

CSIR-Central Road Research Institute

Delhi-Mathura Road, New Delhi-110025



Tender Document e-Tendering System



Name of Work:

Annual Operation & Maintenance Contract of Fire Alarm and Fire Fighting system Installed in Multistory Building at CRR I Staff Colony, Maharani Bagh, New Delhi-65

Maharani Bagh Staff Quarters (MBSQ)

CSIR-CENTRAL ROAD RESEARCH INSTITUTE

DELHI-MATHURA ROAD, NEW DELHI – 110025

Content

Name of the Work: Annual Operation & Maintenance Contract of Fire Alarm and Fire Fighting system Installed in Multistory Building at CRRRI Staff Colony, Maharani Bagh, New Delhi-65

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CSIR - CENTRAL ROAD RESEARCH INSTITUTE
DELHI- MATHURA ROAD, P.O-CRRI,
NEW DELHI – 110025

ई-टेंडर आमंत्रित नोटिस / Notice Inviting e-Tender

NIT No: MBSQ/FFS-AMC/2025-26

CSIR-CRRI invites online tenders through **GeM** portal in two bid system for following work:-

Name of the Work: Annual Operation & Maintenance Contract of Fire Alarm and Fire Fighting system Installed in Multistory Building at CRRI Staff Colony, Maharani Bagh, New Delhi-65

- | | |
|-------------------------------------|-------------------------|
| 1) Estimated Cost | : Rs 25,70,255/- |
| 2) Tender Cost | : Rs. 500.00 |
| 3) Earnest Money | : Rs. 51,500/- |
| 4) Period of Completion of work | : 18 months |
| 5) Bid Submission Start date & time | : As per GeM |
| 6) Bid Submission End date & time | : As per GeM |

Note:

- I. The tender document and other details can be Viewed/ downloaded from the website GeM
- II. Corrigendum/Addition/ Clarification in respect of NIT of the above said work, if any, will be uploaded on the GeM Portal

सीएसआईआर-केन्द्रीय सड़क अनुसंधान संस्थान ने दो बोली प्रणाली में GeM पोर्टल के माध्यम से निम्नलिखित कार्यों के लिए ऑनलाइन निविदाएं करता है :-

कार्य का नाम : Annual Operation & Maintenance Contract of Fire Alarm and Fire Fighting system Installed in Multistory Building at CRRI Staff Colony, Maharani Bagh, New Delhi-65

- | | |
|--|-------------------------|
| 1) अनुमानित लागत | : रु 25,70,255/- |
| 1. निविदा मूल्य | : रु 500.00, |
| 2. धरोहर राशि(EMD) | : रु 51,500/- |
| 3. कार्य पूर्ण करने की अवधि | : 18 months |
| 4. निविदा भरने की प्रारंभ तिथि एवं समय | : As per GeM |
| 5. निविदा भरने की अंतिम तिथि एवं समय | : As per GeM |

नोट:

- I. निविदा दस्तावेज़ और अन्य विवरण वेबसाइट GeM से देखें डाउनलोड किए जा सकते हैं।
- II. उपरोक्त कार्य की निविदा के संबंध में यदि कोई Corrigendum/Addition/ Clarification है तो उस अधिसूचना को GeM पोर्टल पर अपलोड किया जाएगा।

-sd-

प्रमुख –एमबीएसक्यू

CSIR-Central Road Research Institute
Delhi-Mathura Road, New Delhi-110025

File No. MBSQ/FFS-AMC/2025-26

Detailed Notice Inviting Tender

1. Online Item-rate tenders are hereby invited through tendering portal GeM for the work of “**Annual Operation & Maintenance Contract of Fire Alarm and Fire Fighting system Installed in Multistory Building at CRRRI Staff Colony, Maharani Bagh, New Delhi-65**” from contractors of appropriate class of CPWD, Railways, MES, State PWD's, Semi government organizations and / or from those who have successfully carried out similar works for CSIR or its laboratories, govt. or semi government organizations. The tenderers should have successfully completed at least three similar works* amounting to 40% or at least two similar works amounting to 60% or at least one work amounting to 80% or above in single contract of the estimated cost of work during the last seven years, ending on the last day on the month previous to the one in which tender is being invited. The contractors may apply with proof of fulfilling the above conditions along with copies of PAN, GST registration number, satisfactory work completion certificates and Valid electrical license for electrical works only (or an undertaking confirming that electrical works shall be got done through a licensed electrical agency).
- *Similar work shall mean Annual Operation & Maintenance of Fire Alarm and Fire Fighting System.**
2. The Estimated cost of work is **Rs. 25,70,255/- (Rupees Twenty Five Lakh Seventy Thousand Two Hundred and Fifty Five Only)** based on CPWD, DSR-2022(E&M) & DSR-2023 (Civil) for Scheduled Items and prevailing market rates for Non-Scheduled **including applicable GST**.
3. Duration of contract for carrying out of the work will be **18 Months** from the date of commencement which shall be reckoned from the tenth day of issue of award letter.
4. The tender in two bid system shall be submitted through online at GeM –portal by the tenderer, as per date given in Critical Date Sheet below:

Critical Date Sheet

S. No.	Schedule of activities	Date and time
1	Publish Date on CPP/GeM Portal	As per GeM
2	Bid document download start date	As per GeM
3	Bid submission start date	As per GeM
4	Bid submission end date	As per GeM
5	Technical Bid opening date (Cover – I)	As per GeM
6	Financial Bid opening date (Cover – II)	As per GeM

5.
 - a) Scanned copies of Tender Cost (non-refundable) of Rs 500.00 (Rupees Five Hundred Only) and Earnest Money Deposit amounting to Rs 51,500 (Rupees Fifty One Thousand Five Hundred Only), deposited through RTGS / NEFT in favour of Director, CRRI (Account No. 30268867237; IFSC Code- SBIN0010442 of State Bank of India, CRRI) shall be uploaded in Cover-I of the tender. Tenders received without tender cost and earnest money deposit will not be considered.
 - b) Earnest Money will be forfeited if the Contractor fails to commence the work as per the letter of award.
6. The tenderer is to indicate the name & telephone nos. of issuing agency of the completion certificates to enable the verification of the documents, if necessary. It may be noted that even after opening of price bid, the credential submitted found to be false/forged the offer submitted shall be rejected out rightly. No further clarification will be sought from the tenderers.
7. The employer does not bind himself to accept the lowest or any tender and reserves to himself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rates quoted by him.
8. No tenderer shall be permitted to tender for works in the concerned unit of C.S.I.R. in which a relative is posted in the grade between Controller of Administration and Junior Engineer, (both inclusive). He shall also intimate the name of persons who are working with him in any capacity or subsequently employed by him and who are relatives as mentioned above.
 Note: A person shall be deemed to be a relative of another if, and only if, (a) they are members of a Hindu undivided family or (b) they are husband and wife or (c) the one is related to the other in the following manner: father, mother (including step mother), son (including step son), Son's wife, Daughter (including step daughter), Father's father, Son's son, Son's son's wife, Son's daughter, Son's daughter's husband, Daughter's husband, Daughter's son, Daughter's son's wife, Daughter's daughter, Daughter's daughter's husband, Brother (including step brother), Brother's wife, Sister (including step sister), Sister's husband.
9. Tenders submitted shall remain valid for a period of 90 days from the bid submission end date for the purpose of acceptance and award of work. Validity of the tender beyond 90 days from the bid submission end date shall be extended by mutual consent.
10. In e-tendering, tenderer can quote the rates in figure only. The rates in words, amount of each item and total is generated automatically. Therefore, the rate quoted by the tenderer in figure is to be taken as correct.
11. The tenderer should carefully see the contract drawings (as applicable) as no claim whatsoever will be entertained for any alleged ignorance thereof.
12. Before tendering, the tenderer shall inspect the site to fully acquaint himself about the conditions in regard to accessibility of site, nature and area/extent of ground, working conditions of site and locality including stacking of materials, installations of tools & plants etc., conditions affecting accommodations and movement of labour etc. required for the satisfactory execution of contract. No claim whatsoever on such accounts shall be entertained by the Employer under any circumstances.
13. If any tenderer withdraws his tender within the validity period or makes any modification in terms and conditions of the tender, before the award of work, which are not acceptable to CSIR-CRRI then CSIR-CRRI shall, without prejudice to any other right or remedy, shall be at the liberty to forfeit 50 % (fifty percent) of the Earnest Money deposit absolutely. Further, the tenderer shall not be allowed to participate in the re-tendering process for this work.
14. Except writing rates in figure only, the tenderer should not write any conditions or make any changes, additions, alterations and modifications.
15. 100% Earnest Money will be forfeited if the contractor fails to commence the work within the stipulated period after the Award of the work.
16. Some of the major provisions of General Conditions of Contract are given below. Interpretations, however, shall be as given in the General Conditions of Contract.
 - a. DEFECTS LIABILITY PERIOD is of 12 Months from the date of completion as certified by the Engineer-In-Charge.
 - b. Minimum value of work for the intermediate / interim certificate will be **Rs.1.4 Lakh**. However, a lesser amount can be admitted for intermediate / interim certificate at the discretion of the Engineer-In-Charge.

- c. SECURITY DEPOSIT: A sum @ 10 % of the gross amount of the bill shall be deducted from each running bill of the contractor till the sum along with sum already deposited as earnest money, amounts to 5 % of the tendered value of the work. In addition, the contractor shall be required to deposit an amount equal to 5 % of the contract value as performance security within the period prescribed in the letter of award issued to him.
 - d. COMPENSATION: Contractor shall pay, as compensation, an amount equal to One percent or such smaller amount as Employer (whose decision in writing shall be final) may decide on the cost of whole work as shown in the agreement, for every week that the work remains un-commenced or unfinished or due quantity of work remains incomplete after the scheduled dates. Compensation to be paid shall not exceed 10% (Ten percent) of the contract amount as shown in the agreement.
 - e. One Graduate Engineer with minimum 02 years experience or one Diploma Engineer with minimum 05 years experience will be required, to be employed for the work costing more than 20 lacs and upto 1.5 Crores.
17. For any queries relating to the Tender Document and the terms and conditions content therein should be addressed to **Head (MBSQ)**.
- 18. Opening of Technical Bid (Cover. I)**
- (a) The Technical bid will be opened by **Tender Opening Committee (TOC)** on at PM, **CSIR-CRRI, Delhi-Mathura Road, New Delhi-110025**, in the presence of such intending tenderers or their authorized representatives who may wish to be present at that time. No claim or any grievances will be entertained what-so-ever by the Tender Opening Committee in this regard.
 - (b) The TOC, after evaluation of documents contained in Cover-I i.e. Technical Bid, will decide the eligible tenders, as per the criteria laid down in the NIT.
 - (c) The TOC will then open the Financial Bids of only eligible tenderer.
- 19. Opening of Financial Bid (Cover- II)**
- The Cover-II of Technically Qualified Bidders/Tenderers shall be opened.
- Tender Liable for Rejection.**
- Tender is liable for outright rejection if on opening it is found that –**
- (a) The Tenderer has not strictly followed the procedure laid down for submission of tender.
 - (b) If the tender **is CONDITIONAL**
 - (c) If the Tenderer has quoted his offer anywhere else other than specified place provided.
 - (d) The Tenderer has not uploaded the documents or Failed to fill the prescribed format.
 - (e) Any other ground as decided by the TOC in view of deviation from Tender Document.
20. The instructions for the submission of e-tender are available on the GeM under the “Instruction for Online Bid Submission”. All the intending tenderers are requested to go through these instructions before entering into the process of e-tendering.
21. The tenderer shall submit an undertaking on Firm/Company letter head for **black listed/bankrupt etc.** as per **Annexure-I**. The scanned copy of the undertaking shall be uploaded in Cover-I and the Original Copy of the same should be submitted before award of work to Concerned Division / Office.
22. For this tender, tenderer should quote the rates of Items, Tool & Plants and service charge (in lump sum amount per month) only in rupees in given BoQ/Financial bid excel template. In tendering, tenderer can quote the rates in figure only. The rates in words, amount of each item and total is generated automatically. Therefore, the rate quoted by the tenderer in figure is to be taken as correct. **Further, Bidder will quote the rates of minimum wages, applicable EPF, ESI contribution for skilled and unskilled workers not below as per Annexure-II enclosed as it is fixed. Prevailing minimum wages as per Govt. of NCTD orders from time to time, applicable EPF, ESI contribution for skilled and unskilled workers shall be paid. Contractor should quote total amount which should includes Material & Manpower (As per Annexure-II) amount.**

23. List of documents to be scanned and uploaded in Cover-I & II are as per follows:

Sl. No.	Cover-I	Cover-II
1	Receipt of deposit of Tender Cost and EMD	Bidder will quote the rates of minimum wages, applicable EPF, ESI contribution for skilled and unskilled workers not below as per Annexure-II enclosed as it is fixed. Prevailing minimum wages as per Govt. of NCTD orders from time to time, applicable EPF, ESI contribution for skilled and unskilled workers shall be paid. Contractor should quote total amount which should includes Material & Manpower (As per Annexure-II) amount.
2	Undertaking Annexure-I as per clause no.21.	
3	Copies of experience certificates of similar works completed satisfactorily as per NIT clause no.1	
4	Copy of GST registration number	
5	Copy of PAN Card	

UNDERTAKING

(To be given on Company's Letter head)

I age..... years is resident of do hereby solemnly stated on oath that, I am the sole Proprietor /Owner/Power of Attorney Holder of the firm/Company named,

- i) That my firm/company presently not black listed/debar by any Central Govt./ State Govt./ Autonomous bodies/ PSU's etc.
- ii) That the firm/company is not under any liquidation, Bankrupt, Court receivership or similar proceedings.
- iii) That I have submitted online Tender for the **"Annual Operation & Maintenance Contract of Fire Alarm and Fire Fighting system Installed in Multistory Building at CRRRI Staff Colony, Maharani Bagh, New Delhi-65"** on Govt. official site
- iv) That I have carefully gone through, read, thoroughly studied and understood all terms & condition, specification included in the tender document (Tender Form, Detail Tender Notice, conditions and specifications common set of Deviations drawings etc.) I hereby accept all these conditions, I agree to abide by the terms & condition in the tender document and agree to execute the work/job as per terms and conditions, specifications laid down in the tender document.
- v) I do here by state on oath that the documents uploaded by me in Cover-I of this tender are true, correct and bonafide. There are no errors and omissions in the uploaded documents. In case in future, if it is found that, any of the uploaded document /information is false / wrong, I will be personally responsible for the same and I will be liable for legal action against me.

(Name, address and signature of Tenderer)

ANNEXURE-II

No.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT	Remark
				(Rs)	(Rs)	
1	3 Nos Fireman for Annual Operation & Maintenance Contract of existing Fire fighting & fire hydrant system, as per scope of work (enclosed) & Annexure -I of the existing sytem installed at M.S. building Maharani Bagh Staff quarter.	3	each	22411.00	67233	MR
	a) Duties for Sunday 3X52day = 156 day in a year	13.75	each	862.00	11853	
	b) Duties for National holidays. 3X3days =9 day in a year					
	Total no of Duties 156+9=165 in a year					
	No. of Duties Additional Skilled labourPer month =165/12=13.75					
	Total wages (basic minimum)/month				79085.50	
	EPF @ 13.16% of 79085.50				10407.65	
	Bonus @8.33% or Rs. 291.55 each labour	3	each	291.55	874.65	
	Bonus @ 8.33% or Rs. 291.55 /26 day for Additional skilled labour = (291.55/26)X13.75				154.19	
	One Engineer 1500/m for one visit				1500	
	Total per month (A)				92021.99	
	GST @ 18%				16563.96	
	Total per month for 3 manpower				108585.95	
	Labour Cess@ 1%				1085.85	
Total Amount (Per Month)					1,09,672/-	

• **NOTE :**

Bidder will quote the rates of minimum wages, applicable EPF, ESI contribution for skilled and unskilled workers not below As Per Annexure-II (enclosed) as it is fixed. Prevailing minimum wages as per Govt. of NCTD orders from time to time, applicable EPF, ESI contribution for skilled and unskilled workers shall be paid. Contractor should quote total amount which should includes Material & Manpower (As per Annexure-II) amount.

Scope of Work

Name of work:- Annual Operation & Maintenance Contract of Fire Alarm and Fire Fighting system Installed in Multistory Building at CRR I Staff Colony, Maharani Bagh, New Delhi-65

1. The multistoried building consisting of a total of 24 type-IV & Type V quarters at CRR I Staff colony, Maharani Bagh, is provided with the fire alarm and fire fighting systems. Presently, the complete fire fighting and fire alarm system is fully operational and therefore the rates given in the schedule of quantity will be deemed to included cost of all the necessary materials, T & P and labour etc. required for satisfactory operation and maintenance of the entire system, as per the schedule of quantities and good Engineering practice. The firm should inspect the site and examine the installed system before quoting their rates.
2. At present Fire Alarm Fire Fighting and Public Address system installed in the building is fully functional. It would be the responsibility of contracting firms to inspect the complete installation and get themselves fully satisfied before quoting their rates. The firm will handover the complete system fully functional back to the department on completion of work.
3. **The contractor shall obtain the clearance /no objection certificate from the Delhi Fire Service Department of NCT Delhi and will co-ordinate/ liaison with them, at any stages, as and when required.**
4. During the course of Maintenance contract, the firm will co-ordinate with the Engineer-in-charge on regular basis for effective execution of various activities concerning the servicing and operation of Fire Fighting and Alarm System, as per the details /particulars of maintenance schedules mentioned in **Annexure I**.
5. **The firm shall provide a minimum of 3 (Three) Electrician-cum fire man team in 24 hours round the clock spanning over three shifts of 8 hrs duration. With at least one person being available at all times.** The staff deployed should have adequate qualification and experience. The firm will also deploy a senior engineer (having sound knowledge of Fire Fighting System), as and when required who will visit the site at least once in a month, to take up periodic maintenance and to ensure that the works are being accomplished as they are required under the condition of contract. Total manpower to be deployed will be as mentioned below :-

For Item No – 1 (3 Persons per day)

Sl. No.	Description	Quantity	Duty Hours
1	Electrician-cum fire man	3 Nos.(1 in each shift of 8 hrs duration)	i. 6.00 AM to 2.00 PM ii. 2.00 PM to 10.00 PM iii. 10.00 PM to 6.00AM
2	Engineer	1 No.	As & when required and at least once in a month to take up periodic maintenance and to ensure the delivery of work envisaged under the contract.

6. The firms Senior Engineer will hold fire safety session for the residents of multistoried building, once in six months, to create awareness. Leafkets / notes etc. will also be distributed in such sessions.

7. In addition to penalty indicated under the general /special conditions of contract, penalty will be imposed, at the following rates, for the absence of Contractor's staff from duty.
- a) Absence of Electrician cum Fire man will be charged @ Rs 804/- per shift plus Surcharge @ 20%.
 - b) Absence of Engineer @ Rs 1500/- per month plus Surcharge @ 20%.

8. NOTES:-

- 1. Power and water required for the services shall be provided by the department at no additional charge to the contracts.
- 2. The tenderers may visit the site before submitting the tender so that they can themselves see the existing system for any clarification.
- 3. No Tool and plant for execution of services shall be supplied by the department.
- 4. Cleaning materials such as vim / surf / cotton / old dhotis, pilot lamp for indicating lamp, pvc tape etc., gland dori, grease for pump and motors etc required for the execution of services shall be arranged by the contractor on his own.

DETAILS OF MAINTENANCE SHEDULES

Maintenance of Fire Alarm and Fire Fighting System

The following activities /works / checks will be performed by the contractors staff on Daily / Fortnightly / Monthly / Quarterly / Half Yearly basis which will be dully recorded in the log book with date and time.

1. Daily Checks

- a) Check the power supply positions in respect of all the panels placed in various floors of the multistoried building.
- b) Check the LED of panels through lamp test switch.
- c) Check any fault if indicated on any of the panels and rectify the same immediately.
- d) Maintain the wet riser system, the contractor shall carry out the following operations in the presence of departmental officials.
 - i. Check water pressure in the system (minimum 3.5 kg / sqm.)
 - ii. Running of the fire hydrant pump and motor.
 - iii. Check leakage etc. in the system.
 - iv. Check of control panel.
 - v. Check of bell and siren for its proper working.

2. Fortnightly Checks

- a) Operational readiness of the entire system during mains failure.

3. Monthly Checks to ensure

- a) Fire circuit of each zone from the panels.
- b) Whether signals of fire and fault gets transmitted from zonal panel to main panel.
- c) Performance of the hooters.
- d) Performance of the manual call points.
- e) Monthly cleaning of the system and draining of the same etc., as required.

4. Quarterly Checks

- a) Fault circuit of each zone by actually disconnecting the wire

5. Half Yearly Checks

- a) Manual cleaning of manual call points, panels , hooters, hydrant box etc.

6. TERMS OF PAYMENT

Payment for the works completed will be made as shown under:-

Item No. 1 Quarterly payment will be made at the end of each quarter after successful completion of works in the preceding 3 months.

Item No. 2 onwards As per actual measurement.

ADDITIONAL CONDITIONS OF CONTRACT

1. The firm will maintain the logbook for the maintenance works carried out as given under. After each maintenance / testing, the details will be entered in the log book (maintenance) register along with the of testing date and results achieved. The entry in the register will be countersigned by the departmental Engineer.
2. Without taking prior approval from the site Engineer, no fittings / materials will be removed for the purpose of repairs. It will be the contractor's responsibility to provide alternative serviced temporary arrangements for such items removed during the period of repair. The item will be repaired and into position so as ensure that the systems remains fully functional all the time.
3. The firm shall maintain all cables from main control panel to local control panel and to detectors for each zone.
4. The system shall be maintained in working condition all the time until completion of contract. The firm will hand over to CRRI the total system in fully functional condition at the end of completion of contract.
5. The demonstration on the working of system shall be given, once in a fortnight, to the Engineer-in-charge.
6. All materials to be used for repair and replacement of parts shall be from the approved list and of ISI make.
7. The check list and test requirements mentioned in the tender documents are of general nature and indicative only. In case specific checks and additional tests, under the overall guidelines of Delhi Fire department are considered necessary for efficient working of the equipment system towards ensuring its functioning all the time will be paid additionally if required.
8. **In case of incident of fire, the contractors/Engineer shall be available on duty, who will ensure adequate operation of system fire fighting immediately and will also simultaneously inform Delhi Fire Office and Residents / Maintenance staff for vacating the area under fire.**
9. The firm shall depute to site one qualified Engineer to check the whole system at least once every month. A proper record will be maintained duly signed by the Engineer and countersigned Engineer of the Employer concerning such visits. The firm shall submit a list of persons deployed for the work.
10. The firm will demonstrate on daily basis proper working of the complete fire fighting system by testing the system for a period of 45 minutes the firm will also carry out mock drill once in a month or as and when required by the department. A compressive drill also be done, once during the contract period, where firms Engineer will also be present. The firm shall be responsible for proper working condition of the fire system all the time and all parts found defective / damaged will have to be replaced free of cost by the firm. In the event of failure of fire fighting system at the hour of need, the firm shall be fully responsible lapses and will have to meet all the losses uncured due to failure of fire fighting system.
11. The firm shall be responsible for supplying and maintaining all accessories, equipment, and panels, installed and being operated any loss or damage to the system components, line valves etc, due to faulty operation or any other reason shall be the responsibility of contractor and he will have to either replace the same or make good of the damages as the case may be. In case of hydrant pipes, if the damages are caused due to 3rd party or due to ageing, the decision of departmental Engineer shall be final with regard to admissibility of such payment as an additional payments.
12. The Engineer in charge or his representative shall have full access to all installation at all time.
13. Maintaining liaison with the Fire Department in case of fire and tests to be conducted to check the operation / readiness of the system shall be contractor's responsibility.
14. Responsibility of providing all spares and consumables items required for operation of the system shall be that of contractor only.
15. Contractor will remove any staff from the duty if he not found competent for the job Engineer in charge will give such notices in advance and contractor will replace such person in 3-4 days.
16. The servicing of pumps and motors shall be done twice in a year. (i.e. during the 1st quarter and 3rd quarter) to the full satisfaction of Engineer and not extra payment shall be made on this account. The water and electricity required for their running and maintenance will be provided to contractor by department at no cost.

LIST OF APPROVED BRANDS/MANUFACTURERS FOR MATERIALS (Electrical)

Sl. No.	Description	Name of the Manufacturer
1	1.1 kv Cables	Polycab/KEI/ HAVELLS
2	1.1KV XLPE CABLES	Polycab, Universal, Havells
3	Control Cables	Gloster,,/Universal/POLYCAB/KEI/ HAVELLS
4	Cables Glands	Commet, Gripwel, Siemens type brass double compress ion glands SIBG.
5	Lugs	Dowells / Jainson / equivalent
6	M.C.C.B's	L& T / GE – Alsthom. / Siemens / LEGRAND
7	M.C.B's	L& T / GE – Alsthom. / Siemens / LEGRAND
8	Switch Fuse Unit	L&T /GE-Alsthom/Siemens
9	Selector & Control Switch	Kaycee / L& T/ Siemens/ kappa
10	Bus Duct	control & Switch gear /Zeta
11	Current / Voltage Transformer	Automatic Electric/ Kappa/L&T Controlled & switch gear
12	Meter & Metering Equipment	AE./IMP/Rishab
13	Toggle Switch	Kaycee/ Havels
14	Cotactors	L& T /Seimens /Andrew Yules/ GE/ Alsthom/ ABB
15	Bush Buttons	L& T /Siemens/ BCH
16	H.T.O.C.B	GE/ Alsthom/ ABB/ Crompton
17	MS CONDUITE	AKG/BEC/NIC/ICI
18	COOPER & ALUMINIUM CONDUCTORS	National/Gloster/ Plaza/ skyline/sky tone
19	PVC Conduits	Plaza/ AKG/BEC/ polypack
20	Indicating Lamp	L& T /Seimens/ RECO/KAYCEE
21	AMMETER & VOLT METER	A.E./UE/IMP/RISHAB
22	HT XL PE Cable	Nicco/CCI/GLUSTER/UNIVESAL
23	Lighting fitting	PHILIPS/ CROMPTON/ BAJAJ/ GE/HAVELLS/halonix
24	CONDUIT ACCESSORIES	RAME/NOBLE/PLAZA
25	GI PIPE B CLASS	JINDAL/ PRAKASH/ TATA

26	ELECTRICAL FIRTING & FIXTURE	PHILIPS/ CROMPTON/ BAJAJ/SYSKA
27	CEILING FANS	USHA/ BAJAJ/ORIENT/USHA
28	EXHAUST FANS	USHA/ BAJAJ/ORIENT/USHA
29	SWITCH SOCKET/BELL PUSH	ANCHOR/ANCHOR-ROMA CRAPREE/of Havels
30	Ceiling Fan Regulator	ANCHOR/ANCHOR-ROMA CRAPREE/of Havels
31	ELECTRIC PANEL	AS PER SPECIFICATION IN BOQ

Note:-

1. The above makes are all indicative In case the Contractor would like to use any other make, he must submit the technical literature about the capabilities of these items and get the approval of Engineer In –charge prior to using the same.
2. The items for which no makes are specified, only ISI marked and/ or approved make by Engineer In –Charge shall be used.

LIST OF APPROVED BRANDS FOR OTHER MATERIALS (CIVIL)

S.No.	<u>MATERIAL</u>	<u>BRAND / QUALITY</u>
1	Lamination sheet	Century/Formica/ Decolam/ Greenlam/ Nationai or equivalent
2	Prelaminated Board	Novapan/ Bhutan /Green/National or equivalent
3	Comm / Teak Board & Ply Sheets	Duro /Centuryarchitect/ Green / National or equivalent
4	Texured Paint	Spectrum/ Unitle /Birla /Heritage or equivalent
5	Mirror	Atul/ Twin Modi or equivalent
6	Plain Glass	Modi Guard/ Saint Gobain / Asahi or equivalent
7	Enamel Paint	Asian / ICI /Berger/ Nerolac or equivalent
8	Paint	Asian / ICI /Berger/ Nerolac or equivalent
9	Gypsum Board	India Gypsum or equivalent
10	Aluminium Sections	Indalco /Hindalco / Jindal or equivalent
11	Distemper	Asian / ICI / Berger or equivalent
12	Veneers	Duro(Nature'ssignature)/Century/GreenVeneers or equivalent
13	Vitrified Tiles	Marbito/ Euro/ Asian / Nitco/Orient or equivalent
14	Blinds	Mac/ luxalon/ Vista or equivalent
15	Cabinet Locks	Godrej / Shri Kornark or equivalent
16	Door Closer	Door King / Everest / Everite /Britan or equivalent
17	False Ceiling Tiles (Minerals)	USG(Olympia)/ Armstrong or equivalent (Metal) Arm strong / Hunter Douglas or equivalent
18	Ceramic Tiles	Orient / Nitco / Bell / Kajaria / Somany or equivalent
19	Flush Door	Durodoor / Tower / Kutti or equivalent
20	Rectified Tiles	Marbito /Euro/Asian/Nitco or equivalent
21	Sanitary Fittings	Parryware/Hindware/Cera or equivalent
22	C.P. Fittings	Parryware/Parko/Jacquar or equivalent

Note:-

1. The above makes are all indicative In case the Contractor would like to use any other make, he must submit the technical literature about the capabilities of these items and get the approval of Engineer In –charge prior to using the same.
2. The items for which no makes are specified, only ISI marked and/ or approved make by Engineer In –Charge shall be used.

D. GENERAL CONDITIONS OF CONTRACT

1. INTERPRETATION

In construing these conditions, the Specifications, the Schedule of Quantities, Tender, Special Conditions and Agreement, the following words shall have the meanings herein assigned to them except where the subject or context otherwise requires.

This contract shall comprise of the Articles of Agreement, General Conditions of Contract, Special Conditions, Additional Special Conditions, the Schedule of Quantities, Specifications, letter of acceptance of tender and other documents mentioned in the contents sheet attached hereto and including those to which only reference is made herein.

WORK OR WORKS

Shall mean all work or works defined in schedule of quantities, specifications and such other work or works as the contractor may be entrusted with for carrying out under this contract.

EMPLOYER: - shall mean Director General, CSIR or any officer authorized by Director General for the purpose.

ENGINEER: - shall mean the Engineer designated by the Employer to superintend and perform other duties as indicated in the contract.

CONTRACTOR: - shall mean the individual or Firm or Company, whether incorporated or not, under- taking the work and shall include the legal personal representative or such individual or the persons composing such Firm or Company or the successors of such Firm or Company and the permitted assignees of such individual or Firm or Firms or Company.

SITE: - shall mean the site of the contract works including any buildings and erections thereon and any other land adjoining thereto (inclusive) as aforesaid allotted by the Employer or the Engineer for the contractor's use.

COMPENSATION: - shall mean all sums payable by way of compensation under any of the conditions shall be considered as reasonable compensation without reference to the actual loss or damage sustained and whether or not any damage sustained, and whether or not any damage shall have been sustained.

Words imputing persons include firms and corporations; words imputing the singular only also include the plural and vice versa where the context so required. The headings are given to the clauses for convenience and they will not limit the meaning or scope of the clauses in any way.

2 DRAWINGS AND SPECIFICATIONS

The contractor shall execute whole and every part of the work in the most substantial and workmanlike manner both as regards material and otherwise in every respect in accordance with the specifications. The contractor shall also conform exactly and faithfully to the design, drawings and instructions given in the respect of the work by Engineer. The contractor shall be furnished free of charge one copy of such specifications and all such designs, drawings and instructions as are not included in the printed publications.

3 CONTRACTOR TO PROVIDE EVERYTHING NECESSARY

- (a) The contractor shall provide at his own cost all materials. (except such materials, if any as may in accordance)

with the contract be supplied by the Employer) plants, tools, appliances, implements, ladders, scaffolding, temporary works, etc. requisite or proper for the execution of the work whether original, altered or substituted and whether included in the specifications or other documents forming part of the contract or which may be necessary for the purpose of satisfying or complying to the requirements of Engineer, as to any manner as to which under these conditions he is entitled to be satisfied together with carriage therefore to and from the work. The contractor shall also supply without charge the requisite number of persons with means and materials necessary for the purpose of setting out works and counting, weighing and assisting in the measurement or examination at any time and from time to time of the work or materials. Failing his so doing, the same may be provided by the Engineer at the expense of the contractor and the expenses may be deducted from any money due to the contractor under the contract and / or from his Security Deposit.

- (b) The contractor shall provide himself with requisite quantity and quality of water for carrying out the works at this own cost. If, however, piped water is supplied by the Employer, the contractor shall pay for the water at one per cent of the total cost of the work done except on Electrical work, Air- conditioning work and Furniture work. The contractor shall make his own arrangement for water connection and laying of further pipelines from the source of supply of the Employer. It should be clearly understood that the Employer does not guarantee to maintain un – interrupted supply of water and it will be incumbent on the part of the contractor to make alternative arrangement for water at his own cost in the event of any temporary break-down in the water mains so that the progress of work is not held up for want of water. No claim as damages or refund of water charges will be entertained on account of such break-downs. However, if the contractor is permitted to make his own arrangement to draw water from a well, hand – pump, or natural river or pond of the Employer, no charges will be made for the water drawn from the same, but the contractor will make good any damage done to the installation and ensure that the quality of water used in the work is conforming to BIS codes and provide for any Operation at his own cost.
- (c) The contractor shall be allowed to construct temporary wells in Employer's land for taking water for construction purpose only after he has permission of the Employer in writing. No charges shall be recovered from the contractor on this account but the contractor shall be required to provide necessary safety arrangement to avoid any accident or damage to adjacent buildings, roads and service lines. He shall be responsible for any accident or damage caused due to construction and subsequent maintenance of the wells and shall restore the ground to its original condition after the wells are dismantled on completion of the work.
- The Employer on no account shall be responsible for the expenses incurred by the contractor for hired ground or water obtained from elsewhere.
- (d) Subject to availability the Employer may supply power at only one point from where the Contractor shall make his own cost. These shall be in the custody of the Employer. If there is any hindrance caused to other works the contractor shall reroute or remove such temporary lines without any extra cost. Such temporary lines shall be removed after the completion of work. The cost of power consumed by the contractor shall be payable to the employer at rates fixed by the Employer, which would be deducted from the running account bills. However, the Employer does not guarantee the supply of power and no compensation for any failure or short supply of power shall be entertained.

3A SUFFICIENCY OF TENDER

The contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of the tender for the works and the rates and the prices quoted in the schedule of items, which rates and the 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.

4 AUTHORITIES, NOTICES & PATENTS

- (a) The contractor shall conform to any regulation and bye-laws of any corporation and of any electricity supply company and authorities with whose systems the structure is proposed to be connected, and shall before making any variations from the drawing and specifications that may be necessitated for so conforming by giving written notice to the Engineer specifying the variations proposed to be made, the reasons for making it and apply for instructions thereon. If the compliance with this clause involves any extra work not included in this contract, he shall specify these items of work and the allowance of extra payment required on their account.
- (b) The contractor shall give all notices required by the said regulations or bye-laws to be given to any Authority and pay to such Authority or to any public office all fees that may be chargeable in respect of the works and lodge the receipts with the bill to the Engineer for reimbursement.

5 RATES TO INCLUDE ALL TAXES

- a) Rates quoted by the contractor shall be ***inclusive of GST*** (Such as CGST, SGST and IGST) in respect of this contract. ***However, at the time of submission of bill/tax invoice, the component of prevailing rate of GST (which has already been included in the rate/ amount quoted by contractor) should be extruded and shown separately in the tax invoice.*** The Employer shall not entertain any claim whatsoever in this respect. However, pursuant to the constitution (Forty Sixth Amendment) Act, 1982, if any further tax or levy is imposed by Statutes, after the date of receipt of tenders and the contractor thereupon necessarily and properly pays such taxes/levies, the contractor shall be reimbursed the amount as per the rules on producing proof of payment so made provided such payments, if any, is not in the opinion of the Employer (whose decision shall be final and binding) attributable to delay in executing of work within the control of the contractor. The contractor shall keep necessary books of accounts and other documents for the purpose of this condition as may be necessary and shall allow inspection of the same by a duly authorized representative of the Employer and further shall furnish such other information and documents as the Employer may require.

- (b) The contractor shall within a period of thirty days of imposition of any further tax or levy pursuant to the Constitution (Forty Sixth Amendment) Act, 1982 give a written notice thereof to the Employer that the same is given pursuant to this condition together with all necessary information relating thereto.

6 MATERIALS

- (a) If the specification of schedule of items provide for the use of any material to be supplied by the Employer's stores or if it is required that the contractor shall use certain stores to be provided by the Employer as shown in the schedule of materials hereto annexed, the contractor shall be bound to procure and shall be supplied such materials and stores as are from time required to be used by him for the purpose of the contract only and value of the materials us supplied at the rates specified in the said schedule of materials and of the quantities incorporated in the work may be set off or deducted from any sums then due, or thereafter to become due to the contractor under the contract or otherwise or against or from the Security deposit. All materials so supplied to the contractor by the Employer shall remain the absolute property of the Employer and the contractor shall be the trustee of the materials so supplied / procured and the said materials shall not be removed / disposed off from the site of the work on any account and shall be at all times open for inspection by the Engineer of Employer. The contractor shall bear all incidental charges for cartage, storage and safe custody of all materials and against damage due to dampness, rain, sun, fire and theft and be fully responsible for their storage and maintenance. Any such material unused and in perfectly good condition in the opinion of the Employer at the time of the completion of work or termination of the contract, or earlier shall be returned to the Employer at a place directed by Engineer at contractor's cost and at rates stipulated in the said schedule but in case the Employer decides not to take back the materials the contractor shall have no claim for compensation on account of any such materials supplied to him as aforesaid being unused by him or for any wastage or damage to any such materials.
- (b) If for any reason there is delay or non-supply of material as shown in the schedule, the contractor shall procure the same and complete the work in time after due intimation and approval of the Employer. The difference in price (between his procurement price and price shown in the schedule) shall be paid to the contractor. However in case approval of the Employer is not given, only suitable extension of time would be considered and no other claim of compensation / damages shall be payable by the Employer.
- (c) After completion of the work or on determination / termination of the contract, the theoretical quantity of cement to be used in work shall be calculated on the basis of statement showing quantity of cement to be used in different items of work provided in current Schedule for the purpose printed by CPWD. In case any item is executed for which the standard constants for the consumption of cement are not available in the above mentioned statement or cannot be derived from this statement, the same shall be calculated on the basis of standard formula to be laid down by the Engineer. Over this theoretical quantity of cement, shall be allowed a variation up to 3% plus/minus for works estimated cost of which as put to tender is more including authorized variation, if not returned by the contractor, shall be recovered at twice the issue rate, without prejudice to the provision of other conditions regarding return of materials governing the contract. In the event of its being discovered that the quantity of cement which is less than the quantity ascertained as herein before provided (along with variation on minus side as stipulated above) the cost of quantity of cement not so used, shall be recovered from the contractor on the basis of stipulated issue rates and cartage to site.
- (d) The provision of foregoing sub-clause shall apply Mutatis-Mutandis in the case of steel reinforcement or structural steel sections (each diameter/section or category shall be considered separately) except that the theoretical quantity of the steel shall be taken as the quantity required as per design or as authorized by the Engineer, including lappages, plus 3% wastage due to cutting into pieces. Over this theoretical quantity 2% plus/minus shall be allowed as variation due to wastage.
- (e) The provision of foregoing sub-clause shall apply Mutatis – Mutandis in the case of cables (other than under – ground cables), wires, conduits / GI pipes, GI/MS sheets used in various items of work shall be calculated on the basis of measurements recorded in the measurement books for the purpose of payment and for assessing the consumption of materials used in the works. Over this quantity a variation of 5% plus shall be allowed for wastage of materials during execution in case of cables (other than under – ground cables), wires, conduits/GI pipes, and 10% plus in case of GI/MS sheets.
- (f) The provisions made above are without prejudice to the right of the Employer to take action against the contractor under the conditions under the contract for not doing the work according to the prescribed specifications.
- (g) In case of easy availability of approved quality of cement and steel in the open market it will be Employer's discretion to make these items as contractor's supply.

7 TESTING OF MATERIALS

The contractor shall provide assistance, instruments, materials, labour and any other arrangement normally required for testing, checking of materials and workmanship as stipulated in the specifications and by statutory authority at his own cost. The Employer has the right to appoint the testing authorities. The contractor shall pay for the cost of test samples, its packing, transportation including testing fees. Failing his so doing, the same shall be provided by the Engineer at the expense of the contractor and the expenses may be deducted from any money due to the contractor under the contract and / or from the Security Deposit or proceeds thereof or of a sufficient portion thereof.

8. CONTRACTOR'S ENGINEERS / FOREMAN & WORKMEN

- (a) The Contractor shall give all necessary personal superintendence and employ technical staff and foremen during the execution of the work and with such reduced technical staff foremen as long as thereafter as the Engineer may consider necessary until the expiration of the defects liability period. **The number of technical staff, their qualifications and experience who shall be constantly in attendance of the work while the men are at work has been specified at Para 13(A) e. of the Notice Inviting Tender.** Any directions, explanations, instructions or notice given by the Engineer to such technical staff or foremen or any other authorized agent shall be held to be given to the Contractor.
- (b) The Contractor shall provide and employ on site only such technical staff and foremen who are skilled and experienced in their respective fields and who are competent to give proper supervision to the work. The Contractor shall provide and employ skilled, semiskilled and unskilled labour as shall be necessary for proper and timely execution of the work.
- (c) The Engineer shall be at liberty to object to and require the Contractor to remove from the work any person who in his opinion misconducts himself, or is incompetent or negligent in the performance of his duties or whose employment is considered by the Engineer to be undesirable. Such person so removed shall be replaced by competent substitute.

Only foremen will be required to be employed for a work costing up to Rs 20 Lacs, for work costing more than Rs 20 Lacs, technical staff as per **clause -13(A) e) of Notice Inviting Tender** shall be employed. If the Engineer, whose decision in this respect shall be final and binding on the Contractor, is convinced that technical staff is not effectively appointed or is effectively not attending or not fulfilling the provision of this clause, a non refundable recovery shall be effected from the Contractor at the rate of Rs 20,000/= (Twenty thousand per month for graduate engineer) and Rs.15000/= (Rupees Fifteen thousand per month for diploma holder).

9 ACCESS

- (a) The Engineer, and the Employer or its representative shall at all reasonable time have free access to the works and / or workshops, factories or other places the material are being prepared or constructed for the contract and also to any place where the materials are lying or from which they are being obtained and the contractor shall give every facility to them for inspection. Except the representatives of statutory authorities and those mentioned above no other person shall be allowed on the works at any time without the permission of the Engineer.
- (b) If any work is to be done at a place other than the site of works, contractor shall obtain written permission of the Engineer.

10 VARIATION & PRICE FOR VARIATION

- a) The Engineer with the approval of the Employer shall have power to make any alteration / omissions / additions and / or substitutions from the original specifications, drawings, designs, and written instructions and such alterations, omissions, additions, substitutions shall not invalidate the contract and any altered, additional, or substituted work which the contractor may be directed to do in the manner specified above as part of the work shall be carried out by the contractor on the same conditions in all respects on which he agreed to do the main work. The rates for such altered, additional or substituted work under this clause shall be worked out in accordance with the following provisions in their respective order.
- b) If the rates for the altered, additional, or substituted work are specified in the contract for the work, the contractor is bound to carry out the altered, additional, or substituted work at the same rates as are specified in the contract for the work.
- c) If the rates for the altered, additional, or substituted work are not specifically provided in the contract for the work, the rates will be derived from the rates for a similar class of work as are specified in the contract for the work.
- d) If the rates for the altered, additional, or substituted work cannot be determined in the manner specified in sub-clause

(b) and (c) above, then the contractor shall, within 10 working days from the date of receipt of the order to carry out the work through notice in writing, inform the Engineer of the rate which it is his intention to charge for such class of work, supported by analysis of the rate claimed which shall be based on actual cost of work plus 10% as contractor's profit and over – heads except in case of departmental materials for which contractors profit and over- heads shall be 2.5 %. When such notice has been given, the Engineer with the consent of the Employer may agree to such a rate but if the Engineer does not agree to the contractor's rate the Engineer may cancel his order to carry out such class of work and arrange to carry out in such a manner as he may consider advisable.

e) Under no circumstances, the contractor shall suspend the work on the plea of non-settlement of rates of items falling under the clause.

f) Deviation limits

(i)	Building work	30%
(ii)	Maintenance / emergency works	50%
(iii)	Foundation works	100%
(iv)	Services works	30%

11 FAULTY MATERIALS, WORKMANSHIP & DEFECTS AFTER COMPLETION

(a) The Engineer shall have powers to require the removal from the site of all materials and work which in his opinion are not in accordance with specifications and in case of default, the Engineer shall be at liberty to employ other persons to remove the same without being answerable or accountable for any loss or damage that may happen or arise to such materials to be substituted thereof and in case of default the Engineer may cause the same to be supplied and all costs which may attend such removal and / or substitution are to be borne by the contractor.

(b) If it shall appear to the Engineer or to the Employer based on audit / technical examination that any work has been executed with unsound, imperfect, or unskillful workmanship or with materials of any inferior description, or that any materials or articles provided by him for the execution of the work are unsound or of a quality inferior to that contracted for or otherwise not in accordance with the contract, any defects, shrinkage or other faults which may appear within the defects liability period of twelve months from the date of completion arising in the opinion of the Engineer, the contractor shall on demand in writing which shall be made within twelve months of the completion of the work from the Engineer specifying the work, materials, articles defects or other faults complained of notwithstanding that the same may have been passed, certified and paid for, forthwith rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require or as the case may be, remove and reconstruct the work so specified in whole or in part, as the case may require or the case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own cost. In case of any such failure, the Engineer may rectify or remove or re-execute the work or remove and replace with others, the material or articles complained of as the case may be at the risk and cost in all respects of the contractor.

In lieu of rectifying the work not done in accordance with the contract, the Employer may, allow such work to remain, and in that case make allowance for the difference in value, together with such further reduction as in his opinion may be reasonable.

(c) Provided always that nothing in this clause shall relieve the contractor from his liability to execute the works in all respects in accordance with the terms and conditions of this contract, or from his liability to make good all defects.

12 WORKS TO BE OPEN FOR INSPECTION

(a) All work under or in course of execution or executed in pursuance of the contract shall at all times be open to the inspection and supervision of the Engineer and the contractor shall at all times during the usual working hours, and at all other times at which reasonable notice of the intention of the Engineer to visit the works shall have been given to the contractor, either himself be present to receive order and instruction or have a responsible agent duly accredited in writing present for that purpose.

(b) The contractor shall give not less than seven days notice in writing to the Engineer 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 so covered up or placed beyond the reach of measurement and shall not cover up and place beyond the reach of measurement, any work without the consent in writing of the Engineer and the Engineer shall within the aforesaid period of seven days inspect the work, and if any work shall be covered up or placed beyond the reach of measurement without such notice having been given or the Engineer's constant obtained the same shall be uncovered at the contractors expense or in default thereof no payment or allowance shall be made for such work or the materials with which the same was executed.

13 ASSIGNMENT OR SUB-LETTING

- (a) The contract shall not be assigned or sublet without the written approval of the Employer. And if the contractor shall assign or sub-let his contract or attempt to do so or become insolvent or commence any insolvency proceedings or make any composition with his creditors or attempt to do so or if any bribe, gratuity or gift, loan, perquisite, reward or advantage pecuniary or otherwise, shall either directly or indirectly, be given, promised or offered by the contractor or any of his servants or agents to any person in the employment of the Employer in any way directly or indirectly interested in the contract, the Employer shall have the power to adopt any of the courses specified under clause – 23 as may be best suited to the interest of the Employer and in the event of any of the courses being adopted the consequences specified in the said clause shall ensue.
- (b) Where the contractor is a partnership firm, the approval in writing of the Employer shall be obtained before any changes 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 hereunder the partnership firm would have the right to carry out the work be deemed to have been assigned or sublet in contravention of clause 13 (a) and the same action may be taken and the same consequences shall ensue as provided in the said clause 13 (a).

14 INDEMNIFYING AGAINST DAMAGES TO PERSONS, PROPERTY & STATUTES

The contractor shall take all precautions to avoid all accidents by exhibiting necessary caution boards day and night, speed limit boards, red flags, red lights, and providing barriers. He shall be responsible for all damages and accidents caused due to negligence on his part. No hindrance shall be caused to traffic during the execution of work.

- (a) The contractor shall be responsible for all injury to persons, animals or things, and for all damage, whether such injury or damage arises from carelessness or accident in any way connected therewith. This clause shall be held to include inter alia any damage due to causes as aforesaid to work, building (whether immediately adjacent or otherwise) and to roads, streets, foot paths, bridges or ways as well as all damage caused to the buildings and works forming the subject of this contract by inclemency of weather. The contractor indemnifies the Employer and holds him harmless in respect of all expenses arising from such injury or damages as aforesaid and also in respect of any award of compensation or damage consequent upon such claim including legal costs.
- (b) The contractor shall reinstate all damage of every sort mentioned in this clause, so as to deliver the whole of the contracted works complete and perfect in every respect and so as to make good and otherwise satisfy all claims for damage as aforesaid to the property of third parties.
- (c) The contractor also indemnifies the Employer against all claim which may be made upon the Employer for acts during the currency of this contract by any employee or representative of an employee of the contractor or any sub-contractors, employed by him, for any injury to or loss or life, of such employees, or for compensation payable under any law for the time being in force to any workmen or to the representative of any deceased or incapacitated workmen.
- (d) The contractor also indemnifies the Employer against all claims which may be made upon the Employer for acts during the currency of this contract by the Central / State Government or local Municipal authorities for the noncompliance of any laws, regulations, rules pertaining to wages act, safety act in force and any amendments thereof in respect of all labour and apprentices directly or indirectly employed in the work under this contract.
- (e) The Employer shall be at liberty and is hereby empowered to deduct the amount of any damages, compensation costs, charges and / or expenses arising or accruing from or in respect of any such claim and / or damages as aforesaid from any sum or sums due to **become due to the** contractor or security deposit.
- (f) The contractor shall indemnify the Employer against any action, claim or proceedings relating to infringement or use of any patent or design or any alleged patent or design rights and shall pay any royalties which may be payable in respect of any article or part thereof included in the contract. In the event of any claims made under or action brought against the Employer in respect of any such matters as aforesaid the contractor shall be immediately notified thereof and the contractor shall be at liberty, at his own expense, to settle any dispute or to conduct any litigation that may arise therefore. Provided that the contractor shall not be liable to indemnify the Employer if the infringement of the patent or design or any alleged patent or design right is the direct result of an order passed by the said Employer or his authorized representative.

15 LIEN IN RESPECT OF CLAIM IN OTHER CONTRACTS

- (a) Any sum of money due and payable to the contractor including the security deposit under the contract may be withheld or retained by way of lien by the Employer or Government or any other contracting person or persons against any claim of the Employer or Government or such other persons in respect of payment of a sum of money arising out of or under any other contract made by the contractor with the Employer or Government or with such other persons.
- (b) It is agreed term of the contract that the sum of money so withheld or retained under this clause by the Employer will be kept withheld or retained as such by the Employer or till his claim arising out of in the same contract or any other contract is either mutually settled or determined by the Arbitrator if the contract is governed by arbitration clause or by the competent court as the

case may be, and that the contractor shall have no claim for interest or damages whatsoever on this account or any other ground in respect of any sum of money withheld or retained under this clause and duly notified as such to the contractor.

16 WITHHOLDING & LIEN IN RESPECT OF SUMS CLAIMED

- (a) Whenever any claim or claims for payment of a sum of money arises out of or under the contract against the contractor, the Employer shall be entitled to withhold and also have a lien no retain such by or sums in whole or in part from the security deposit, if any furnished as the case may be and also have a lien over the lien over the same pending finalization or adjudication of any such claim. In the event of the security deposit being insufficient to cover the claimed amount or amounts or if no security deposit has been taken from the contractor, the Employer shall be entitled to withhold and have a lien to retain to the extent of such claimed amount or amounts referred to above, from any sum or sums found payable or which at any time thereafter may become payable to the contractor under the same or any other contract, with the Employer or any contracting person pending finalization or adjudication of any such claim.

It is an agreed term of the contract that the sum of money so withheld or retained under the lien referred above, by the Employer will be kept withheld or retained as such by the Employer till the claim arising out of or under the contract is determined by the Arbitrator (if the contractor is governed by the arbitration clause) or by the competent court as the case may be and that the contractor will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention under the lien referred to above and duly notified as such to the contractor. For the purpose of this clause, where the contractor is a partnership firm or a limited amount or amounts in whole or in part from any sum payable to any Partner / Limited company as the case may be, whether in his individual capacity or otherwise.

- (b) The Employer shall have the right to cause an audit and technical examination of the works and the final bills of the contractor including all supporting vouchers, abstract etc., to be made after payment of the final bill and if as a result of such audit and technical examination any sum is found to have been over paid in respect of any work done by the contractor under the contract or any work claimed by him to have been done by him under the contract and found not to have been executed the contractor shall be liable to refund the manner prescribed in sub-clause (a) of this clause or in any other manner legally permissible; and if it is found that the contractor was paid less than what was due to him under the contract in respect of any work executed by him under it, the amount of such under-payment shall be duly by the Employer to the contractor. Provided that the Employer shall not be entitled to recover any sum over-paid, nor the contractor shall be entitled to payment of any sum paid short where such payment has been agreed upon between the Employer on the one hand and the contractor on the other hand, under any term of contract permitting payment for work after assessment by the Employer.

17 IN-CASE OF DEATH OF CONTRACTOR

Without prejudice to any of the rights or remedies under this contract, if the contractor dies, the Employer shall have the option of terminating the contract without compensation to the contractor.

18 SUB-CONTRACTORS

The Employer reserves the right to use the premises and any portion of the site for the execution of any work not included in the contract. The contractor is to afford all reasonable facilities to all sub-contractors, specialists, merchants, tradesman and others who may at any time be appointed by the Employer for executing any work or supplying any goods relating to the constructions, servicing, equipping or furnishing of the work under this contract.

19 COMPLIANCE TO LABOUR LAWS & APPRENTICE ACT

The contractor shall comply with all the provisions of the Minimum Wages Act, 1948, Contract Labour (Regulation and Abolition) Act, 1970, and rules and orders framed there under and other labour laws affecting contract labour and Apprentice Act, 1961 the building and other construction workers welfare Cess Rules 1998 and rules and orders framed there under that may be in force or brought into force from time to time. Contractor shall obtain a valid license under Contract Labour (R & A) Act 1970 and Contract Labour (R & A) Central Rules 1971 before commencing work and which should be valid till the completion.

20 COMPENSATION FOR DELAY

- (a) The time for carrying out the work as entered in the tender shall be strictly observed by the contractor and shall be deemed to be the essence of the contract on the part of the **contractor**. The work shall throughout the stipulated period of the contract be proceeded with all due diligence and the contractor shall pay as compensation an amount equal to one per cent or such smaller amount as the Employer (whose decision in writing shall be final) may decide on the amount of the whole work as shown in the agreement, for every week that the work remains uncompleted or unfinished after the proper dates.
- (b) And further to ensure good progress during the execution of the work, the contractor shall be bound in all cases in which the time allowed for any work exceeds one month (save for special jobs) to complete one – eighth of the whole of the work before

one-fourth of the whole time allowed under the contract has elapsed; three-eighths of the work before one-half of such time has elapsed, and three-fourths of the work before three – fourths of such time has elapsed. However for special jobs if a time schedule has been submitted by the contractor and the same has been accepted by the Employer, the contractor shall comply with the said time schedule. In the event of the contractor failing to comply with this condition, he shall be liable to pay as compensation an amount equal to one per cent or such smaller amount as the Employer (whose decision in writing shall be final) may decide on the said cost of the work for every week that the due quantity of work remains incomplete. Provided that the entire compensation to be paid under the provisions of this clause shall not exceed ten per cent on the cost of the work as shown in the agreement.

21 DAMAGE TO WORKS IN CONSEQUENCE OF HOSTILITIES OR WAR – LIKE OPERATIONS

- (a) The work (whether fully constructed or not) and all materials, tools, and plants, scaffolding, temporary buildings and other things connected therewith shall be at the risk of the contractor until the work has been delivered to the Employer and a certificate from him to that effect obtained. In the event of the work or any materials properly brought to the site for incorporation in the work being damaged or destroyed in consequence of hostilities or war- like operation, the contractor shall, when ordered in writing by the Employer, remove any debris from the site, collect and properly stack or remove in store all serviceable materials salvaged from the damaged work and shall be paid at the contract rates in accordance with the provision of this agreement for the work of clearing the site of debris, stacking, removal of serviceable materials and for the reconstruction of all works ordered by the Employer such payment being in addition to compensation up to the value of the work originally executed before being damaged or destroyed and not paid for. In case of works damaged or destroyed but not already measured and paid for the compensation shall be assessed by the Employer. The contractor shall be paid for the damage / destruction suffered and for restoring the material at the rates based on the analysis of rates tendered for in accordance with the provision of this agreement. The certificate of the Employer regarding the quality and quantity of materials and the purpose for which they were collected shall be final and binding on the contractor.
- (b) Provided always that no compensation shall be payable for any loss in consequence of hostilities or war-like operation (i) unless the contractor had taken all such precautions against Air Raid as are deemed necessary by the A.R.P. Officers or the Employer, (ii) for any materials etc., not on the site of the work or for any tools and plant, machinery, scaffolding, temporary buildings and other things not intended for the work.
- (c) In the event of the contractor having to carry out reconstruction as aforesaid, he shall be allowed such extension of time for its completion as is considered reasonable by the Employer.

22 EXTENSION OF TIME

- (a) If the contractor shall desire an extension of time for the completion of the work on the grounds of his having been unavoidably hindered in its execution or any other ground, he shall apply in writing to the Employer within thirty days of the date of hindrance on account of which he desires extension as aforesaid, and the Employer shall, if in his opinion (which shall be final) reasonable grounds shown therefore, 24authorized such extension of time if any, which may, in this opinion, be necessary or proper.
- (b) In the event, the value of work exceeds the value of the Bill of Quantities owing to variations the contractor shall be entitled to ask for extension of time in proportion to the increased value work.

23 SUSPENSION OF WORK BY CONTRACTOR

- (a) The Employer may without prejudice to his right against the contractor in respect of any delay or inferior workmanship or otherwise or to any claims for damages in respect of any breaches of the contract and without prejudice to any rights or remedies under any of the provisions of this contract or otherwise and whether the date for completion has or has not elapsed by notice absolutely determine the contract in any of the following cases:
 - (i) If the contractor having been given by the Engineer a notice to rectify, reconstruct or replace any defective work or that the work is being performed in any inefficient or otherwise improper or un workman – like manner shall omit to comply with the requirements or such notice for a period of seven days thereafter or if the contractor shall delay or suspend the execution of the work so that in the judgment of the Employer (which shall be final and binding) he will be unable to ensure completion of the work by date for completion or he has already failed to complete the work by that date.
 - (ii) If the contractor being a company shall pass a resolution or the court shall make an order that the company shall be wound up or if a receiver or a manager on behalf of a creditor shall be appointed or if circumstances shall be wound up or if a receiver or a manager on behalf of a creditor shall be appointed or if circumstances shall arise which entitle the court of creditor to appoint a receiver or a manager or which entitle the court to make a winding up order.
 - (iii) If the contractor commits breach of any of the terms and conditions of this contract.

(iv) If the contractor commits any acts mentioned in Clause – 13 hereof.

(b) **When the contractor has made himself liable for action under any of the cases aforesaid, the Employer shall have the following powers:**

- (i) To determine or rescind the contract as aforesaid (of which termination or rescission notice in writing to the contractor under the hand of the Employer shall be conclusive evidence). Upon such determination or rescission the security deposit of the contractor shall be liable to be forfeited and shall be absolutely at the disposal of the Employer.
- (ii) The Engineer may employ labour paid by the Employer and to supply materials to carry out the work or any part of the work debiting the contractor with the cost of the labour and the price of the materials (of the amount of which cost and price certified by the Engineer shall be final and conclusive against the contractor) and crediting him with the value of the work done in all respects in the same manner and at the same rates as if it had been carried out by the contractor under the terms of his contract. The certificate of the Engineer as to the value of the work done shall be final and conclusive against the contractor, provided always that action under the sub-clause shall only be taken after giving notice in writing to the contractor. Provided also that if the expenses incurred by the Employer are less than the amount payable to the contractor at his agreement rates, the difference should not be paid to the contractor.
- (iii) After giving notice to the contractor to measure up the work of the contractor and to take such part thereof as shall be unexecuted out of his hands and to give it to another contractor to complete in which case any expenses which may be incurred in excess of the sum which would have been paid to the original contractor if the whole work had been executed by him (of the amount of which exceed the certificate in writing of the Engineer shall be final and conclusive) shall be borne and paid by the original contractor and may be deducted from any money due to him by the Employer under his contract or any other account whatsoever or from his security deposit.
- (iv) In the event any one or more of the above courses being adopted by the Employer 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 engagements or made any advances on account or with a view to the execution of the work or the performance of the contract. And in case action is taken sum for any work thereof or actually performed under this contract unless and until the Engineer has certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified.

24 SECURED ADVANCE

The contractor on signing an indenture in the form specified by the Employer during the progress of the execution of the work may be paid if agreed by the Employer up to 75 per cent of the estimated value which shall take into account the market value and contractors tendered rates for the finished item of any material which in the opinion of the Engineer is likely to be incorporated in the work within next three months, are non-perishable and are in accordance with the contract and which have been brought on the site in connection therewith and are adequately stored and protected against damage by weather or other causes but which have not at the time of advance been incorporated in the works. When materials on account of which and advance has been made under this clause are incorporated in the work the amount of such advance shall be deducted from the next payment made under any of the clause or clauses of this contract.

25 CERTIFICATES & PAYMENTS

- (a) No payments shall be made for a work estimated to cost Rupees ten thousand or less till the whole of the work shall have been completed and certificate of completion given. But in the case of a work estimated to cost more than Rupees ten thousand, the contractor shall, on submitting the bill be entitled to receive a monthly payment proportionate to the part of work executed, and to the satisfaction of the Engineer, whose certificate of the sum so payable shall be final and conclusive against the contractor, provided the amount of work done is as per the value of intermediate certificate or for a lesser amount at the discretion of the Engineer as mentioned in the NIT. All such intermediate payments for work actually done and completed and shall not preclude the requiring of bad, unsound, imperfect or unskilled work to be removed and taken away and reconstructed, or rejected or be considered as an admission of the due performance of the contract, of any part thereof in any respect or the accruing of any claim nor shall it conclude, determine, or affect in any way the powers of the Employer under these conditions or any of them as to the final bill shall be submitted by the contractor within two months of the date fixed for the completion of work or of the date of the certificate of completion furnished by the Employer and payment shall be made within three months if the value of the completed works is up to Rs. Two lakhs and in six months if the same exceeds Rs. Two lakhs of the submission of

such bill. If there shall be any dispute about any item or items of the work then the undisputed item or items only shall be paid within the said period of three months or six months as the case may be.

- (b) Whenever there is likely to be delay in recording detailed measurements for making a running payment, advance payment without detailed measurement for work done worked out at 75 per cent of the tendered rates for assessed quantities may be made in running account bills by the employer on the basis of a certificate from the Engineer. The advance payments so allowed shall be adjusted in the subsequent running bills by taking detailed measurements thereof. Final payments shall be made only on the basis of detailed measurements.
- (c) A bill shall be submitted by the contractor each month on or before the date fixed by the Engineer on printed forms obtainable from the Engineer's office. The Engineer shall take or cause to be taken the requisite measurements for the purpose of having the same verified and the claim, as far as admissible, adjusted as far as possible, before the expiry of ten days from the presentation of the bill. If the contractor does not submit the bill within the time fixed as foresaid the Engineer may cause action within seven days of the date fixed as aforesaid, an authorized representative to measure up the said work in the presence of the contractor whose signature to the measurement will be sufficient warrant and the Engineer may prepare the bill from such measurements.
- (d) Before taking any measurement of any work the Engineer or his authorized representative deputed by him shall give reasonable notice to the contractor. If the contractor fails to attend such notice or fails to sign or to record the difference within a week from the date of measurement in the manner required by the Engineer then in any such event the measurement taken by the Engineer or by the authorized representative deputed by him as the case may be, shall be final and binding on the contractor and the contractor shall have no right to dispute the same.
- (e) The charges in the bills shall always be entered at the rates specified in the agreement or in the case of any extra work ordered in pursuance of these conditions and not mentioned or **provided** for in the agreement at the rate determined as per clause – 10. However in case or partially executed items of work, the Employer at his discretion allows proportionate rates for such items as determined by the Engineer whose certificate of the sum so payable shall be final and conclusive against the contractor.

26 SECURITY DEPOSIT

- (a) A Sum of @ 10% of the gross amount of the bill shall be deducted from the each running bills of the contractor till the sum along with the sum already deposited as Earnest Money, will amount to security deposit of 5% of the Tendered value of the work. In addition, the contractor shall be required to deposit an amount equal to 3% of the tendered value of the contract as performance security within the period prescribed for commencement of work in the letter of award issued to him.
- (b) In case a fixed deposit receipt of any scheduled bank is furnished by the contractor to the Employer as part of the security deposit and the bank goes into liquidation or for any reasons is unable to make payment against the said fixed deposit receipt, the loss caused thereby shall fall on the contractor and the contractor shall forthwith on demand furnish additional security deposit, provided always that the Employer for this purpose shall be entitled to recover the said percentage of the amount from each running bill till the balance of the amount of security deposit is realized. All compensation or the other sums of money payable by the contractor under the terms of this contract may be deducted from the security deposit or from the interest arising there from or from any sums which may be due to or may become due to the contractor by the Employer on any account whatsoever and in the event of his security deposit being reduced by reason of any such deductions aforesaid, the contractor shall within ten days make good in cash or further fixed deposit receipt pledged in favor of the Employer. The security deposit shall be collected from the running bills of the contractor at the rates mentioned above and the earnest money if deposited at the time of tenders will be treated as part of the security deposit.
- (c) The contractor if he so desires may furnish fixed deposit receipt in advance towards the security deposit. Such fixed deposit receipt shall be of a minimum value of Rs 25000/- each (The last such fixed deposit receipt could be of a lower value on the basis of the amount). In case any recovery is affected from running account bills, such recovered amount shall not be replaced with fixed deposit receipt. It is in the contractor's interest to keep a watch about the adequacy of the fixed deposit receipt submitted.
- (d) No partial refund of security deposit shall be made during the defect liability period. In case the final bill is not settled within stipulated period for reasons beyond control and the Employer is satisfied that the security deposit is not required for adjustment of Employer's dues or whatsoever dues either in this or any other contract then this security deposit either in full or in part could be refunded at the sole discretion of the Employer. However, release of security deposit would be only after written clearance of Labour Officer regarding no dues or claims is received.
- (e) In case of termination of contract, this security deposit shall be forfeited and amount necessary to make up this amount shall be recovered from money due to the contractor under this contract, or any other contract with the Employer.

27 COMPLETION CERTIFICATE

- (a) Within ten days of the completion of the work, the contractor shall give notice of such completion to the Employer and within days of the Engineer shall inspect the work. If there is no defect in the work the Employer shall furnish the contractor with a certificate of completion otherwise a certificate of completion indicating defects shall be issued but the work shall not be considered to be completed until the contractor shall have removed from the premises on which the work shall be executed all the scaffolding, surplus material, rubbish, and all huts and sanitary arrangements required for his work, people on the site in connection with the execution of the works as shall have been erected or constructed by the contractor and cleaned of the dirt, splashes, droppings of finishing items from all wood work, doors, windows, walls, floors or other parts of any building, in, upon or about which the work is to be executed or of which he may have had possession for the purpose of the execution thereof. If the contractor shall fail to comply with requirements of this clause on or before the date fixed for the completion of the work, the Employer may at the risk and cost of the contractor take action as he may think fit and the contractor take action as he may think fit and the contractor shall have no claim except for any sum actually realized by the sale thereof.

28 ESCALATION

- (a) If the prices of materials a not being supplied by the Employer and / or wages of labour required for execution of the work increase, the contractor shall be compensated for such increase as per provisions detailed below and the amount of the contractor shall accordingly be varied, subject to the condition that compensation for escalation in prices shall be available only for the work done during the stipulated period of the contract including such period for which the contract is validly extended under the provisions of Clause- 22 of General Conditions of Contract without levy of compensation under Clause – 20 of General Conditions of Contract and also subject to the condition that no such compensation shall be payable for a work for which the stipulated period of completion is eighteen months or less. Such compensation for escalation in the prices of materials and labour when due, shall be worked out based on the following provisions.
- (i) The base date for working out such escalation shall be the last date on which the tenders were stipulated to be received.
- (ii) The cost of work on which escalation will be payable shall be reckoned as 85% the cost of the work as per the bills, running or final, and from this amount the value of material supplied by the Employer and proposed to be recovered in the particular bill shall be deducted before the amount of compensation for escalation is worked out. In case of materials brought to site for which secured advance is included in the bill full value of such materials as assessed by the Engineer in charge (and not the reduced amount for which secured advance has been paid), shall be included in the cost of work done for operation of this clause. Similarly, when such materials are incorporated in the work, the secured advance is deducted from the bill the full assessed value of the materials originally considered for operation of this clause shall be deducted from the cost of work shown in the bill running or final. Further the cost of work shall not include any work for which payment is made for any item at prevailing market rates.
- (iii) The compensation for escalation for materials & labour shall be worked out as per the formula given below:

$$(a) \quad vm = W^A / 100 \times (MI - MIO) / MIO$$

VM- Variation in material cost i.e. increase or decrease in the amount in rupees to be paid or recovered.

Cost of work done worked out as indicated in sub Para (ii) above.

Component of materials expressed as per cent of the total value of work and is predetermined as 75.

MI- Index numbers of Wholesale prices in India for all commodities published by the Reserve Bank of India for the period under reckoning.

Mio- Index numbers of Wholesale prices in India for all commodities published by the Reserve Bank of India on the date of receipt of tenders.

$(LI - Lio)$

$$VL = W \times B / 100 \times Lio$$

VL- Variation in labour cost i.e. increase or decrease in the amount in rupees to be paid or recovered.

W- Value of work done, worked out as indicated in sub Para (ii) above.

B- Component of labour expressed as per cent of the total value of work and is predetermined as 25.

LI- All India consumer price index numbers for industrial workers published by the Reserve Bank of India for the period under reckoning as for the period under consideration.

Lio- All India consumer price index numbers for industrial workers published by the Reserve Bank of India and valid on the

stipulated date of receipt of tenders.

The following principle shall be followed while working out indices mentioned in sub Para (iii) above.

- (i) The compensation for escalation shall be worked out at half yearly intervals and shall be with respect to the cost of work done during the six calendar months of the said work. The first such payment shall be made at the end of the eighteen months after the month (excluding) in which the tender was accepted and thereafter at six monthly intervals. At the time of completion of work, the last period for payment might become less than six months, depending on the actual date of completion.
- (ii) The index (MI or LI) relevant to any six months for which such compensation is paid shall be the arithmetical average of the indices relevant to the six calendar months. If the period up to date of completion after eighteen months covered by the last such installment of payment is less than six months, the index MI or LI shall be the average of the indices for the months falling within that period.
- (iii) The base index (Mio or Lio) shall be the one relating to the month in which the tender was stipulated to be received.

In the base event the price of materials and / or wages of labour required for execution of the work decreases there shall be downward adjustment of the cost of work so that the price of materials and / or wages of labour shall be deductible from the cost of work under this contract and in this regard formula herein before stated under this clause shall mutates mutandis apply, provided that no such adjustment for the decrease in the prices of materials and / or wages of labour aforementioned would be made in case of contracts in which the stipulated period of completion of the work is eighteen months or less.

Employer shall have the discretion to permit the IEEMA (Indian Electrical & Electronics Manufacturers' Association) clause for escalation in case of specialized works e.g. lifts and electrical and mechanical installations etc. where the price variation is not similar to building works.

29 ARBITRATION

- a) In the event of any question /dispute/difference arising under the agreement or in connection herewith (except as to matters the decision of which is specially provided under this agreement) the same shall be referred to the Delhi International Arbitration Centre for appointment of Arbitrator to adjudicate the dispute.
- b) The award of the Arbitrator shall be final and binding on the parties. The Arbitrator may give interim award(s) and /or directions, as may be required.
- c) Subject to the aforesaid provision, the arbitration and conciliation act, 1996 and the rules made hereunder and any modification thereof from time to time being in force shall be deemed to apply to the Arbitration proceedings under this clause."

30 DISMANTLED MATERIAL

The contractor shall treat all material obtained during dismantling of a structure, services sub systems / installations, excavation of the site for a work etc., as employer's property and such material shall be disposed of to the best advantage of the Employer according to the instructions issued in writing by the Engineer.

31 PERFORMANCE GUARANTEE

Performance Guarantee may be taken from the Contractor before the award of work, by the officer authorized to award the contract, if and where considered necessary, to ensure that a part or whole of the contract is completed by the contractor. In case of non-performance, this guarantee could be encased.

E.

SPECIAL CONDITIONS OF CONTRACT-I

1. These special conditions are meant to amplify the general specifications and general conditions of contract.

Work shall be done as per CPWD specification. In case of any discrepancy, the order of precedence in interpretation shall under:-

- (i) Schedule of quantities
- (ii) Drawings
- (iii) Additional conditions
- (iv) General conditions of contract
- (v) Special condition
- (vi) Additional Technical Specifications
- (vii) CPWD latest Civil and Electrical specifications
- (viii) IS codes
- (ix) International codes
- (x) Best Engineering practice

2. STEEL

- (i) Steel to be issued as stated elsewhere in the contract shall be for reinforcement bars for RCC work
- (ii) Reinforcement bars for RCC work will be issued in available coils and straight lengths.
- (iii) Issue of steel of diameters above 10 mm dia will be regulated on sectional weight basis, weight calculated with the help of the standard sectional weights as given in the CPWD latest specificatio conversion of length to weight. However, for bars up to and including 10 mm dia the following pro shall be adopted. The average sectional weight for each diameter shall be arrived at from sample each lot of steel received at site. The actual weight of steel issued shall be modified to take into a the variations between the actual and the standard co-efficient and the contractor's account ' debited by the cost of this modified quantity only.
- (iv) For theoretical consumption of steel reinforcement bars will be balanced diameter wise for the purp penal recovery as envisaged in the contract.

3. CEMENT

Cement to be issued as stated elsewhere in the contract shall be only for site work. For factory made products such as P tiles, hollow concrete blocks, RCC pipes etc. cement shall not be issued.

- 4 Unless otherwise provided in the schedule of quantities the rates tendered by the contractor shall apply for all heights, lifts and depths of the work and nothing extra shall be payable on this account.
- 5 The surplus excavated earth which is beyond the requirement of the Employer's work may be allowed by the Employer disposed off by the contractor on his own or sell the surplus excavated earth to private parties at his discretion but nothing will be paid for the carriage or disposal of surplus earth if the same is not required on any other work of the Employer

ADDITIONAL CONDITIONS-II

1. The structural and architectural drawings shall at all times be properly correlated before executing any work. However, in case of any discrepancy in the item given in the schedule of quantities appended with the tender and drawings relating to the relevant item the former shall prevail unless and otherwise given in writing by the Engineer
2. No payment shall be made to the contractor for any damage caused by rain, snowfall, floods or any other natural cause whatsoever during the execution of work. The damage to work will be made good by the contractor at his own cost, and no claim on this account shall be entertained
3. All materials used shall be as per specifications and ISI marked wherever applicable. ISI marking referred relate to latest BIS code as published by Bureau of Indian Standards up to 30 days before the date of opening the tender
4. The contractor shall give a performance test of the entire installation (s) as per standard specifications and / or as directed by the Engineer and will also submit. Test certificates as are required by Municipal / Electrical authority or any other authority. Nothing extra shall be payable for the same other than the fees paid to such authorities, which shall be reimbursed on production of receipts.

ADDITIONAL CONDITIONS FOR CEMENT AND STEEL-III

I. CONDITIONS FOR CEMENT

- a. The contractor shall procure 33 grade (conforming to IS: 269) or 43 grade (conforming to IS: 8112) ordinary Portland cement as required in the work, from reputed manufactures of cement , having a production – capacity of one million tones oer annum or more, such as ACC, L&T,J.P. Rewa, vikram, Shri cement, Birla Jute and cement Corporation of India etc. as approved by Ministry of Indistry, Government of India, and holding lincense to use ISI certification mark for their product whose name shall be got approved from Engineer-in charge. And ISI marking, samples of cement arranged by the contractor shall be taken by the Engineer –in charge and got tested in accordance with provisions of relevant BIS codes. In case test results indicate that the cement arranged by contractor does not confirm to the BIS codes, the same shall stand rejected and shall be removed from the site by the contractor at his own cost within a week's time of written order from the Engineer-in-charge to do so.
- b. The cement shall be brought at site in bulk supply of approximately 50 tones or as decided by the Engineer-in charge .
- c. The Cement godown of the capacity to store a minimum of 2000 bags of cement shall be constructed by the contractor at site of work for which no extra payment shall be made. Double lock provisions shall be made to the door of the cement godown. The keys of one lock shall remain with the Engineer –in charge. The contractor shall be responsible for the watch and ward and safety of the cement godown. The contractor shall facilitate the inspection of

the cement godown by the Engineer-in-charge at any time.

- d. The contractor shall supply free of charge the cement required for testing. The cost of tests shall be borne by the contractor.
- e. The actual issue and consumption of cement on work shall be regulated and proper accounts maintained as provided in clause 6 of the contract and shall be governed by conditions laid therein.
- f. Cement brought to site and cement remaining unused after completion of the work shall not be removed from site without written permission of the Engineer-in charge.

II. CONDITIONS FOR STEEL

1. The contractor shall procure steel reinforcement bars. Conforming to relevant BIS codes from reputed manufactures as approved by the Engineer-in-charge . The contractor shall have to obtain and furnish test certificates to the Engineer-in-charge in respect of all supplies of steel brought by him to the site of work. Sample shall also be taken and got tested by the Engineer-in-charge as per the provisions in this regard in relevant BIS codes. In case the test results indicate that the steel arranged by the contractor does not conform to BIS codes, the same shall stand rejected and shall be removed from the site of work by the contractor at his cost within a week's time from written orders from Engineer-in-charge to do so.
2. The steel reinforcement shall be brought to the site in bulk supply of 10 tones or more as decided by the Engineer-in-charge.
3. The steel reinforcement shall be stored by the contractor at site of the work in such a way as to prevent distortion and corrosion and nothing extra shall be paid on this account. Bars of different sizes and lengths shall be stored separately to facilitate easy counting and checking.
4. For checking nominal mass, tensile strength, bend test, re-bend test etc. specimen of sufficient length shall be cut from each size of the bar at random at frequency not less than that specified below:

Size of bar	For consignment below 100 tons	For consignment over 100 tons.
Under 10 mm dia.	One sample for each 25 tons or part thereof	One sample for each 40 tons or part thereof
10 mm to 16 mm dia	One sample for each 35 tons or part thereof	One sample for each 45 tons or part thereof
Over 16 mm dia	One sample for each 45 tons or part thereof	One sample for each 50 tons or part thereof

5. The contractor shall supply free of charge the steel required for testing. The cost of tests shall be borne by the contractor.
6. The actual issue and consumption of steel on work shall be regulated and proper accounts maintained as provided in clause 6 of the contract. The theoretical consumption of steel shall be worked out as per procedure in clause 6 of the contract and shall be governed by conditions laid therein.
7. Steel brought to site and steel remaining unused shall not be removed from site without the written permission of the Engineer –in Charge.

F. Computerized Measurement Guideline:-

1. The measurements of all items having financial value shall be entered by the contractor or his authorized representative in computer and all such measurement shall be complied in the shape of the Computerized Measurement Book having pages of A-4 size as per the format provide by the Institute, so that a complete record of measurement is obtained of all the items of work performed under this contract.
2. Each set of measurements to be recorded in computerized MB's should commence with following entries stating: (a) Full name of work as given in the agreement (b) Location of work (c) Name of contractor (d) Number and date of agreement (e) Date of commencement of work.(f) Date of actual completion of work (g) Date of recording measurements (h) Reference to previous measurements , if any
3. All measurements recorded by the contractor or his authorized representative from time to time, during the progress of the work, shall be got checked and test checked by the concerned officials as per interval or program fixed in consultation with the contractor. After the necessary corrections made by the department Engineer the measurement sheets shall be returned to the contractor for incorporating the corrections and for resubmission of bill to the authorized representative of Engineer – in – charge for signatures by the department engineers and the contractor or their representatives in token of their acceptance of measurement.
4. The final, fair, computerized measurement book given by the contractor duly hard bound with its machine page numbered and soft copy of the same shall be 100% correct, and no cutting or over writing in the measurements would thereafter be allowed. The contractor shall submit two separate copies of such computerized MB's for the purpose of reference and record as required by various division of the institute like account and Engineering unit etc.
5. The contractor shall also submit a computerized Abstract of cost and the bill which is based on these measurements, as per the format provide by the Institute, duly hard bound and its pages machine numbered along with two spare copies of this bill.
6. The contractor shall, without extra charge, provide assistance with their computer, printer appliance, Manpower and other things necessary for checking of measurements to the Engineer – in – Charge or his representative.
7. All such interim payments shall be recorded as payment of advance against final payment only.
8. The final bill shall be submitted by the contractor in the same manner as specified in interim bills within the stipulated period as specified in the agreement.
9. No further claim shall be made by the contractor after submission of the final bill and these shall be deemed to have been waived his right in respect of measurement activates taken at site by the contractor.
10. For recording measurements and also for preparing abstract, the agreement/ extra item number, both in words as well as in figure, should be given neatly along with description of the item in full or in abbreviated form.
11. The computerize MB'S shall be done and maintained as per the guideline of CPWD.

G. SPECIAL CONDITIONS OF CONTRACT (PART – II)

1. Safety Measures in Respect of COVID-19 Out-Break:

The Contractor has to follow the various guidelines as issued by Ministry of Home Affairs, Ministry of Health & Family Welfare, Government of India, from time to time for taking all precautions at construction sites to prevent spread of COVID -19.

In addition to following all safety measures, the **“Standard Operating Procedures & Guidelines for Construction Sites for COVID-19 Outbreak”** as shared by **National Real Estate Development Council (NAREDCO)** under the guidance of Ministry of Health and Family Welfare (MoHFW) and Ministry of Housing and Urban Affairs (MoHUA), Govt. of India, should also be followed strictly.

2. Safety Measures in Respect of Dengue Out-Break:

The Contractor shall, at his own expenses, **provide preventive measure against** all anti Malaria/ Dengue instructions given to him by the Engineer-in-Charge.

3. Safety Measures in Respect of NGT Guidelines regarding Environmental pollution control:

The contractor shall, without extra charge, provide temporary protective screens (Woven PVC cloth) made out of specified fabric with all necessary fixing arrangement to ensure that it remains in position for the work duration as required by the Engineer-in-charge

H. – FORM

ARTICLES OF AGREEMENT

ARTICLES OF AGREEMENT MADE AT _____ this _____ day of _____
BETWEEN the Council of Scientific & Industrial Research, New Delhi, a Society registered under the Societies Registration Act, 1860 (Hereinafter referred to as the Employer, which expression shall include its successors and assignees and all officers of the Society) of the one part and _____ trading in the name and style of _____
(hereinafter referred to as the contractor(s) which expression shall include his / their respective heirs, executors, administrators and permitted assignees) of the other part.

WHEREAS the Employer is desirous of getting the work of _____ done and has caused drawings, schedules and Specifications describing the work to be prepared.

AND whereas the said specifications and the schedule of quantities and other documents have been signed by on the part of the parties.

NOW IT IS HEREBY AGREED AND DECLARED BY AND BETWEEN THE PARTIES HERETO AS FOLLOWS:

1. In consideration of the payments to be made to them as hereinafter provided the Contractor shall upon and subject to the conditions hereinafter contained execute and complete, the work at the rates specified in the attached schedule of quantities with such materials as are provided for and in accordance in all respect with specifications, designs, drawings and instructions in writing. Time for carrying out the work will be _____ and the date of commencement shall be reckoned from the tenth day of issue of award letter.
2. The Employer shall pay to the Contractors such sums as shall become payable hereunder at the times and in the manner specified in the said conditions.
3. This agreement contains the following documents in addition to pages of Articles of Agreement.

(i) General Conditions of Contract Page No _____ to _____

(ii) Special Conditions Page No _____

(iii) Additional Conditions Page No _____

(iv) Indenture for Secured Advance Page No. _____ to _____

(v) Original tender document along with the covering letter of the firm dated _____ Page No: 1 to _____

In witness whereof the parties hereto have set their respective hands the day and year herein above written.

Signed by, for and on behalf of Employer _____

In the presence of

(1) _____

(2) _____

Signed by the said contractor

In the presence of

(1) _____

(2) _____

INDENTURE FOR SECURED ADVANCE

This indenture made the _____ day of _____ 199 between _____ (hereinafter called the contractor which expression shall where the context so admits or implies be deemed to include his heirs, executors, administrators and permitted assignees) of the one part and Council of Scientific & Industrial Research, New Delhi, a Society registered under the Societies Registration Act 1860 (hereinafter called the Employer which expression shall include its successors and assignees and authorized officers of the Society) of the other part.

WHEREAS by an agreement dated _____ (hereinafter called the said agreement) the contractor has agreed AND WHEREAS the contractor has applied to the Employer that he may be allowed advances on the security of materials absolutely belonging to him and brought by him to the site of the works the subject of the said agreement for use in the construction of such of the works as he has undertaken to execute at rates fixed for the finished work (inclusive of the cost of materials and labour and other charges) AND WHEREAS the Employer has agreed to advance to the contractor the sum of Rs. _____ (Rupees _____) on the security of materials the quantities and other particulars of which are detailed in accounts of secured advances attached to the running account Bill for the said works signed agreement and in consideration of the sum of Rs. _____ on or before the execution of these presents paid to the contractor by Employer (the receipt whereof the contractor doth hereby acknowledge) and of such further advances (if any) as may be made to him as aforesaid the contractor doth hereby covenant and agree with the Employer and declare as follows:-

1. That the said sum of Rs. _____ advanced by the Employer to the contractor as aforesaid and all or any further sum or sums advanced as aforesaid shall be employed by the contractor in or towards expediting the execution of the said works and for no other purpose whatsoever.
2. That the materials detailed in the said account of secured advance which have been offered to and accepted by the Employer as security are absolutely the contractor's own property and free from encumbrances of any kind and the contractor will not make any application for or receive a further advance on the security for materials which are not absolutely his own property and free from encumbrances of any kind and the contractor indemnifies the Employer against all claims to any materials in respect of which and advance has been made to him as aforesaid.
3. That the materials detailed in the said account of secured advances and all other materials on the security of which any further advance or advances may hereafter be made as aforesaid (hereinafter called the said materials) shall be used by the contractor solely in the execution of the said works in accordance with the directions of the Engineer and in the term of the said agreement.
4. That the contractor shall make at his own cost all necessary and adequate arrangements for the proper watch, safe custody and protections against all risks of the said materials and that until used in construction as aforesaid the said materials shall remain at the sit of the said works in the contractor's custody and on his own responsibility and shall at all times be open to inspection by the Employer or any officer authorized by him. In the event of the said materials or any part thereof being stolen, destroyed or damaged or becoming deteriorated in a greater degree that is due to reasonable use and wear thereof the contractor will forthwith replace the same with other materials of like quality or repair and make good the same as required by the Engineer.
5. That the said materials shall not on any account be removed from the site of the said works except with the written permission of the Employer or any officer authorized by him on that behalf.
6. That the advances shall be repayable in full when or before the contractor receives payments from the Employer of the price payable to him for the said works under the terms and provisions of the said agreement. However, if any intermediate payments are made to the contractor on account of work done then on the occasion of each such payment the Employer will be at liberty to make a recovery from the contractor's bill for such payment by deducting therefrom the value of the said materials then actually used in the construction and in respect of which recovery has not been made previously, the value

for this purpose being determined in respect of each description of materials at the rates at which the amounts of the advances made under these presents were calculated.

7. That if the contractor shall at any time make any default in the performance or observance in any respect of any of the terms of provisions of the said agreement or of these presents the total amount of the advance of advances that may still be owing to the Employer shall immediately on the happening of such default be repayable by the contractor to the Employer together with interest thereon at twelve per cent per annum from the date or respective dates of such advance or advances to the date of repayment and with all costs charges, damages, and expenses incurred by the Employer in or for the recovery thereof or the enforcement of this security or otherwise by reason of the default of the contractor and the contractor hereby covenants and agrees with the Employer to repay and pay the same respectively to him accordingly.
8. That the contractor hereby charges all the said materials with the repayments of the Employer of the said sum of Rs. _____ and any further sum or sums advanced as aforesaid and all costs charges, damages and expenses payable under these presents PROVIDED ALWAYS and it is hereby agreed and declared that notwithstanding anything in the said agreement and without prejudice to the powers contained therein if and whenever the covenant for payment and repayment herein before contained shall become enforceable and the money owing shall not be paid in accordance therewith the Employer may at any time thereafter adopt all or any of the following courses as he may deem best :-
- a. Seize and utilize the said materials or any part thereof in the completion of the said works on behalf of the contractor in accordance with the provisions in that behalf contained in the said agreement debiting the contractor with the actual cost of effecting such completion and amount due in respect of advances under these presents and crediting the contractor with the value of work done as if he had carried it out in accordance with the said agreement and at the rates thereby provided. If the balance is against the contractor he is to pay same to the Employer on demand.
 - b. Removed and sell by public auction the seized materials or any part thereof and out of the moneys arising from the sale retain all the sums aforesaid repayable or payable to the Employer under these presents and pay over the surplus (if any) to the contractor.
 - c. Deduct all or any part of the moneys owing out of the security deposit or any sum due to the contractor under the said agreement.
9. That except in the event of such default on the part of the contractor as aforesaid interest on the said advance shall not be payable.

10.

In witness whereof the said _____ and _____ by the order and under the direction of the Employer have hereunto set their respective hands the day and year first above written.

Signed sealed and delivered by the said contractor : _____

In the presence of

Signature: _____

Address : _____

Signed by : _____

By the order and direction of the Employer : _____

In the presence of

Signature : _____

Name : _____

Address : _____

PERFORMANCE GUARANTEE

To,

Council of Scientific & Industrial Research

In consideration of Council of Scientific & Industrial Research (hereinafter) called "The Council" having awarded to M/s _____ a Company registered under the Companies Act 1956 (hereinafter) called the Contractor, a contract for (hereinafter) called the said contract under the terms and conditions of an Agreement dated ----- made between the Council and the Contractor hereinafter called and said agreement and Council agreed to accept a Deed of Guarantee as herein provided for Rs. _____ (Rupees _____ only) from a Scheduled Bank towards due performance of the contract by the Contractor as per the terms and conditions of the contract on the condition that the Bank on demand from the Council and without demur pay to the Council the aforesaid amount.

We, _____ Bank Ltd., (hereinafter) referred to as the 'bank' do hereby undertake to pay to the Council an amount not exceeding Rs. _____ against any loss or damage caused to or suffered or would be caused to or suffered by the Council by reasons of any breach or breaches of any of the terms of conditions of the said agreement by the said contractor.

We, _____ Bank Ltd., do hereby undertake to pay the amounts due and payable under this Guarantee without any demur, merely on a demand from the Council by stating the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the Council for reasons of any breach by the said contractor (s) of any of the terms & conditions contained in the said Agreement or by reason of the contractor (s) failure to perform the said Agreement. Any such demand made on the Bank shall be conclusive as regards 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 _____.

This guarantee shall come into force immediately and continue in force and remain valid till six months after the completion of all works under the said contract which according to the terms of the said contract, should be six months from the probable date of completion viz., the _____ day of _____. If, however, the period of the completion of the works under said contract is for any reason extended and upon such extension if the Contractor fails, before the terms of this guarantee expires, to furnish a fresh or renewed guarantee for the extended period, the Bank shall pay to Council the said sum of Rs _____ or such lesser sum as Council may demand.

This guarantee shall not be affected by any change in the constitution of the Bank or of the Contractor.

Notwithstanding anything hereinbefore contained, the liability of the Bank under this guarantee is restricted to Rs _____ (Rupees _____ only) and the guarantee shall remain in force till _____ day of _____ 19 _____ unless claim or demand under this guarantee is presented to the bank within six months from that date all the rights of Council under this guarantee shall be forfeited and the Bank shall be released and discharged from all obligations hereunder