and trials on material 40mm thick to include material between 20mm and 40mm thick. Trials shall include specimen weld details from the actual construction which shall be welded in a manner simulating the most unfavourable instances of fit-up and preparation which it is expected will occur in the particular fabrication.

After welding specimens shall be allowed to cool naturally to ambient temperature. They shall be left for 72 (seventy two) hours and thereafter they shall be sectioned and examined for cracking.

Testing shall be carried out in accordance with IS 7307 (Part I) as directed by the EIC.

Approval of any welding procedure shall not relieve the Contractor of his responsibility for correct welding procedures or for any of his responsibilities under the Contract.

Workmanship for Welding

The general welding procedure for shop and site welds, including particulars of the preparation of fusion faces, pre-heating where required and method of making welds, shall be submitted in writing to the EIC for approval before work is put in hand. No departure from the welding procedure shall be made without the prior approval of the EIC.

In the fabrication of built up assemblies all butt welds in each component part shall be completed before the final assembly. Wherever practicable, clamps, magnets, holding devices or other setting-up fixtures shall be used in assembling parts of the structures so as to avoid tack-welding as far as possible.

In fit-ups where clamps cannot be used spacer-strips shall be used to ensure the correct root gap.

Where tack welds are used they shall be of the same quality and size as the first run of main weld. All tack welds shall be cleaned and ground to sound material prior to welding of the root pass. Main welds shall fuse completely with the end of the tack weld to form regular profiles. Where preheat is required for main welds tack welds shall be made under the same heat conditions. Indiscriminate use of tack-welds during assembly shall be avoided.

All welds shall be visually inspected. Cracked or badly formed welds shall be cut out to the approval of the EIC before re-welding.

As far as practicable, all welding shall be carried out in the down-hand position. Where structural steelwork is painted before fabrication or erection metal surfaces within 75mm of any weld shall be coated with primer only.

Welding Supervision

The Contractor shall appoint welding supervisors whose competence and qualifications shall be subject to the approval of the EIC and all welding work shall be carried out under their direction.

The Contractor shall co-ordinate his activities so that all inspection work can be carried out before the removal of scaffolding and before welds are covered by painting or field coating.

Tests

The Contractor shall conduct tests in accordance with the following norms:

- i) Visual examination - Hundred per cent (100%) of the welded joints.
- ii) At least 10% welds shall be checked by dye-penetration test.
- iii) Defective welding revealed by testing shall be made good to the satisfaction of the EIC at the cost of the Contractor.

Erection

Erection of structural steelwork shall be carried out in an expeditious manner in accordance with the relevant IS Codes of Practice in conformity with the drawings and Specifications.

The suitability and capacity of all plant, equipment and the like used for erection shall be subject to the approval of the EIC.

The Contractor shall provide all construction plant and equipment, transport facilities, tools, tackle, consumables, labour and supervision for erection, including carrying out the following:

Receiving, unloading, checking and moving into the storage facility at Site, Transporting on Site, storage, handling, rigging, assembling, rivetting, bolting, welding and erection of all fabricated materials in proper locations in accordance with the drawings or as directed by the EIC.

Checking centrelines, levels of all foundation blocks including checking lines and levels, position and plumb of all bolts and pockets, any defects observed in the foundations being brought to the notice of the EIC.

Quoted rates for structural fabrication and/or erection work shall be deemed to include for the drilling of holes in concrete to fix anchor bolts for fixing steel members, staging and scaffolding for the hoisting of steel members to correct levels and positions, aligning, levelling, rivetting, bolting, welding, fixing in position in accordance with the drawings or as directed by the EIC, supply of all required consumables, construction and erection materials, including but not limited to gauges, welding and brazing rods, electrodes and wire, oxygen, acetylene, fuel, bolts, nuts, rivets, shims and temporary supports, bracings and the like.

One set of reference axes and one benchmark level will be furnished to the Contractor for use in setting out the Works. The Contractor shall assume full responsibility for the correct setting out and erection of the steelwork as per the alignment and levels shown on the drawings.

Notwithstanding any assistance rendered to the Contractor by the EIC, if at any time during the progress of the work any error should appear or arise therein, the Contractor shall remove and rectify the work at his own cost to the satisfaction of the EIC.

Before commencement of the erection of structural steelwork the Contractor shall submit a Schedule of Operations, detailing the procedures to be followed. The Schedule shall include provision for any temporary bracing that may be considered necessary during the erection.

During erection steelwork shall be securely bolted or otherwise fastened and, if necessary, temporarily braced so as to make adequate provision for all erection stresses and conditions, including those due to erection equipment and its operation. Such temporary bracing shall be maintained in position until erection work is sufficiently advanced and it has been ascertained that the bracing provided is no longer required.

Connections for temporary bracing and additional holes, members or cleats used to facilitate handling or erection, shall be provided in a manner that does not weaken the steelwork already erected. The alignment of each portion of the structure shall be carried out progressively, soon after that portion has been erected. Permanent connections shall not be made until proper alignment has been obtained and a sufficiently large portion of the structure has been erected and temporarily connected so as to ensure that the members thus connected shall not be overstressed or displaced during the progressive alignment of the remainder of the structure.

Erection tolerances shall be accepted strictly in accordance with the provisions of IS 7215.

E. WATERPROOFING WORKS:

The rates for all items under this section to include:

1. All scaffolding, platforms, ladders, staging and plant required in the execution of work to any height or depth and lift.
2. Agency to carry out waterproofing work shall got approved from the Architect.
3. Cutting chases in wall, tucking in felt and filling chases with cement concrete 1:2:4 complete and making concrete filled with parapet wall/junctions shall be included in the rates and nothing extra shall be paid for these.
4. The water proofed roof shall be tested with 150 mm standing water as directed for 7 days.
5. A guarantee for a period of 10 (Ten) years against leakage/ dampness shall be given by the contractor on a non judicial stamp paper worth Rs.10/-.
6. Measurement for plan only shall be taken and nothing extra shall be payable for vertical, sealing the cut-out etc. The joint of water proofing and plaster should be protected by a suitable nosing.

Tapecrete Waterproofing for Sunken Areas

All the chasings or cuttings in the floors and walls shall be carried out prior to the commencement of the treatment. The depressions in the concrete shall be filled with filler made of 1cement: 1.5silica sand: 0. 52tapecrete P151 or equivalent by weight. The prepared surface then shall be plastered (10mm thick) with cement mortar 1:3 mix, mixed tapecrete P151 or equivalent as per manufacturers' specifications. The plastering shall be carried out throughout the sunk portion and carried up to all sides of the walls up to 150mm.

The specialist then shall carry out 'TAPECRETE' waterproofing treatment comprising of 3 coats of tapecrete. After first coat, within the gap of 24 hrs, next coat should be applied and so on.

After 1st coat of tapecrete P151 polymer modified cementitious (PMC) spread fibre glass on the wet slurry layer and impregnate with tapecrete P-151(PMC) or equivalent slurry. 2nd coat of tapecrete P-151(PMC) or equivalent slurry coating over fiber glass fabric, 3rd coat of tapecrete P-151(PMC) or equivalent, brush topping on the tapecrete P-151 equivalent slurry coating. After three coats apply plaster (15mm thick) with cement mortar 1:4 mix, mixed tapecrete P151 or equivalent After the first coat of Tapecrete all corners, junctions, joints of pipes and masonry to be sealed with Epoxy putty. The treatment is laid underneath and behind all pipes. The specification on verticals is taken 150mm above the finished floor level. Treatment for sunken portion shall be measured in plan area and paid on Sqm basis

Terrace Waterproofing: -

1. The waterproofing specification should be laid directly on the RCC slab after it has been rendered smooth.
2. The waterproofing is terminated on top of the parapet.
3. The brick wall shall be plastered with 12-15mm coarse sand plastered and turned onto the top of parapet.

4. A fillet of 50 x 50 mm shall be made in cement and coarse sand mortar at the junction of the parapet & slab.
5. All rainwater pipes shall be fixed prior to laying of waterproofing. All vertical stacks shall be cut flush with the slab and horizontal sleeves shall not be more than 25mm above slab level.
6. Shaft shall be erected till about 600mm from the slab for all services to come onto the roof.
7. service shall run onto the roof or walls below the level of 450mm from slab shall be sealed properly.
8. Immediately after the waterproofing specification has been laid on the base it should be covered with minimum 75mm thick cement concrete 1:4:8 laid to slope and finally tiles/stone etc. laid in mortar.
9. The vertical waterproofing shall be protected with brick cladding post the protection layer of membrane is done on the pcc and verticals.

Horizontal:

Providing and laying built up flexible & heavier grade of waterproofing specification using multiple Heavy-Duty Membranes of Polymer modified Bituminous Polymeric Polyethylene Membrane felt one of the finest extremely pliable & flexible membrane available for waterproofing, which is non-degradable, non-ageing, can absorb structural movements, expansion, contraction, vibrations. It also acts as a vapour barrier therefore it is totally waterproof and damp-proof. The membrane consists of five layers with a center core of HMHDPE sandwiched between two layers of polymerized bitumen and finally with top and bottom layers of thermo fusible HMHDPE films.

The specification on the base consists of the 2 layers of polymer modified bituminous membrane of about 1 mm thickness, laid over a layer of bituminous primer and using hot mineral asphalt for each layer. The membrane consists of five layers with a center core of HMHDPE sandwiched between two layers of polymerized bitumen and finally with top and bottom layers of thermo fusible HMHDPE films.

F. FLOORING FINISHES :

The rates for all items under this section to include :

1. Marble and Granite Flooring

The type, quality and thickness of marble and granite slabs for flooring, skirting and dados shall be of the best quality as described and approved by the EIC and shall be hard, dense, uniform, homogenous in texture, have even crystallising grains and be free from cracks and other defects. The Contractor shall provide the EIC with samples for approval and only approved slabs shall be brought on to the Site.

Before laying sub-surfaces shall be thoroughly cleaned and washed of all loose materials, dirt, laitance and the like and then well wetted without forming water pools on the surface.

The stone slabs shall be laid either parallel or diagonal to the adjoining wall, as shown in the drawing Slabs shall be laid in cement slurry over a cement mortar bed approximately 20mm thick (One part cement and four parts sand) evenly spread over sub-surfaces.

Slabs shall be gently tapped with a wooden mallet until properly bedded and level with adjoining slabs. Joints not exceeding 1mm wide shall be perfectly straight and uniform in thickness. Slabs shall be laid perfectly level unless otherwise specified or directed by the EIC. After laying joints shall be finished with white cement.

Slabs laid adjoining walls shall project at least 12mm under plaster or render, skirtings or dados.

After laying flooring shall be allowed to cure undisturbed for 10 (ten) days. Design traffic shall not be allowed on the floor for at least 14 (fourteen) days after laying slabs. Following curing slabs shall be lightly tapped with a small wooden mallet.

Should this give a hollow sound such slabs, together with any cracked or broken slabs, shall be removed and replaced with new slabs to proper lines and levels.

The above procedure shall be followed again after slabs are polished. To ensure that such replaced slabs match those laid earlier the Contractor shall order sufficient extra slabs to meet this requirement.

After joints have developed sufficient strength floors shall be machine polished to the desired finish to the satisfaction of the EIC. Sufficient quantities of water shall always be used during polishing to prevent scratching.

For skirting and dado vertical surfaces shall be as per below paras.

Once work has set skirting and dados shall be hand polished with Carborundum stone to produce a high glossy finish. Corners and junctions shall be finished true.

Floor tiling and dados shall be measured in square metres after making deductions for openings and the like. Skirting shall be measured in linear metres for specified widths. Quoted rates quoted for flooring, skirting and dado work shall be inclusive of forming angles, corner pieces.

2. Glazed, Ceramic and Vitrified Tile Work

The type, quality, size, thickness and colour of tiles for flooring, skirting and dados shall be of the best quality as described and approved by the EIC. The Contractor shall provide the EIC with samples for approval and only approved tiles, skirting and dados shall be brought on to the Site.

Before laying tiles sub-surfaces shall be thoroughly cleaned and washed of all loose materials, dirt, laitance and the like and then well wetted without forming water pools on the surface.

The tiles shall be laid either parallel or diagonal to the adjoining wall, as shown in the drawing. Tiles shall be laid on cement concrete/ mortar bedding of average 35 mm thick in the proportions of one part of cement, and four parts sand.

Tiles shall be laid on mortar beds one after another, each tile being gently tapped with a wooden mallet until properly bedded and level with adjoining tiles. Joints shall be

perfectly straight and uniform in thickness. Spacers shall be used between tiles. Tiles shall be laid perfectly level unless otherwise specified or directed by the EIC. After laying joints of tiles shall be finished with white cement or polymer grout or cement of approved colour as described.

Floor tiles laid adjoining walls shall project at least 12 mm under plaster or render, skirting or dados. Half tiles and cut pieces shall be avoided as far as possible.

After laying flooring shall be allowed to cure undisturbed for 7 (seven) days. Design traffic shall not be allowed on the floor for at least 14 (fourteen) days after laying tiles. Following curing each and every tile shall be lightly tapped with a small wooden mallet. Should this give a hollow sound such tiles, together with any cracked or broken tiles, shall be removed and replaced with new tiles to proper lines and levels.

Backs of tiles for skirting and dados shall be covered with a thin layer of neat cement paste and tiles gently tapped against the wall with a wooden mallet/ adhesive shall be applied as per the manufacturer specifications as approved by EIC. Work shall be done from the bottom of the surface proceeding upwards. Joints shall be as close as possible and the work shall be truly vertical and flush. Corners and junctions shall be finished true. At the tops of dado work glazed tile borders, if specified, shall be provided.

3. Application methodology of laticrete307/290 or equivalent approved adhesive/glue for skirting and dado:

All surfaces should be between 40 °F (4°C) and 90 °F (32°C), the surface shall be clean and free of all dirt, oil, grease, loose peeling paint, laitance, concrete sealers or curing compounds. Rough or uneven concrete surfaces should be made smooth with LATICRETE Latex Portland Cement or equivalent underlayment to provide a wood float (or better) finish. Dry, dusty concrete walls or masonry should be dampened and excess water swept off. Installation may be made on a damp surface. New concrete walls shall be damp cured and 28 days old before application. *No minimum cure time for concrete slabs when thin-set adhesive is mixed with latex additive or equivalent. All walls must be plumb and true to within ¼”(6mm) in 10 ft(3m).

Mixing methodology shall be as per the manufacturer specifications and instructions

Application

Apply adhesive to the substrate with the flat side of the trowel, pressing firmly to work into surface. Comb on additional adhesive with the notched side. Use the proper sized notched trowel to insure full bedding of the tile. Spread as much adhesive as can be covered with tile in 10 minutes. Back butter large tiles (> 12”x12”) to provide full bedding and firm support. Place tiles into wet, sticky adhesive and beat in using a beating block and rubber mallet to imbed tile and adjust level. Check adhesive for complete coverage by periodically removing a tile and inspecting bedding adhesive

transfer onto back of tile. If adhesive is skinned over (not sticky), remove and replace with fresh adhesive.

Grouting

If grouting is required, grout installation after a minimum of 24 hours curing time at 70 F(21 C). Grout with LATICRETE or equivalent LATICRETE Sanded or Unsanded Grout or equivalent mixed with LATICRETE 282 Grout Admix or equivalent.

Floor tiling and dado to be measured in square metres after making deductions for openings. Quoted rates for flooring, skirting and dado work shall be inclusive of laying floor tiles /wall tile/dados including forming angles, corner pieces and in modular pattern either parallel/diagonal/skew to walls, as per detail drawing furnished by the architect and or, as instructed and approved by EIC. Floor tiling and dados shall be measured in square metres after making deductions for openings and the like.

Skirting shall be measured in linear metres for specified widths. Quoted rates quoted for flooring, skirting and dado works shall be inclusive of forming angles, corner pieces and approved borders.

4. t Stone Flooring

Stones as described shall be of approved quality, free of defects hard, sound, durable and uniform thickness and approved by the EIC. Edges shall be chisel dressed and the top surface shall be machine polished with joints running true and parallel from side to side. The Contractor shall provide the EIC with samples for approval and only approved stones shall be brought on to the Site.

Before laying tiles sub-surfaces shall be thoroughly cleaned and washed of all loose materials, dirt, laitance and the like and then well wetted without forming water pools on the surface.

The stone slabs shall be laid either parallel or diagonal to the adjoining wall, as shown in the drawing. Thoroughly wetted stones shall be laid on cement concrete mortar bedding not less than 20mm thick in the proportions of one part cement and four parts sand. Mortar shall be evenly spread over sub-surfaces and covered with a bed of cement at the rate of 5kg per square metre over areas that can be covered with stones within half an hour.

Stones shall be laid on cement beds one after another, each stone being gently tapped with a wooden mallet until properly bedded and level with adjoining stones. Joints shall be perfectly straight and uniform in thickness. Stones shall be laid perfectly level unless otherwise specified or directed by the EIC. After laying joints of stones shall be struck smooth.

Floor stones laid adjoining walls shall project at least 12mm under plaster or render, skirtings or dados. Cut pieces shall be avoided as far as possible.

After laying flooring shall be covered with a layer of damp sand and allowed to cure undisturbed for 7 (seven) days. Design traffic shall not be allowed on the floor for at least 14 (fourteen) days after laying stones. Following curing each and every stone shall be lightly tapped with a small wooden mallet. Should this give a hollow sound such stones, together with any cracked or broken stones, shall be removed and replaced with

new stones to proper lines and levels. To ensure that such replaced stones match those laid earlier laid the Contractor shall order sufficient extra tiles to meet this requirement.

For skirting and dado vertical surfaces shall be thoroughly cleaned and wetted and evenly and uniformly covered with approximately a 12-15mm thick coat of cement mortar (1:4)/as per 8.9.4 as directed by the EIC.

Backs of stones for skirting and dado shall be covered with a thin layer of neat cement paste and tiles gently tapped against walls with a wooden mallet. Work shall be done from the bottom of the surface proceeding upwards. Joints shall be as close as possible and the work shall be truly vertical and flush.

Flooring and dados shall be measured in square metres after making deductions for openings and the like. Skirting shall be measured in linear metres for specified widths. Quoted rates quoted for flooring, skirting and dado work shall be inclusive of forming angles and corner pieces.

G. PAINTING AND DECORATIVE WORKS :

The rates for all items under this section to include

This Specification describes the general requirements of painting and decorating on internal and external surfaces, woodwork and metalwork and varnishing and polishing to be executed on projects.

1. Painting with Acrylic Emulsion Paint

Acrylic emulsion paint of approved brand, manufacture and of the required shade shall be used.

APPLICATION: The number of coats shall be three or more coats to give smooth finish meeting the approval of the PMC / Architect. The paint shall be applied in the usual manner with brush or roller. The paint dries by evaporation of the water content and as soon as the water has evaporated the film gets hard and the next coat can be applied. The time of drying varies from one hour on absorbent surfaces to 2 to 3 hours on non-absorbent surfaces.

The thinning of emulsion is to be done with water and not with turpentine. Thinning with water will be particularly required for the under coat which is applied on absorbent surface. The quantity of water to be added shall be as per manufacturer's instructions.

The surface of finishing shall present a flat velvety smooth finish. If necessary more coats shall be applied till the surface presents a uniform appearance with velvety smoothness.

PRECAUTIONS:

Old brushes if they are to be used with emulsion paints, shall be completely dried of turpentine or oil paints by washing in warm soap water.

Brushes shall be quickly washed in water immediately after use and kept immersed in water during break periods to prevent the paint from hardening on the brush.

In the preparation of surfaces for plastic emulsion painting, no oil base putties shall be used for filling cracks, holes etc.

Splashes on floors, etc. shall be cleaned out without delay as they will be difficult to remove after hardening.

Washing of surfaces treated with emulsion paints shall not be done within 3 to 4 weeks of application.

2. Painting with ready mixed paint/Synthetic Enamel Paint

Painting on New Surface: The surface which has not been painted earlier, or the paint has been removed by paint remover, burning, caustic soda etc. shall be considered to be new surface.

Preparation of Surface

a) Wood Work: The surface shall be cleaned and all unevenness removed as specified in wooden surface. Knots, if visible, shall be covered with a preparation of red lead. Holes and indentations on the surface shall be filled in with glazier's putty or wood putty and rubbed smooth before painting is done. The surface should be thoroughly dry before painting.

Iron and Steel Work: The priming coat shall have dried up completely before removed by scrapping or by brushing with steel wire brushes. All dust and dirt shall be thoroughly wiped away.

b) Plastered Surface: The priming coat shall have dried up completely before painting is started. All dust or dirt that has settled on the priming coat shall be thoroughly wiped away before painting is started.

c) Application: The specification described in Cement Paint shall be hold good as far as applicable. The number of coats to be applied will be as stipulated in the item. The painted surface shall present a uniform appearance and glossy/matt finish described in Schedule of Quantities free from streaks, blisters etc.

3. Plastic Emulsion Paint

Plastic emulsion paint shall be of approved make, colour and shade to the satisfaction of the EIC.

Plastic emulsion paint shall be diluted by the addition of a quantity of water equivalent to half the volume of the paint to be applied. The paint and water shall be thoroughly mixed and then strained through cloth.

Priming coats shall be applied to surfaces by brush and allowed to dry properly, holes and depressions being filled with putty prepared with whitening and plastic emulsion paint and rubbed smooth and dry and touched up with plastic emulsion paint.

Subsequent coats, diluted by the addition of a quantity of water equivalent to about 15% to 20% of the volume of paint to be applied shall be applied to surfaces by brush and allowed to dry thoroughly so that no brush marks shall be seen.

Surfaces shall be cleaned and all cracks, holes and surface defects repaired with gypsum and allowed to set hard. All irregularities shall be removed by sand papering smooth and wiped clean and surfaces so prepared shall be completely dry and free from dust before painting is commenced. In the case of newly plastered surfaces special care shall be taken to ensure that they are completely dry before any application is attempted.

Existing, previously distempered or painted surfaces shall be cleaned of grease, dirt, dust and other deleterious matter and cracks, holes and surface defects repaired with plaster of Paris, allowed to set hard, sand papered smooth and wiped clean.

Flaking from previous coatings, if any, shall be thoroughly removed.

4. Texture Paint

General

Decorative treatment/coating consisting of coating the plaster finished surfaces with decorative textured coat of ready mixed mixture of approved aggregate with bonding compound/synthetic adhesive manufactured by M/s. Berger, Sherwin Williams, Asian paints, apoorva, Orion or equivalent approved manufacturer. The treatment coating shall be got done through approved agency as per manufacturers recommendations.

The treatment shall be applied/coated directly over the sub-base of reasonably smooth/levelled and clean surface like plastered brick work (plaster not being raked or scratched) in-situ concrete, precast concrete units, light weight blocks, asbestos cement sheet etc. as specified.

Material

The various aggregate and special bonding media/synthetic resin shall be strictly as per manufacturers recommendations. Only such aggregates shall be used, which are weather and corrosion resistant viz. glass, ceramic marble, chips, granite, quartz and flint, hematite's, pyrites or one in natural vitrified, coloured or other processed forms as specified. The aggregate shall vary in sizes from 0.5 mm. to 2.5 mm. and shall be applied in shades as specified. The finish shall have a film thickness of 3 mm. average.

Surface preparation

Before commencing, the surfaces should be cleaned thoroughly to remove any grease, dirt, dust or loose particle and should be free from surface water. Extremely porous surfaces should be pre-sealed with a thin coat of suitable primer. Previous painted surfaces if any, should be prepared by thoroughly scrapping off all loose flaking paint film, washing down with a suitable detergent and rinsing thoroughly with clean water and allowed to dry.

Application

Paint shall be brought to site in sealed containers. Addition of thinner at site will not be permitted. The material in the containers shall be mixed thoroughly before use, to off-set the settlement occurred due to heavy vibration while transporting and during storage.

A small amount of paint mixture shall be placed on a spot board. The spot board shall be held against the surface on which the treatment/coating is to be applied. The mixture shall be applied to the surface evenly with the help of laying on trowel to uniform thickness of about 3 mm. on an area of about 0.18 sqm. Scrap off the excess material, with the help of the steel float to obtain an even film thickness of 3mm. This shall be achieved by using the steel float held slightly on the trailing edge, putting an even pressure and scrapping off the excess material/mixture, left on the spot board shall be immediately put back into drum and shall be mixed well before reuse.

Level of the paint film to a smooth and even finish using the flat edge of steel float. It is important that only small areas of about 0.18 sqm. shall be treated at a time.

Wherever possible, whole work should be completed without stop in one operation by engaging sufficient number of workers, so that flowing edge may be maintained without forming any joint. If this is unavoidable, a suitable natural break in the application should be chosen and the joint shall be made using a straight edge, which can be continued when application is resumed the following day. Over lap or over troweling at joints shall be avoided. This treatment shall always be carried out in shade, away from full effect of hot sun.

At all times the completed work shall be protected against rain fall until complete hardness has been obtained which takes about 24 hours.

Once the treatment/coating is completed and set hard, no other treatment like polishing, cleaning, washing with acid etc. shall be resorted to in this area. The treatment/coating shall be taken up in hand when all other construction works viz. plastering, electrical wiring, plumbing, painting etc. have been completed.

After the whole work is completed, the texture shall be given a coat of anti-fungus gel to avoid fungus growth on surfaces. The contractor shall be responsible to protect the finished surface from any damages for whatever reason whatsoever.

5. SAND STONE DADO & CLADDING:

Only machine cut Sand stone slabs of specified size will be used. Brass clamps and brass pins (if required) of approved quality, size and make shall be provided. The brass pins shall be provided at the meeting of two Sand slabs both ways horizontally and vertically. The brass cramps shall be provided at the places approved by the Engineer-in-Charge. Sand stone to be used shall be of approved size, colour, type of veins and laid as specified in schedule of quantities or to the pattern shown in drawings or as directed by the Engineer-in-Charge. Laying of Sand stone shall be similar as stated above as far as applicable.

H. FALSE CEILING:

False Ceiling with Calcium Silicate Board / E-Board and Aluminium Framework

The work envisaged under these specifications refer to supplying and fixing in position false ceiling at any floor, any location and at any height.

Scope:

Providing and fixing Aluminum frame work

Providing and fixing one layer of approved calcium silicate board of 6 mm thick / 4mm thick e-board over this frame work.

Making necessary cut out for light fitting other necessities.

Finishing, if required

Aluminum Frame work:

The system consists of aluminum frame work suspended from the soffit of the RCC ceiling. The following approved Aluminum components shall be used for grid work.
Wall angles

Main T-sections Cross T-sections ceiling supports

Fixing of aluminum frame work shall be as per the drawings and as directed by the EIC

Calcium silicate board/e-board:

Incombustible:

Calcium silicate board shall be non-combustible. They also prevent spread of fire when applied as inner walls and ceilings. They do not discharge toxic gas or smoke. Calcium silicate board shall confirm as non-combustible as per BS476 part4-1970

Moisture Resistance:

Calcium silicate board shall be total water resistant and the moisture will not cause any leaching or efflorescence.

Strong and light:

Calcium silicate boards shall be light weight, rigid and robust and can withstand hammer impact when fixing. Surface shall be free from loose particles or powder etc.

Superior dimension stability:

Calcium silicate boards shall be stable crystalline structure and excellent dimension stability

Termite and vermin resistant:

The boards are not affected by insects, vermin, micro-organisms and will not nourish mould growth.

Finishing:

Calcium silicate boards may be placed in suspended ceiling T- grid for a removable ceiling. The surface of Calcium silicate boards shall be smooth and may be easily painted after suitable surface preparation.

Storage:

Board should be stored indoor placed flat on level supports. Never stack boards upright on edges.

Stacks should not have more than 100 boards of 6mm. Separate stacks with a hard wood board when placing one over the other.

Handling

Boards should be lifted clear off the stack and should not be dragged one over another. Place the boards down carefully in order to avoid damage to the corners or to the edges.

The above materials procurement shall fulfill the quality standards and to the satisfaction of EIC

The calcium silicate board/e-board shall be finished with primer and one/two coats of paint of approved make as per the requirement and as directed by the EIC.

LIST OF APPROVED MAKES

S. NO.	ITEMS	APPROVED MAKES
1	REBAR - ADHESIVE CHEMICAL & DISPENSAR	HILTI HIT-RE-500 / Fisher Pluse / Equivalent as approved
2	BONDING AGENT	NITOBOND EP / SIKA / Equivalent as approved
3	COROSSION PROTECTION CHEMICAL	BASF / SIKA / FOSROC / ADCOS / SP CONCARE / Equivalent as approved
4	ANCHOR BOLTS / FASTENERS / CHEMICAL FASTENERS	HILTI / FISHER / Equivalent as approved
5	STEEL REINFORCEMENT	TATA / SAIL / JINDAL / JSW / Equivalent as approved
6	STRUCTURAL STEEL SECTIONS	SAIL / TATA ISCON / JINDAL HISSAR / Equivalent as approved
7	WELDING RODS	ADVANI / Equivalent as approved
8	RMC	ULTRATECH / ACC / Equivalent as approved
9	POP	SAKARANI / INDIA GYPSUM / JK / Equivalent as approved
10	CEMENT	ULTRATECH / AMBUJA / BIRLA / Equivalent as approved
11	CONCRETE ADMIXTURES	SIKA / BASF / FOSROC / SP CONCRAE / Equivalent as approved
12	EPOXY PAINT	BERGER / FOSROC / STP
13	SYNTHETIC ENAMEL	BERGER / ASAIN PAINTS / ICI / NEROLAC / APEX ULTIMA
14	FIRE RETARDENT PAINT	AKZO NOBEL / I.C.I DULEX / ACRO PAINTS (Fire Gard) / NAVAIR
15	PU SEALANT / STRUCTURAL SEALANT	DOW CORING / WACKER / SIKA / PIDILITE
16	WATERPROOFING COMPOUND	SIKA / CICO NO. 1 / PIDILITE

PREAMBLE TO BOQ

S. NO.	NOTES
1	During progress of work, Contractor has to coordinate with Govt authorities. Contractor to quote his best rate, keeping in view such eventualities. Cost for such eventualities is deemed to be included in rate, nothing extra shall be paid on this account by the Client.
2	Once work is awarded to contractor, Client will handover the site, in writing for construction work. Once construction work is complete, Contractor will handover the same to Client in satisfactory conditions.
3	No child labour will be allowed to work during construction stage.
4	Chewing Tobacco & Smoking, drinking at site premises are prohibited.
5	Contractor needs to coordinate and make all necessary provisions for services & no extra payment shall be made on this account.
6	Working in Operational Campus: The campus is fully occupied and operational. Work must be executed with zero disruption to daily activities. Noise-generating activities must be scheduled in the odd hours and coordination with ISID.
7	Safety & Barricading: Contractor shall provide safety nets, barricading, warning signage, and Personal Protective Equipment (PPE) for all labour. No child labour permitted.
8	Dismantling & Demolition: Safe removal of window jamb stone, SS railings at 3rd-floor landing, existing parapet brickwork, manual/mechanical cutting of RCC columns/slabs/beams at terrace level, chipping off existing terrace waterproofing, and safe disposal of malba outside municipal limits.
9	Protection Measures: Outer facade protection using 600-micron PVC sheets and inner glazing/floor protection using plywood and PVC sheets to prevent dust/damage during live building operation.
10	Scaffolding & Formwork: Erection of heavy-duty cuplock double scaffolding system with MS tubes, challies, safety green nets, and lighting, plus formwork for additional refuse areas.
11	All existing Services Electrical, Plumbing, HVAC, Fire Fighting, Gas Pipelines etc. to be protected by the Contractor. If any damages, Contractor to pay the damages cost & shall be held responsible.
12	Contractor to provide and fix GI expanded wire mesh with nails at the junction of RCC beam or columns or slab and Brick work before plastering work. Contractor to get the hacking of the green concrete done before application of plaster. Nothing extra shall be paid on this account.
13	The rate for waterproofing work shall include: i) Surface Requirement to do the effective waterproofing. ii) All surfaces to be waterproofed should be made sound, clean and dry. iii) Specialized agency to be approved by Client / who shall give Guarantee for 10 years for the Waterproofing works done at Site. iv) Contractor shall give both material and performance guarantee in the format approved by Clients / Consultants.

S. NO.	NOTES
14	The rate for steel work shall include: i) All forging, pressing, reducing to required size shape and figure, drilling, tapping, punching, counter sinking for screws, grinding etc., and every type of work that may be necessary to fabricate, finish, erect and fix in position all steel work. ii) Neatly cut and fitted notches, true and squared ends including planning's to sheared end of plats, angles etc., where abutting against each other, for transmission of stresses. iii) All necessary templates, pattern moulds, mock-ups etc. iv) All welding / bolting / riveting as required. v) Necessary hoisting equipment, temporary supports, scaffolds, bracings, connections, required for fabrication and erection including removing same after fixing steel work in final position. vi) Anchor / fix members to/in masonry / concrete. vii) Preparation of surface de-rusting, sand blasting and protection with two coats of zinc-chromate primer & three or more coats of epoxy or enamel paint. viii) The Contractor shall submit necessary fabrication / shop drawings for work involved for approval, The fabrication work shall start only after approval of the fabrication drawings. Any change required in the fabrication drawings shall be carried out at no extra cost. ix) Fabrication shall be in a perfect Architectural workmanship manner and as provided in Section V & VI of IS 800 & IS 7215.
15	The rates quoted for Concrete, Plaster shall include: i) Making all drips, grooves, moulds, curved surfaces and chamfered edges etc. in concrete and/or plaster work as directed. ii) All projections, toothing and ornamental work and finishing to shape as directed. iii) Embedding all electric pipes, boxes, fan hooks false ceiling suspensions, cut-outs of any size and shape and inserts of any other description etc. in RCC slab or beam as directed. iv) Working up or hacking of concrete surface & cleaning the surface from loose dust & dirt for providing keys for further concrete work including applying thick cement slurry or mortar. v) Use of cement slurry over shuttering before commencing concreting if required. vi) Work in narrow widths, small quantities and curved alignment. vii) Removing rust, mill scales, oil, grease, paint etc. from reinforcing bars & apply cement slurry over the reinforcing bars to protect them from rusting. viii) Cleaning of slush, mud etc. if any from laid reinforcement of sub structure work before laying of concrete. ix) Work either straight or curved, plain or circular or any shape, work in inclined or sloping surfaces. x) In case M/s ISID decides to supply Ready mix concrete the shuttering shall be adequately placed for carrying discharge from concrete Pump. The cost there off shall be covered in Shuttering item. xi) Associated works and attendance for Specialised Agencies work. The works which are not covered in specialised agencies' (Water Proofing works, Construction Joint Treatment, Injection Grouting works etc.) scope of works xii) Rates to be quoted for all levels, heights and the treatment of construction joints with injection grouting.

S. NO.	NOTES
16	The rates for all masonry work include: Hacking and roughening of concrete or other surfaces in contact with masonry for bondage. ii) Leaving out dowels from concrete member for anchorage. iii) Levelling up and preparing tops of wall for damp-proof courses, precast units, plinth beams etc iv) Holes (cut and formed or left) for fixing, pipes, bolts and other inserts and making good including grouting if necessary. v) Forming chases for edges of concrete floors or other units, for sealing in waterproofing layers etc. vi) The efflorescence patches appearing on brick work shall be washed with a light solution of HCL or other chemicals (after approval of PMC) to give efflorescence free surface.
17	All BOQ items quoted rates are inclusive of : All necessary leads, lifts & for all heights shall be included in quoted rates as per site. No extra payment shall be made by the Client on account on this.
18	All BOQ items quoted rates are inclusive of : All the debris disposal to the NDMC approved yard / required location shall be included in the quoted rates. Noting extra shall be payable on this account.