

TENDERING PROCESS

- A. Tender box will be kept at Security Control Room
For dropping Filled Tenders

- B. Tender documents are issued in two bid system.
 - 1. **Technical bid-to be submitted in a separate sealed cover**
 - 2. **Price bid- to be submitted in separate sealed cover**

- C. Tender opening

On the day of tender opening, only technical bids will be opened and evaluated. After scrutiny and acceptance of the technical bids, price bids of accepted parties only, will be opened and date of opening of price bids will be intimated separately.

The technical bid consists of technical schedule requiring documentary proof. In case the agency has not satisfied all the conditions along with documentary proof, the tender will be rejected.

Technical and price bids must be in separate covers and super scribed as "Technical bid" and "Price Bid" separately with item Nos. clearly written on the covers. Tenders received mixed (with price and technical bids) will be rejected. Every page of the price bid document shall be signed by the tenderer at the bottom of the page.

In case of tender application and tender documents downloaded from web site, the tenderer shall pay cost of tender documents and EMD for item of work he is tendering separately by means of **two separate DDs** (in favour of **Accounts Officer BHEL R&D, Vikasnagar, Hyderabad 500 093**) one towards cost of tender documents and second towards EMD. Both DD's shall be enclosed along with the Technical bid. DD's may be drawn for cost of tender documents up to last date of receipt of tenders.

(i) TECHNICAL BID

(ii)

(iii) (First Three pages along with necessary Documents and EMD should be submitted as Technical Bid)

Name of the contractor :

1) Name of work :

2) Tender Notice no & :
Date, Item No.

3) Details of DD/Cash paid.
D.D or Cash receipt No. for EMD
DD for cost of tender documents when
downloaded. (to be enclosed along with
this bid).

4) Particulars of experience/credentials:

- a) Completion certificate of same nature of job at least one work of 50 % of estimated value during the last three years.
- b) 50 % turnover in any year of previous 3 years for each of item of work.
- c) Penalty : 0.50 % of the gross value work will be levied for every weeks delay by the agency subject to a maximum of 5 % value of the work.

5) Class of Registration Certificate as Civil Contractor with Local PWD/ CPWD/ Railways/ MES / Any Unit of BHEL and other PSU in Hyderabad (Copy to be enclosed).

6) ESI NO. (Copy to be enclosed)

7) PF CODE NO. (Copy to be enclosed)

8) PAN NO (in case not available, proof of having applied with acknowledgement from concerned authorities).

9) APGST/VAT/TIN NO. (in case not available, proof of having applied with acknowledgement from concerned authorities).

NOTE:

1. Without PAN and APGST/VAT/TIN No. contractors bills cannot be processed and payments will be held up.
2. Technical bids will be scrutinised on the same day. In case the agency has not satisfied all the above conditions with documentary proof the bid will be rejected and their price bid will not be opened.
3. In case of a firm, shall be in the name of the firm. However in case of sole proprietor or individuals these can be on the name of the sole proprietor or individual.
4. Though some of above documents are available with BHEL for those agencies who are presently working with BHEL, they also should submit one copy of the same. Otherwise the offer will be rejected.
5. All the columns shall be filled with proper information.
6. The contractors are requested to sign on all pages in the documents,

Signature of Contractor(s).

TENDER DOCUMENT

TENDER NOTICE NO.CL/03/09-10	ITEM NO.1	DATED:15-06-2009
DATE & TIME OF CLOSING:	10-07-09	14: 30 HRS.
DATE & TIME OF OPENING:	10-07-09	14: 45 HRS.
COST OF TENDER DOCUMENT :	Rs.1000.00	
EARNEST MONEY DEPOSIT :	Rs.2,00,000.00	

NAME OF WORK : Construction of Centre of Excellence Building Including interiors for Pumps and Compressors in BHEL R&D Lab. Complex.

Article II. ISSUED TO : _____

DATE: -----

EMD PAID VIDE DD/ CR/ BC/ NO:

Rs:

TENDER POSITION:

CLX:

DATED:

FMX

**A) BHARAT HEAVY ELECTRICALS LIMITED
CORPORATE RESEARCH & DEVELOPMENT
VIKASNAGAR, HYDERABAD – 500 093.**

a. INDEX

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2. Tender and Contractors Certificate.
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ISSUING OFFICER

2) **BHARAT HEAVY ELECTRICALS LIMITED
CORPORATE RESEARCH & DEVELOPMENT
VIKASNAGAR, HYDERABAD – 500 093.**

TENDER NOTICE

1. NO.CL/03/09-10 Date:15-06-2009 Item No.1, Sealed Tenders will be received by the AGM (PROJ.), Bharat Heavy Electricals Ltd., Corporate Research & Development Division at his office at Vikasnagar, Hyderabad – 500 093 up to 14-30 Hours on 10-07-2009 for the work of

Construction of Centre of Excellence Building Including interiors for Pumps and Compressors in BHEL R&D Lab. Complex.

At Vikasnagar, adjacent to HAL Complex, Balanagar, Hyderabad-500 093.

The Tenders will be opened by the AGM (PROJ.) Bharat Heavy Electricals Ltd., Corporate Research & Development Division on the date and at the place aforesaid mentioned. The Tenderers or their agents are expected to be present at the time of opening of the Tenders. The tender receiving Office will, on opening the Tender, attest over writings or corrections, if any, there in the presence of the Tenders who may be present at the time. The Tender should be in the form obtainable from the Office of the AGM (PROJ.). The CPWD Standard Specification and other documents relating sheet to the contract such as additional specifications, drawing descriptive specification sheet regarding materials etc, can be seen at any time between 9:00 AM and 1:00 PM on Office of the AGM (PROJ.) Tender forms and other particulars regarding the proposed work can be obtained at the office of the AGM (PROJ.) Tender forms and other particulars regarding the proposed work can be obtained at the office of the AGM (PROJ.) on any working day from 9:00AM TO 1:00 PM up to 08.07.2009 on payment of the prescribed sum of Rs.1000.00 per set which amount is not refundable.

2. Tenders must be submitted in sealed covers and should addressed to the AGM (PROJ.), Bharat Heavy Electricals Ltd, Corporate Research & Development, Vikasnagar, Hyderabad-500593 the Tender number and the name of the work being noted on the cover. If the Tender is made by an individual, it shall be signed with his full name and his address shall be given. If it is made by firm, it shall be signed with the co-partnership name by a member of the firm, who shall also sign his own name, and the name and address of each member of the firm shall be given. If the Tender is made by a Corporation, it shall be signed by a duly authorised Officer who shall produce with his Tender, satisfactory evidence of his authorisation such Tendering corporation may be required before the agreement is executed, to furnish evidence of its corporate existence.

3. Each Tenderer must pay a sum of Rs.2,00,000.00 (Rupees Two Lakh Only) as Earnest Money Deposit (EMD). The Earnest Money prescribed for this work may be offered in the form of

Pay order, demand Draft, drawn in favour of Accounts Officer, Bharat Heavy Electricals Limited, Research and Development, Vikasnagar, Hyderabad.

The Earnest Money will be refunded to the unsuccessful tenderer after the intimation of rejection of the tender is sent. The Earnest Money will be retained in the case of the successful tenderer and get converted as a part of security Deposit for the due performance of the contract and either case will no carry any interest. It will be dealt with as provided in the conditions attached to the tender.

When a tender is to be accepted, the tenderer whose tender is under consideration shall attend the office of the AGM (PROJ.) on the date fixed by written intimation to him. He shall forthwith attend upon intimation being given to him by the AGM (PROJ.) of acceptance of his tender, complete the execution of the agreement by signing all documents connected therewith. Failure to do so shall entail forfeiture of the earnest money.

4. EMD by the Tenderer will be forfeited as per Tender Document if.

- i) After opening the tender, he revokes his tender within the validity period or increased his quoted rates.
- ii) The tenderer does not commence the work within the period as per LOI/Contract. In case the LOI/contract is silent in this regard, within 15 days after award of contract.

5. EMD shall not carry any interest.

6. Tenderers shall pursue carefully the instructions in 'Direction to Parties Tendering and the conditions of the agreement form and all other relevant documents before tendering rates for the work. The approximate quantity of work to be executed under each class is given in the Schedule – A. The quantities are given with a view to enable the tenderer to quote his overall rate for each class of work in the tender form and for a uniform comparison of tenders. It shall be definitely understood that the Bharat Heavy Electricals Limited does not accept any omissions, deductions, or additions that may be made in the tender documents by the parties tendering.

7. AGM (PROJ.) reserves the right to reject any tender or part thereof or all the tenders without assigning any reasons thereof.

8a. Tenders offering a percentage deduction from or increase on the estimate amount and those not submitted in proper form or in due time will be rejected.

8b. The offer shall be valid for a period of 90 days from the date of opening of the tender.

9. Security Deposit shall be collected from the successful tenderer. The rate of Security Deposit will be as below.

Up to Rs. 10 lakhs	10%
Above Rs. 10 lakhs	Rs. 1 lakh + 7.5% of the amount exceeding Rs. 10 lakhs
Above Rs. 50 lakhs	Rs.4 lakhs + 5% of the amount exceeding Rs. 50 lakhs

The Security Deposit should be deposited before start of the work by the contractor.

9a. Security Deposit may be furnished in any one of the following forms.

- i) Cash (as permissible under the Income Tax Act)
- ii) Pay Order, Demand Draft in favour of BHEL R&D.
- iii) Local cheques of schedule banks subject to realization.
- iv) Security available from Post Office such as National savings Certificate, Kissan Vikas Patras etc.
- v) Bank Guarantee from schedules Banks/Public Financial Institutions as defined in the Companies Act subject to a maximum of 50% of the total security deposit value. The balance 50% has to be remitted either by cash or in the other form of security. The Bank Guarantee format should have the approval of BHEL R&D.
- vi) Fixed Deposit Receipt issued by scheduled Banks/Public Financial Institutions as defined in the companies Act. The FDR should be in the name of contractor, A/c BHEL R&D, duly discharge on the back.
- vii) Security Deposit can also be recovered at the rate 10% from the running bills. However in such cases at least 50% of the security deposit should be deposited before start of the work and the balance 50% will be recovered from the running bills.
- viii) EMD of the successfully tender shall be converted and adjusted against the security deposit.

Note: Acceptance of Security Deposit against Sl. No.(iv) and (vi) above will be adjusted to Hypothecation or endorsement on the documents in favour of BHEL R&D. However, BHEL R&D will not be liable or responsible in any manner for the collection of interest or renewal of the documents or in any other matter connected therewith.

9b. Security Deposit shall not be refundable to the contractor except in accordance with the terms of the contract.

The 50% Security Deposit will be released along with final bill balance will be released after 12 (Twelve) Months maintenance period.

10. a) Rs.2,00,000.00 (Rupees Two Lakhs only) will be retained as Security deposit for the due performance to the stipulation to keep the offer open for a period of 90 days from the date of opening of the tender; it being understood that the tender documents have been sold/issued to the tender and the tenderer is being permitted to Tender in consideration of the above stipulation on his part and that he shall not alter or modify the terms and conditions thereof in a manner not acceptable to A.G.M. (PROJ.) Should the tenderer fail to observe or comply with the foregoing stipulation, the aforesaid amount of Rs.2,00,000.00 (Rupees Two lakhs only) shall be liable to be forfeited.
11. The AGM (PROJ.) reserves the right to reject any tender or part there of all tenders without assigning any reason therefore.
12. Tenders offering a percentage deduction or increase on the estimate amount, which is not submitted in proper form or in due time, will be rejected.
13. The under signed reserves the right to reject any or all tenders or part there of or to divide the work in to convenient groups and award the work to more than one agency. The under signed also reserved the right to allow to public enterprises preference facilities as admissible under the existing policy.

SIGNATURE OF CONTRACTOR(S)

ISSUING OFFICER

Grams: BHELDEV
Fax : 040-23776320

Phone No: 1) 23882185
2) 23774494

BHARAT HEAVY ELECTRICALS LIMITED
CORP. R&D DIVISION: HYDERABAD – 93

TENDER NOTICE NO: CL/03/2009-2010 Dt. 15/06/2009

Sealed Tenders are invited by the AGM (Proj) from the reputed contractors experienced in similar work having valid PF No., ESI, VAT/TIN No. and Labour License from state Govt. (Labour License is mandatory before agreement) and registered with local PWD/ CPWD/ Railways/ MES/ BHEL any unit and other PSUs, for the following works to be taken up at BHEL, Corp. R&D, Division, so as to reach the Tender Box placed at Security Check-Post, BHEL, Corp. R&D, Division, Vikasnagar, Hyderabad-500 093 up to 14-30 hours on 10-07-09. Tender will be opened on 10-07-2009 at 14-45 hours in the office of the AGM (Proj).

S No.	Description of Work	Estimated cost (Rs. In Lakhs)	EMD Rs. Ps	Cost of Tender Document Rs. Ps	Period sale of Tender Document	Date of opening	Period of completion
	Construction of Centre of Excellence Building Including interiors for Pumps and Compressors in BHEL R&D Lab. Complex.	148	2,00,000.00	1,000.00	18-06-09 to 08-07-09	10-07-09	9 Months

Note:

1. Tenders received without EMD are liable for rejection.
2. Tender documents are obtainable between the dates mentioned from the office of the AGM(PROJ.) BHEL (R&D) Divn, Vikasnagar, Hyderabad-93 during office hours on submitting the application with full of their experience and enclosing copies of registration certificates, PF No. ESI, Sales Tax registration labour license has to be produce at time of agreement.
3. The cost of tender documents will not be refunded and tenders are not transferable under any circumstances.
4. The under signed reserves the right to reject any or all tenders or part thereof or to divide the work in to convenient group and award the work to more than one agency. The under signed also reserves the right to allow to Public Enterprises preference facilities as admissible under the existing policy.
5. Crossed demand drafts/Cash for issue of tender documents shall be sent to the Accounts Officer, BHEL Corp. R&D Divn., Vikasnagar, Hyderabad-500 093. Cash may be remitted at our cash office between 12.30 hours to 14.00 hours.
6. Working contractors are also to pay Earnest Money Deposit. EMD will neither be adjusted against their pending bills nor they can be transferred from one work to the other.
7. The conclusion of contract will be in the form prescribed by Bharat Heavy Electricals Limited for the purpose.
8. In case date of opening happens to be holiday by any reason, tenders will be received and opened on next working day.

Sd/-
AGM (PROJ.)

TENDERER AND CONTRACTOR'S CERTIFICATE

1. I hereby declare that I have pursued in detail and examined closely the Central Public Works Department Detailed Standard Specifications and its addenda volume and also the BHEL General Conditions of Contract, I agree to be bound by and comply with all specifications contained in CPWD Standard Specifications and BHEL General Conditions of Contract, for the various items of work specified in the "SCHEDULE – A" and the work as a whole.

1. I hereby declare that I shall pay the statutory minimum wages to my workers as applicable from time to time.

I shall also adhere to all the statutory obligations under Contract labour (Regulation and Abolition) Act 1971 and Rules framed there under with subsequent revisions if any.

DATE _____

SIGNATURE OF CONTRACTOR(S)

DIRECTIONS TO PARTIES TENDERING

1. A list of materials proposed to be supplied by the Bharat Heavy Electricals Ltd., Corporate Research & Development Division, Vikasnagar, Hyderabad-500093 and the place where and the prices at which they are proposed to be supplied is given in schedule – B. TENDERER MUST ACCEPT THESE MATERIALS AT THE SPECIFIED PRICES AND QUOTE FOR FINISHED WORK ACCORDINGLY, Notwithstanding any subsequent change in the market value for those materials the charges to the party executing the work will remain as originally entered in the agreement. If at anytime, BHEL supplies materials other than those specified in the agreement at the request of the contractor for use on work, they will be charged at the market value prevailing at the time of supply or issue rate plus 12.5% whichever is greater.
2. The tenderer shall examine closely the CPWD Detailed Standard Specifications kept in AGM(PROJ.) Office and also the relevant clauses of the Standard Preliminary Specifications before submitting his tender unit rates which shall for finished work in situ. The contractor is advised to purchase a book of CPWD Detailed Standard Specification for his reference. He shall also carefully study the drawings and additional Specifications and all the documents which form part of the agreement to be entered into by the accepted tenderer.
3. Each tenderer must also send a certification of income Tax Verification from the appropriate income Tax Authority in the form prescribed therefore.

In the case of proprietary or partnership firm it will be necessary to produce the certificate aforementioned for the pre-proprietor or Proprietor and for each of the partners as the case may be.

If a certificate has already been produced by the tenderer during the calendar year in which the tenderer is made in respect of a previous tender, it will be sufficient if particulars regarding the previous occasion on which the certificate was produced are given.

All tenders received without a certificate as aforesaid mentioned will be summarily rejected.

4. Every tenderer is expected, before quoting his rates, to inspect the site of the proposed work. He should also clarify the queries, if any, and satisfy himself about the quality expected and availability of materials. The best class of materials shall be used on the work. In every case, the materials must comply with the relevant standard specification, samples of materials as called for in the standard specifications, or in his tender notice or as required by the AGM(PROJ.) having jurisdiction for the time being over the work should have the due approval before the supply to site of work in begun. Attention of the contractor is drawn to the Standard, 'Preliminary Specification' regarding payment of seignior age, tools etc.
5. Time shall be considered as essence of the contract. The rate of progress as indicated in Annexure – C is required to be maintained. Date of commencement of this programme will be the date on which the site (or premises) is handed over to the contractor.

6. The tenderer should quote specific rates for each item in the schedule, and the rates should be in rupees and paisa. The units and rates should be written both in words and figures.

The schedule accompanying the tender shall be written legibly and free from erasure, over writings or conversion of figures Correction-where unavoidable should be made by crossing out, initialing, dating and rewriting, No alteration which is made by the tenderer in the agreement form, the conditions of agreement, the drawing or specifications, accompanying the same will be recognised; and if any such alterations are made the tender will be void.

7. Rates quoted shall include all taxes, octroi, transport etc complete.
8. BHEL's General Conditions of Contract as enclosed shall apply for this work.
9. Income Tax will be deducted on the work as per the direction of Income tax department.
10. Sales Tax will be deducted on the works as per the direction of Sales Tax department.
11. Cess or any other taxes will be deducted as implemented by Government time to time at specified rates.

(ii) CONTRACTOR (S)

ISSUING OFFICER

TENDER FOR THE WORK

Article III. I/We

Do hereby tender to execute works of the under mentioned description and in accordance with the conditions noted below in consideration of payment being made for the quantity of work actually executed at the respective rates specified in Schedule 'A' hereto.

I/We hereby distinctly and expressly declare and acknowledge that before the submission of my/our tender I/We have carefully followed the instructions in the tender notice and have read the CPWD Detailed Standard Specifications and the clauses of the Preliminary Specifications/BHEL General Conditions of Contract and that I/We have made such examination of the contract documents and of the specifications, etc and of the location where the said work is to be done and such investigation of the work required to be done, and in regard to the material required to be furnished as to enable me/us thoroughly understand the intention of the same and the requirements, convenient agreements, stipulations and restrictions; and distinctly agree that I/We will not hereafter make any claim or demand upon the BHEL, based upon or arising out of any alleged misunderstanding or misconception or mistake on my/our part of the said requirements, convenient, agreements, stipulations, restrictions and conditions".

I/We enclose an income tax verification certificate _____

_____/_____
_____ I /We have already produced an income tax verification certificate during the current calendar year in respect of (here particular of the previous occasion on which the certificate was produced should be given). _____

I/We agree to kept the tender open for acceptance for Ninety (90) days from the date of submission thereof and not to make any modifications in its terms and conditions which are not acceptable to BHEL.

If after the tender is accepted, I/We fail to commence the execution of the works are provided in the conditions, I/We agree the BHEL shall without prejudice to any of their right or remedy, be at liberty to forfeit the said earnest money absolutely.

Signature of Contractor (S)

Address:

I/We agree that should the BHEL decide to forfeit earnest money as aforesaid, unless, a sum equal to earnest money mentioned above is paid by us forthwith, the BHEL may as its option, it out of the deposit and in the event of deficiency, out of any other moneys due to me/us or otherwise.

Witness_____

Signature_____

In the capacity
Of_____

Duly authorised to sign

The tender on behalf of

(in block capitals):

Postal Address_____

Telegraphic Address_____

Telephone No._____

i) AGREEMENT

This agreement made this day the _____ of _____
_____ between Bharat Heavy Electricals Ltd., having its registered Office at New Delhi, Unit: Corporate Research & Development Division, Vikas Nagar, Hyderabad-500 093 (hereinafter called the First Party) of one part and _____ (hereinafter called the contractor) of second part.

Where as the first party is desirous of _____

(name of work) at Site at Vikasnagar, Hyderabad – 500 093 of Bharat Heavy Electricals Limited, Corporate Research & Development Division, situated at about 9 KMs West of Secunderabad City, more particularly described in the Schedule including drawings and specification attached herewith.

Whereas in pursuance of the said contractor's tender being accepted, the first party has decided to give the aforesaid work to the said contractor.

Whereas the said contractor has agreed to execute the assigned work subject to the conditions herein contained in these presents and the works shown upon the said drawings and specifications at the approved rates embodied in schedule – A (bill of quantities) attached herewith.

And whereas the contractor has agreed to the retention by the first party of the Earnest Money Deposit of Rs.1,00,000.00 paid by him when he submitted his tender as part of the security for the due fulfillment of the contract to the satisfaction of the first party.

And whereas the contractor has also pursued the copy of the CPWD standard specifications and its Addenda volume, BHEL General Conditions of Contract, thereto maintained in the AGM (PROJ.) Office and is bound by all the standard Specifications for items of work described by a standard specifications number in schedule 'A' and by all the conditions and clauses of the standard preliminary specifications detailed in the agreement.

And whereas the contractor has agreed to execute upon and subject to the conditions set forth in standard specification indicated in schedule – A and in the standard preliminary Specification and such other conditions as are contained in all the specification and such other conditions as are contained in all the specification forming part of this contract (hereinafter referred to as the 'said conditions'), the work shown upon the drawings and described in the said specifications and set forth in schedule – A as the " Probable quantities" and comply with the time of completion as mentioned in the Tender Notice.

Now these present witness that in consideration of the Schedule-A as also of agreement of good and faithful service to be rendered and performed by the contractor in the execution of the said work, subject to the stipulations hereinafter expressed.

Now its hereby agreed as follows:

1. That the contract shall come into force with retrospective effect from _____
_____ the date on which the site or premises was handed over to the contractor.
2. That it is agreed between the parties that the non exercise of any of the powers conferred on the authorities of the first party, will not in any manner constitute waiver of the conditions here to contained in these presents and the liability of the contractor either of part of future compensation shall remain unaffected.
3. That notwithstanding anything mentioned earlier by either party, only the conditions included in the agreement shall prevail.
4. That the expenses of completing and stamping the agreements shall be paid by the contractor.
5. The contractor will be responsible for complying with the statutory provisions under various Labour Acts such as workers compensation Act, Minimum wages Act, PF, ESI contributions etc. In case BHEL R&D, as a principal employer, has to pay an amount to any agency for non-fulfillment of any of the provisions of the above referred Acts, I/we authorise BHEL to deduct the amount from my/our bills or I/we will pay the amount to BHEL R&D.

In witness there of the parties have respectively set their signatures in the presence of:

Witness: 1)

2)

Date _____

SIGNATURE OF THE CONTRACTOR

For and on behalf of,
Bharat Heavy Electricals Limited
Corporate Research & Development Divn

ACCEPTING AUTHORITY

Name of the work: Construction of Centre of Excellence Building
 Including interiors for Pumps and Compressors in
 BHEL R&D Lab. Complex.

ABSTRACT ESTIMATE

Sno	Description of Item of work	Quantity	Unit	Rate in Figure	Words	Amount
1	Surface dressing of the ground including removing vegetation and inequalities not exceeding 150mm deep and disposal of rubbish, lead upto 50m. and lift upto 1.5m. in all kinds of soils.(2)	1225.0	Sq.m			
2	Earth work excavation in foundation trenches or drains not exceeding 1.50 m in width or 10 sq.m on plan including dressing of the sides and ramming of bottoms, lift upto 1.50 m including getting out the excavated soil and disposal of surplus soil as directed within a lead of 50m in all kinds of soils.(3)	924.7	Cu.m			
3	Extra for excavating in foundations, trenches , or drains not exceeding 1.5 m in width or 10 Sq.m on plan including dressing of sides and ramming of bottom , lift Exceeding 1.5m but not exceeding 3.0M including getting out the excavated soil and disposal of surplus earth as directed with in a lead of 50M in kinds of soil(17).	141.2	Cu.m			
4	Excavation in hard rock or breaking of boulders by only chiseling using necessary machinery / plant required in all depths (payment will be made on the basis of stack measurement duly deducting 40% voids.)(4)	10.0	Cu.m			
5	Felling of trees of girth (measured at a height of 1m above ground level including cutting of trunks and branches removing the roots and stacking of serviceable materials and disposal of un-serviceable materials and including burning etc complete beyond 60cm girth up to and including 120cm girth.(7)	10.0	Each			

Sino	Description of Item of work	Quantity	Unit	Rate in Figure	Words	Amount
6	Supplying & filling with sand under floors & plinths in layers not exceeding 200mm including watering and ramming each deposited layer.(11)	24.3	Cu.m			
7	Supply and filling with morrum brought from outside including Laying in layers not exceeding 200mm in depth, watering and ramming and consolidating each deposited layer.(12)	513.8	Cu.m			
8	Filling with available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc.in layers not exceeding 200mm in depth, consolidating each deposited layer by ramming and watering lead upto 50m and lift upto 1.5m.(10)	308.2	Cu.m			
9	Inter carting of surplus excavated earth by mechanical transport including loading un loading spreading etc,complete with in 2 km lead.(13)	365.6	Cu.m			
10	Supplying and stacking of Chlorpyriphos/Lindane emulsifiable concentrate of 20% in sealed containers to the site .(19)	200.0	litre			
11	Diluting & injecting chemical emulsion for PRE-CONSTRUCTIONAL anti-termite treatment & creating chemical barrier under & around the column pits, top surface of plinth filling, junction of wall and floor, expansion joints, surroundings of pipe and conduits etc, complete (plinth area of building at ground floor only shall be measured) with chlorpyriphos emulsifiable concentrate 20% with 1% concentration . (14)	587.09	Sq.m			
12	Providing and laying in position cement concrete of mix 1:4:8(1 cement: 4 coarse sand: 8 graded stone aggregate 40mm nominal size) excluding the cost of centering , shuttering- all works upto plinth level. Cement will be FREE supply(23)	344.52	Cu.m			

Sno	Description of Item of work	Quantity	Unit	Rate in Figure	Words	Amount
13	Providing and laying cement concrete in mix 1:2:4 (1 cement:2 coarse sand :4 graded stone aggregate 20 mm nominal size) upto floor five level in retaining walls, return walls, walls including attached pilasters, columns piers , abutments , pillars , posts, buttresses, strings or lacing courses parapets, copings, bed blocks, anchor blocks , plain window sills fillets etc. excluding the cost of centering, shuttering and finishing . Cement will be FREE supply.(22)	6.51	Cu.m			
14	Providing and Laying M-20 grade Reinforced cement concrete in position machine mixed and machine vibrated design mix cement concrete for reinforced cement concrete elements, excluding the cost of centering , shuttering, finishing and reinforcement. including cost of admixtures in recommended proportions (As per IS 9103) to accelerate, retard setting time of concrete, improve workability & Water proofing of the structure with out impairing strength and durability as per directions of Engineer -in-charge in Footings ,bases of columns, up to plinth levels.(26)	100.83	Cu.m			
15	Providing and laying M20 grade Reinforced cement concrete in position machine mixed and machined vibrated design mix cement concrete for reinforced cement concrete elements ,excluding the cost of centering , shuttering, finishing and reinforcement ,including cost of admixtures in recommended proportions (As per IS 9103) to accelerate, retard setting time of concrete, improve workability & water proofing of the structure with out impairing strength and durability as per directions of Engineer in charge in Walls , Columns, pillars, posts and struts etc., complete in all floors Cement will be free supply. (31)	81.08	Cu.m			

Sino	Description of Item of work	Quantity	Unit	Rate in Figure	Words	Amount
16	Providing and Laying M-20 grade Reinforced cement concrete in position machine mixed and machine vibrated design mix cement concrete for reinforced cement concrete elements , excluding the cost of centering, shuttering, finishing,and reinforcement ,including cost of admixtures in recommended proportions (As per IS 9103 to accelerate,retard setting time of concrete,improve workability & Water proofing of the structure with out impairing strength and durability as per directions of Engineer in charge in Beams, Plinth beams,Cantilevers,Suspended floors, lintels , Chajjas , stair cases and shelves etc complete in all floors. Cement will be FREE supply.(32)	386.32	Cu.m			
17	Reinforced Cement Concrete work in SHELVES excluding the cost of Centring and shuttering and Reinforcement with 1:2:4 (1 Cement : 2 Coarse sand :4 graded stone aggregate 20mm nominal size . Cement will be FREE supply.(43).	3.21	Cu.m			
18	Providing and laying cement concrete in mix 1:2:4 (1 Cement : 2 Coarse Sand 4 graded stone aggregate 40mm nominal size) in pavements, laid to required slope and camber in panels as required including consolidation finishing and tamping etc complete including cost of all materials Cement will be FREE supply (737)	36.20	Cu.m			
19	Providing and laying design mix cement concrete in roads, taxi tracks and runways having a minimum works test beam flexural strength of 30 kg. per sq.cm. at 28 days using not less than 340 kg. of cement per cum of finished concrete, coarse sand and graded stone aggregate of 40 mm nominal size in appropriate proportions as per specified design criteria approved by Engineer-in-Charge mechanically vibrated using needle and surface vibrators including steel from work with sturdy MS channel sections including curing and providing and filling contraction joints and dummy joints with approved joint filler and primer including rounding of the edges and filling the grooves 10x25mm deep at top for construction joints and 10mmx50mm deep at top for dummy joints with joint sealing compound [conforming to grade	66.00	Cu.m			

Sino	Description of Item of work	Quantity	Unit	Rate in Figure	Words	Amount
	B of IS:1834] including making necessary arrangements for expansion joints etc. all complete. Cement will be free supply.					
20	Providing and laying cinder concrete in mix 1:3:6 (1 Cement : 3 Sand : 6 cinder concrete) light weight in all floors in Trench, sunken slabs of toilets etc complete including cost of all materials. Cement will be free supply. (737)	11.61	Cu.m			
21	Providing centering and shuttering including strutting, propping,etc.& removal of form work after the specified time as directed by the engineer-in-charge only with steel shuttering (the extent possible usage of wood has to be avoided in construction activities) for raft slab and footings and Machine foundations.(48)	142.24	Sq.m			
22	Providing centering and shuttering including strutting, propping,etc. & and removal of form work after a specified time as directed by the engineer-in-charge (extent possible usage of wood has to be avoided in construction activities) only using using only steel shuttering for columns,pillars,posts and struts in all floors.(49)	818.48	Sq.m			
23	Providing centering and shuttering including strutting, propping etc.and removal of form work after a specified time as directed by the engineer-in-charge (extent possible usage of wood has to be avoided in the construction activities) only with steel shuttering for lintels ,beams, plinth beams,girders,bressummers and cantilevers in all floors.(50)	1733.3	Sq.m			
24	Providing centering and shuttering including strutting ,propping, etc. and removal of form work after a specified time as directed by the engineer-in-charge (extent possible usage of wood has to be avoided in construction activities) using only steel shuttering for Suspended floors, roofs,Landings, etc complete.(51)	1280.3	Sq.m			

Sino	Description of Item of work	Quantity	Unit	Rate in Figure	Words	Amount
25	Extra for additional height in centering ,shuttering wherever required with adequate bracing,propping etc., including cost of de-shuttering and de centering at all levels over a height of 3.5 M for every additional height of 1 meter of part thereof (plan area to be measured)in Suspended floors, Roofs, Landings, Beams and balconies.(55)	2093.1	Sq.m			
26	Providing centering and shuttering including strutting,propping,etc and removal of form work after specified period as directed by the Engineer in charge (Extent possible usage of wood has to be avoided in the construction activities using only steel shuttering for Weather shade, chajjas , Cobels etc,. including edges in all floors. (46)	218.40	Sq.m			
27	Providing centering and shuttering including strutting, propping, etc and removal of form work after specified period as directed by the Engineer in charge (Extent possible usage of wood has to be avoided in the construction activities using only steel shuttering for staircase etc,. complete in all floors. (46)	77.58	Sq.m			
28	Providing centering and shuttering including strutting, propping, etc and removal of form work after specified period as directed by the Engineer in charge for pockets in machine foundations. (46)	24.96	Sq.m			
29	Reinforcement for RCC work including fabrication, cutting, bending binding and placing steel in position etc, including the cost of 18 gauge MS annealed binding wire in all floors. The steel required will be supplied FREE at Central Stores. MILD STEEL.	300	kg			
30	Reinforcement for RCC work including fabrication ,cutting, bending, binding and placing in position etc, including cost of 18 gauge MS annealed binding wire in all floors. The steel required will supplied FREE of cost at Central Stores. TOR / COLD TWISTED BARS.(58)	59664	kg			

Sino	Description of Item of work	Quantity	Unit	Rate in Figure	Words	Amount
31	Coursed rubble stone masonry (second sort) with hard stone in layers with suitable bond stone at 1 m intervals in each coarse in cement mortar 1:6 (1 cement:6 coarse sand) in basement or super-structure. Cement will be FREE supply.(62)	285.96	Cu.m			
32	Providing and laying AEROCON block masonry with 230mm thick blocks in cement mortar 1:6 [1 cement: 6 sand] with mixing of plasticiser all as directed by the engineer in charge with providing reinforcement in between layers as per the manufacturers recommendations and directions of engineer in charge etc complete in all floors [cement & steel are FREE issue [66]	634.22	Sq.m			
33	Brick masonry in cement mortar 1:6 (1 cement: 6 coarse sand) using of Machine moulded brick displayed in office or equivalent quality as directed by the engineer-in-charge in all floors and basement. Cement will be FREE supply.(67)	123.08	Cu.m			
34	Half brick masonry in cement mortar 1:4 (1 cement: 4 coarse sand) with machine molded bricks displayed in office or equivalent as directed by the engineer-in-charge with 2 nos.of m s. rods of 6mm dia.for every 5th coarse etc, but excluding the cost of m s.rods including the cost and conveyance of materials and labour charges in all floors. Cement will be FREE supply.(68)	221.58	Sq.m			
35	Providing wood work in frames of doors, windows & clerestory windows and other frames,wrought framed and fixed in position in second class indian teak wood.(71)	0.7163	Cu.m			
36	Providing and fixing 35mm thick skin door shutter with non decorative type with frame of 1st class hard wood The shutter has to be fixed with 1 No. Aluminium power coated handle, 1 No. tower bolt ISI mark stainless steel butt hinges 100x58x1.9 mm 3 nos. to each shutter fitted with suitable nettle fold screws etc complete for single door shutter.	15.79	Sq.m			

Sino	Description of Item of work	Quantity	Unit	Rate in Figure	Words	Amount
37	<p>Providing and fixing galvanized steel sheet doors frame produced from 1.2 mm [18 G] thick galvanized sheet formed to single rebate profile of size 100 mm x 57 mm door leaves [shutter] single / double are constructed from 0.8 mm thick galvanized steel sheet formed to</p> <p>provide a 46 mm thick fully flush double skin door shell with lock seam joints at stile edges. In fill</p> <p>of honey comb kraft paper is to be used to give the required rigidity and effective acoustic & thermal insulation. Frame has to be fixed on plastered opening with the help of Anchor fasteners.</p> <p>Vision glass has to be fixed with Unbreakable toughned glass of 5mm Thick as per the size mentioned in the drawing</p> <p>The door frames and shutters are to be finished with zinc phosphate primer and finished with thermo-setting polyurethane paint of Al-phatic grade providing high level of scratch resistance & durability.</p> <p>Each door shutter has to be provided with SS ball bearing butt hinges 3mm thick fixed flush to the frame and shutter, mortise steel lock with lever handles, mortise deed bolt, mortise latch has to be provided.</p> <p>For double door concealed extended level action flush bolts are to be provided on the top of the door to the leading stile edge. [728]</p>	18.95	Sq.m			
38	<p>Providing and fixing main entrance door all as per the drawing with following specification. All the partition box sections are made of 101x44x3mm thick Aluminum sections powder coated with approved colour and shade. Door verticals will be with 47x44.5x3mm door top & bottom will be with 95x44.5x3mm. All the glass in partition will be fitted with 5mm th. clear glass and door shutter glass has to be fitted with 8mm th glass, partition glass and door glass has to be fitted with</p>	5.04	Sq.m			

Sino	Description of Item of work	Quantity	Unit	Rate in Figure	Words	Amount
	around rubber beading and heavy type aluminum powder coated clip beading on both and heavy type aluminum powder coated clip beading on both sides of glass, Door shutter has to be fitted with 2 Nos of approved make floor springs with ISI mark, Door handles of approved design & made, Door stoppers, Concealed tower bolts, Concealed Mortise lock of approved make and PVC beading around the door frame. Threaded Galvanized MS rod with bolt and nuts has to be provided inside the door members. (694)					
39	Providing and fixing of aluminum door with double shutter made out of powder coated aluminum box section of size 44.50 x 47.50 x 2 mm for verticals, top and middle rails and 101.6 x 44.5 x 2 mm for bottom rail inclusive of supply and fixing all aluminum fixtures and fittings such as handles 2 Nos. 1 No.tower bolt 12 mm dia, 200 mm long, 3 Nos. of 4" [100 mm] long butt hinges, suitable concealed lock of approved make and PVC beading around the door frame etc. complete. Panels are to be filled with 5 mm thick reflective glass of approved shade and make. Around the door one powder coated aluminum frame of box section 63x37x2 mm has to be fixed for fixing of aluminum door. All the gaps are to be filled with silicon sealant.[729]	15.33	Sq.m			
40	Providing & fixing double action hydraulic floor spring of approved brand and manufacture as per IS 6315 marked, for doors including cost of cutting,floors as required embedding in floors and cover plates with brass pivot and single piece MS sheet outer box with slide plate etc complete as per the direction of Engineer in charge with stainless steel cover plate.	10.00	Each			
41	Providing and fixing 45 mm thick second class Indian teak wood Double glazed shutters with 2 Nos. of 5 mm thick stained/itching glass with necessary teak wook beading supply & fixing of SS butt hinges 100x 58x1.9 mm 3 nos. to each shutter fitted with suitable necessary nettle fold screws etc complete including the cost of all materials and labour etc., for double or single leaf shutters. [76]	15.75				

Sino	Description of Item of work	Quantity	Unit	Rate in Figure	Words	Amount
42	<p>Fabrication, supply and fixing of motorised rolling shutter of approved design made of 18 G MS Lathe inter locked together through their entire length and jointed together at the end by end locks mounted on specially designed pipe shaft with bracket, side guides and arrangements for electrically operated rolling shutter with required no of springs, bottom plate reinforced with 40x40x6 angle, guide channel 10 G processed section, MS top cover 1.25mm thick etc. complete. The following electrical equipment are to be fitted to the rolling shutter.</p> <p>1.1 HP motor [Crompton or equivalent make [1440 RPM]</p> <p>2. Reduction gear box Elecon or equivalent make [1/2 HP 1:50]</p> <p>3. Siemens starter [reverse-forward] Siemens or equivalent.</p> <p>4. Limit switches of approved make[698]</p>	25.20	Sq.m			
43	<p>Providing and fixing 40x3 mm flat iron hold fast 400mm long including fixing with 10 mm dia bolts, nuts and wooden plugs embedding in cement concrete block 30x10x15cm 1:3:6 [1 cement : 3 coarse sand : 6 stone aggregate 20 mm nominal size] [78]</p>	48.00	Each			
44	<p>Providing & fixing aluminium sliding door bolt anodised transparent / dyed to required colour / shade with required no. of nettle fold screws etc. size 300 mm long x 16 mm dia. [79]</p>	24.00	Each			
45	<p>Providing & fixing aluminium tower bolts anodised transparent or dyed to required colour or shade with necessary screws etc., complete. Size 200mm long x 10mm dia. [80]</p>	24.00	Each			
46	<p>Providing & fixing aluminium handles anodised transparent/dyed to required colour/shade with necessary screws, complete of size 125 mm. [81]</p>	48.00	Each			
47	<p>Providing & fixing aluminium hanging floor door stopper anodised transparent/ dyed to required colour and shade with necessary screws etc., complete. Twin rubber stopper. [82].</p>	24.00	Each			

Sino	Description of Item of work	Quantity	Unit	Rate in Figure	Words	Amount
48	<p>Supply & fixing of Unplasticised Poly Vinyl Chloride [uPVC] casement windows [openable] duly manufactured using approved brand uPVC profiles of 58x57x3mm for outer frames, 58x68x2.5mm for casement shutter [sash] frames and the mullion sections are of 58x74x2.5mm</p> <p>The profiles shall be extruded with properties of impact resistance, UV stability, corrosion resistance, colour fastness, chemical resistance, low thermal expansion, fire retarding, aging resistant, and sea water resistant.</p> <p>The outer frame and the sash frame should be structurally reinforced with hop dip galvanized steel with a resistance of up to 50 microns, 1.5mm thick 'BOX' type for outer frame & 1.5 mm thick 'C' type for sash frame & should be suitably passivated for corrosion resistance for tropical deployment & should not be exposed to any drainage routing.</p> <p>The outer frame and the sash frame shall be pre-fabricated & welded through fusion welding & assembled in factory.</p> <p>The sash should be capable of mounting single [4/5mm thick]/double glazing [24mm thick].</p> <p>The window sash shall be fitted with 5 mm thick clear float glass of reputed make [Saint Gobain/Ashahi/Modi] duly fixed with ethylene propylene di-monomer [EPDM] weathering seal resistant to tear & decay & exposure to ozone, ultra-violet radiation & tropical climates.</p> <p>Accessories like friction stay hinges of stainless steel grade 304 shall be provided-2 nos. per sash, handle with mazak alloy casting-1 no. per sash, multipoint locking system suitably concealed-1 no. per sash, provided with raiser wedges and cavity block for smooth operation.</p> <p>The window is to be installed at the site using anchor fasteners, packers and silicon rubber sealant of approved make around the outer frame from inside and outside to absorb and buffer expansion of wall.</p> <p>The construction of casement window system shall have a suitable water drainage facility and shall be easy to glaze/deglaze at site etc., including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site with templates for casement sizing complete for finished item of work.</p>	102.60				

Sino	Description of Item of work	Quantity	Unit	Rate in Figure	Words	Amount
49	<p>Supply & fixing of Unplasticised Poly Vinyl Chloride [uPVC] casement windows [FIXED] duly manufactured using approved brand uPVC profiles of 58x57x3mm for outer frames, 58x68x2.5mm for casement shutter [sash] frames and the mullion sections are of 58x74x2.5mm</p> <p>The profiles shall be extruded with properties of impact resistance, UV stability, corrosion resistance, colour fastness, chemical resistance, low thermal expansion, fire retarding, aging resistant, and sea water resistant.</p> <p>The outer frame and the sash frame should be structurally reinforced with hop dip galvanized steel with a resistance of up to 50 microns, 1.5mm thick 'BOX' type for outer frame & 1.5 mm thick 'C' type for sash frame & should be suitably passivated for corrosion resistance for tropical deployment & should not be exposed to any drainage routing.</p> <p>The outer frame and the sash frame shall be pre-fabricated & welded through fusion welding & assembled in factory.</p> <p>The sash should be capable of mounting single [4/5mm thick]/double glazing [24mm thick].</p> <p>The window sash shall be fitted with 5 mm thick clear float glass of reputed make [Saint Gobain/Ashahi/Modi] duly fixed with ethylene propylene di-monomer</p> <p>[EPDM] weathering seal resistant to tear & decay & exposure to ozone, ultra-voilet radiation & tropical climates.</p> <p>The window is to be installed at the site using anchor fasteners, packers and silicon rubber sealant of approved make around the outer frame from inside and outside to absorb and buffer expansion of wall.</p> <p>The construction of casement window system shall have a suitable water drainage facility and shall be easy to glaze/deglaze at site etc., including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site with templates for casement sizing complete for finished item of work.</p>	33.75				
50	<p>Supply & fixing of Unplasticised Poly Vinyl Chloride [uPVC] ventilators [Fixed Louvers] duly manufactured using approved brand uPVC profiles of 58x36x2.5mm for outer frames.</p>	6.48				

Sino	Description of Item of work	Quantity	Unit	Rate in Figure	Words	Amount
	<p>The profiles shall be extruded with properties of impact resistance, UV stability, corrosion resistance, colour fastness, chemical resistance, low thermal expansion, fire retarding, aging resistant, and sea water resistant.</p> <p>The outer frame and the sash frame should be structurally reinforced with hop dip galvanized steel with a resistance of up to 50 microns, 1.5mm thick 'BOX' type for outer frame & should be suitably passivated for corrosion resistance for tropical deployment & should not be exposed to any drainage routing.</p> <p>The outer frame shall be pre-fabricated & welded through fusion welding & assembled in factory.</p> <p>The glass will be 4 mm pin-head louver blades.</p> <p>The window is to be installed at the site using anchor fasteners, packers and silicon rubber sealant of approved make around the outer frame from inside and outside to absorb and buffer expansion of wall.</p> <p>The construction of casement window system shall have a suitable water drainage facility and shall be easy to glaze/deglaze at site etc., including cost and conveyance of all materials, accessories, labour charges for transportation, erection at site with templates for casement sizing complete for finished item of work.</p>					
51	Providing and fixing M.S. Grills of approved design with powder coating of approved shade including cost of all materials, Transportation and fixing etc., complete (692)	137.43	Sq.m			
52	Providing and fabricating and installing the façade structural glazing for the flat, curved, and sloping surfaces with approved colour, polyester powder coated heavy duty aluminium extrusions of Jindal sections 64x57x2mm [with a flange of 15 mm]. This box section has to be used for both the mullion and the transom of the structural glazing system. Fixing of 6mm thick reflective glass of approved shade and make to frame with ultra glaze SSG 4000 of GE silicons or equivalent sealant including the providing polyethylene cross link foam spacer. The grooves between the glass panels are to be filled with weather sealant of silpruf black RTV	143.52	Sq.m			

Sino	Description of Item of work	Quantity	Unit	Rate in Figure	Words	Amount
	silicon of GE silicons or equivalent make to make it air tight water tight and dust free including cost of scaffolding, materials, labour etc. complete.					
53	Providing & fixing 18mm to 20mm thick polished granite stone slabs (Icon brown/Vizag blue) on a Cement mortar bed of 40mm thick 1:6 (1 Cement: 6 Coarse sand) and applying Cement slurry of 6.4 Kg/Sq.m laid in design pattern as specified and jointed with matching tiles mate of approved brand and shade including smoothening of edges etc., complete. Cement will be free supply. (687)	180.52	Sq.m			
54	Providing and fixing 18 to 20mm thick polished granite stone slabs [Steel Grey) on a cement mortar 1:6 [1 cement : 6 coarse sand] of 40 mm thick and applying cement slurry 64 kg/sqm laid on staircase steps & risers as specified & jointed with matching tile made of appd. brand and shade. Three sides of tread tile has to be fully moulded and polished. Two anti skid lines are to be created at the end of steps. Cement will be free supply.	67.12	Sq.m			
55	Providing and laying 10mm thick Antiskid Vitrified Ceramic tiles flooring laid over 40mm thick cement mortar 1:6 (1 cement : 6 Coarse sand) and applying a cement slurry of 6.4kg/Sq.m fixing the tiles to the base mortar. All the joints are to be grouted with matching colour grout of approved make. Flooring has to be maintained zero level . The final finished tile surface has to be cleaned with approved cleaning agents at the material such as colour grout, sand, chips, labour, transportation & lifting of tiles has to be procured by contractor) cement will be free Issue (735)	180.37	Sq.m			
56	Providing and laying 8mm thick Vitrified ceramic tile flooring laid over 40mm thick cement mortar 1:6 (1 Cement:6 Coarse sand)and applying a cement slurry of 6.4kg/Sq.m for fixing the tiles.All the joints are to be grouted with matching colour grout of approved make. Flooring has to be maintained zero level .	506.94	Sq.m			

Sino	Description of Item of work	Quantity	Unit	Rate in Figure	Words	Amount
	The final finished tile surface has to be cleaned with approved cleaning agents (Cement will be supplied by department at free of cost) all other material such as colour grout, sand, chips, are to be procured by contractor rate should include labour, transportation and lifting of all materials, tiles etc Complete. (736)					
57	Providing and fixing 8 mm thick 12"x24" of size ceramic tile with anti-stain property [Johnson or equivalent make] on wall face on cement plaster of 12mm thick cement mortar 1:3 [1 cement : 3 fine sand] tiles are to be fixed with grey cement slurry over cement plaster and jointed with matching tile grout of approved brand and colour. Cleaning the finished surface with acid wash etc. complete. Cement will be issued free of cost.	233.14	Sq.m			
58	100mm thick cement concrete flooring 1:2:4 [1 cement: 2 coarse sand : 4 graded stone aggregate 20mm nominal size] finished with a floating coat of neat cement including cement slurry, rounding of edges and strips but excluding the cost of nozing etc., complete. Cement will be free supply [700]	164.00	Sq.m			
59	Providing and laying vacuum de-watered flooring to required level, surface vibration and vacuum de-watering using suction mats attached to vacuum pumps. The floor has to be finished by mechanical floating and trowelling operation to required level, cutting of grooves at intervals as required with mechanised diamond wheel to create stress release joint including cost of machinery, transportation, labour etc. complete. [702]	144.00	Sq.m			
60	Providing cement concrete flooring mix. 1:2:4 (1 cement: 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement including slurry, rounding of edges and strips etc, complete of 40mm thick flooring. Cement will be FREE supply.(146)	184.00	Sq.m			

Sino	Description of Item of work	Quantity	Unit	Rate in Figure	Words	Amount
61	Providing & fixing 18mm to 20mm thick polished & Flamed to antique finish granite stone slabs (steel grey / Icon brown/ Vizag blue) on a Cement mortar bed of 40mm thick 1:6 (1 Cement: 6 Coarse sand) and applying Cement slurry of 6.4 Kg/Sq.m laid in design pattern as specified and jointed with matching tiles mate of approved brand and shade including smoothening of edges etc., complete. Cement will be free supply. (687)	99.00				
62	Supply and application of 2mm thick self levelled Epoxy flooring of approved colour over Cementitious substrates.Surface has to be dry it should be free from grease ,oil or any other contamination it has to be cleaned by wire brushing or mechanical means .One coat of primer has to be applied by brush or roller on prepared surface throughly in a thin continious film before applying epoxy Flooring (686)	122.00	Sq.m			
63	Providing and laying 10mm thick parking Antiskid Vitrified ceramic tile (Jhonsons endura or equivalent) flooring laid over 40mm thick cement mortar 1:6 (1 Cement:6 Coarse sand)and applying a cement slurry of 6.4kg/Sq.m for fixing the tiles.All the joints are to be grouted with matching colour grout of approved make. The final finished tile surface has to be cleaned with approved cleaning agents (Cement will be supplied by department at free of cost) etc Complete. (736)	52.00	Sq.m			
64	Providing and fixing Grey/Red colour Weather stone interlock concrete pavers in block thickness of 60mm inclusive of sub-base compaction ,Supply and preparation of 100mm of sand filling bedding placing of pavers trimming of edges , treatment of joints with fine sand ,final compaction and sweeping clean etc including cost of all material (159)	165.00	Sq.m			
65	18mm thick cement plaster in two coats under layer 12mm thick cement plaster 1:5(1 Cement :5 Coarse sand) and a top layer 6mm thick cement plaster 1:3 (Cement : 3 Fine sand) of sponge finish in all floors. (Cement will be Free supply) (167)	4566.5	Sq.m			

Sino	Description of Item of work	Quantity	Unit	Figure	Rate in Words	Amount
66	Providing and applying Two coats of BIRLA LAPPUM over plaster surface to make the surface even and smooth and sand papering Two times to get even & smooth surface including curing etc. complete. (689)	1600.3	Sq.m			
67	Providing 20 mm thick Impervious plaster with Cement mortar 1:3 (1 cement : 3 Fine sand) finished with a floating coating of neat cement finish including mixing of Approved make liquid integral water proofing liquid This has to be added 200 ml for bag of cement or as per the manufacturers instructions. applying a coat of "CERA LATEX SBR"(of CERA-CHEM) sterene butadiene rubber or equivalent make of approved brand with water 1:1 and added with plain cement 2 Parts & brush applied on the concrete surface before impervious plaster. All the corners of slab Columns & parapet are to be rounded in all floors (Cement will be FREE supply).(656)	904.85	Sq.m			
68	Providing and laying Water proofing treatment to vertical and horizontal surface of depressed portion of WC kitchen and the like consisting of i) 1st course of applying cement slurry @ 4.4 kg/sq.m mixed with water proofing compound conforming to IS 2645 in recommended proportions including rounding off junction of vertical and horizontal surface. ii) 2nd course of 20mm cement plaster 1:3 (1 Cement : 3 coarse sand) mixed with water proofing compound in recommended proportion including rounding off junction of vertical and horizontal surface. iii) 3rd course of applying blown or residual bitumen applied hot at 1.7 kg per sq.m area. iv) 4th course of 400micron thick PVC sheet .(Overlaps at joints of pvc sheet should be 100mm wide and plastered to each other with bitumen @ 1.7 kg/Sq.m)	37.62	Sq.m			
69	18 mm thick sunk/raised mortar bands in cement mortar 1:4(1 cement:4 fine sand).Cement will be FREE supply.	241.84	Rm			
70	Providing and Fixing of decorative cornice in cement concrete all as per drawing.	96.92	Rm			

Sino	Description of Item of work	Quantity	Unit	Figure	Rate in Words	Amount
71	Applying and painting with plastic emulsion paint of approved brand & shade to give an even shade on new work two or more coats over a coat of cement primer of approved brand.(185)	2338.5	Sq.m			
72	Applying Two or more coats of delux Multisurface paint system "Uni gloss" of Snow cem india or equivalent make paint for Interiors & Exteriors over and including one coat of Primer (Snowcem plus or Equivalent) all as per manufacturers specifications including cost of all materials, labour scaffolding etc complete(193)	1899.6	Sq.m			
73	Providing and applying Cement based Textured Exterior wall finish of approved design & make to the exterior surface of the building all as per the manufactures instructions over final coat of plastering including applying approved colour/ Chemical coating. Cost will including all materials scaffolding scrapping or cleaning, finishing etc., complete. (690)	322.20	Sq.m			
74	Providing and Fixing Stainless steel railing all as per drawing including grouting the Railing etc complete.	54.72	Sq.m			
75	Reinforced cement concrete 1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggragate 20mm nominal size) excluding cost of centring and shuttering and reinforcement in columns in all floor. Cement will be FREE supply.(41)	2.97	Cu.m			
76	Applying & finishing with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade,two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture.	134.76	Sq.m			
77	Providing and fixing in position 25mm thick bitumenious impregnated fibreboard including cost of all materials ,labour etc., Complete.(707)	16.50	Sq.m			
78	Providing and fixing M.S insert plates in coloumns ,beams ,slabs along with Anchor rods welded to insert plates ,placed in the position wherever required as per Engineer incharge directions including cost of all materials, labour etc., complete.	952.00	Kg			

Sino	Description of Item of work	Quantity	Unit	Figure	Rate in Words	Amount
79	Providing and fixing M.S round holding down bolts with nuts and washer plates complete.	200.00	Kg			
80	Providing and Fixing trench covers of 35mm thick MDF board conforming to IS 12406 in between MS angles including fixing & applying one coat of primer and two or more coats of synthetic enamel paint on both sides of trench cover of approved make and shade.(586)	18.00	Sq.m			
81	Providing and fixing Mortise lock of approved make & designed (710)	25.00	Each			
82	Dry stone pitching 22.5 cm thick including supply of stone and preparing the surface etc complete.	386.50	Sq.m			
83	Providing and fixing Steel work in builtup sections including cutting ,hoisting fixing in position and applying a priming coat of approved steel primer ,welded and bolted including special shaped washers etc complete. all per the Engineer incharge directions including cost of all materials,labour etc ., complete. Electric resistance or induction butt welded tubes.	1051	Kg			

INTERIOR WORKS

Sno	Description of Item of work	Quantity	Unit	Rate in Figure	Words	Amount
1	<p>Providing and fixing 89mm thick pre-laminated double skin partitions full height using 40mmx64 mm medium teak wood frame work with horizontals and verticals placed at 600mm center to center & cladding panels of 12mm thick one sided pre-laminated exterior grade of approved colour and make on both sides of the frame work by using cleats. 3 mm gap has to be provided for expansions at the joining of the cladding panels. 100mm x25mm thick teakwood beading with polish of matching shade has to be used as skirting at bottom of the partitions. Teak wood beading has to be polished either with matching shade of partition laminates or natural colour teak wood polish (Some partitions are stopping at ceiling height but vertical members should go up to beam / room bottom. Measurement will be made up to false ceiling only where partitions are stopping at false ceiling). Prelaminated exterior grade board should confirm to IS:12823.(745)</p>	186.61	Sq.m			
2	<p>Providing and fixing 89mm thick pre-laminated double skin Half Height partitions using 40mm x 65mm medium teakwood frame work with horizontals and verticals placed at 600mm center to center & cladding panels of 12 mm th. one sided pre-laminated exterior grade board of approved color & make [IS 12823] on both sides of the frame work by using cleats. 3mm gap has to be provided for expansion at joining of the cladding panels.100mmx23mm th teakwood beading with polish of matching shade has to be used as skirting at bottom of partitions.Teakwood beading has to be polished either with matching shade of partition laminates or natural colour teakwood polish.The exposed edges on top and sides or wherever visible should be covered with 100x12mm teakwood lip-ping duly polished to natural colour Clear glass of 8 mm th.upto a height of 400mm with a curve on top as per the design should be fixed above the partition using decorative molding. Glass edges should be sanded and polished to smooth & simple itching design all as per the drawing.(746)</p>	19.80	Sq.m			

Sno	Description of Item of work	Quantity	Unit	Figure	Rate in Words	Amount
3	<p>150 mm thick Gypsteel © Acoustud partition which includes two layers of tapered edge 15mm thick Gyproc® Fire line (confirming to IS 2095 1996 Part 1) & outer layer of 13 mm Gyproc duraline (confirming BS1230 Type-5) is screw fixed with drywall screws of 25mm & 35mm respectively at 300 mm centres to either side of 92mm Gypsteel© Acoustuds (0.55mm thick having one flange of 34mm and another flange of 36mm made of GI steel) placed at 600mm centre to centre in 148mm Gypsteel© floor & ceiling channel (0.55mm thick have equal flanges of 32mm made of GI steel) with joints staggered to avoid leakage through joints. A fixing channel of 99mm width (0.9mm thick having 2 flanges of 9.5mm each) has to be provided at the horizontal joints of the two boards finally square and tapered edges of the boards are to be jointed and finished so as to have a flush look includes filling and finishing with jointing compound, joint paper tape and 2 coats of drywall top coat. (as per the instructions of the engineer)</p>	153.60	Sq.m			
4	<p>Providing & fixing 47 mm thick pre- laminated sheet wall paneling useing 35 x 50 mm thick Exterior grade plain particle board for horizontals & verticals placed at 600mm C/C and leveling to plumb with a gap of min 35mm or running for electrical pipes etc complete. Cladding panels of 12 mm thick one side Pre- laminated Exterior grade board of approved make & shade (IS:12623) has to be fixed to the frame work using cleats. 3 mm gap has to be provided for expansion at the joining of the cladding of panels. Provided 100 mm x 25 mm Teak wood skirting at bottom of the wall paneling. Teak wood beading has to be polished either with matching shade of wall paneling or natural colour teak wood polish.(715)</p>	269.01	Sq.m			
5	<p>Providing and fixing cup-board shutters made out of 18mm th.water proof plywood pasted with 1 mm th.laminate on both sides of the shutter with approved shade & make. Around the opening has to be fixed with 75x37mm th.medium class TW frame polished with wax polish with 3 or more coats of approved shade. Shutters are to be fixed with hinges, handles, tower bolts, ball catchers, concealed locks etc. complete all as per directions of engineer-in-charge.[731]</p>	29.25	Sq.m			

Sno	Description of Item of work	Quantity	Unit	Figure	Rate in Words	Amount
6	<p>Providing and fixing in true horizontal level false ceiling grid of prelude XL system of M/s Armstrong OR equivalent make using Hot dipped galvanized steel section, exposed surface chemically leached capping prefinished in baked polyester paint, Main Tee of size 24 x32 x 3000mm at every 600mm C/C, CROSS Tee of size 24 x 25 x 600mm at every 600mm x 600mm and suspending the grid using 2mm GI wire and 6mm nylon rawal plug at every 1200mm intervals at the main tee and laying MINERAL FIBER ACOUSTIC CEILING BOARDS (fine fissured) of M/s Armstrong or Equivalent make having a fire rating of 60 minutes as per BS 476/23 of 1987, Noise reduction Co-efficient (NRC) of 0.50 to 0.55, sound attenuation of 34 dB, thermal conductivity of K=0.052 w/m, Weight of 3.5kg/Sq.m and Humidity Resistance of RH-95 of size 600mmx600x15mm over the formed grid.(744)</p>	637.03	Sq.m			
7	<p>Providing & fixing India gypsum suspended ceiling which includes G.I. perimeter channels of size 55 mm th. having one flange of 20mm & another flange of 30mm & a web of 27mm along with perimeter of ceiling screw fixed to brick wall/partition with the help of nylon sleeves & screws at 610mm centers. Then suspending GI intermediate channels of size 45mm 0.9mm th. with two flanges of 15mm each from the soffit at 1220mm centers with ceiling angle of width 25mmx10mmx0.55mm thick fixed to soffit with GI cleat and Steel expansion fasteners. Ceiling erection of 0.5mm thickness having knurled web of 51.5mm & two flanges of 26mm each with lips of 10.5mm are then fixed to the intermediate channel with the help of connecting clip & in direction perpendicular to the intermediate channel at 457mm centres. 12.5mm tapered edge Gypboard (conforming to IS 2095-1982 & 2542-1981) is then screw fixed to ceiling section with 25 mm drywall screws at 230 mm centers. Screw fixing is done mechanically either with screw driver or drilling machine with suitable attachment. For fixing light fittings AC grill diffusers and cut-outs etc</p>	282.25	Sq.m			

Sno	Description of Item of work	Quantity	Unit	Figure	Rate in Words	Amount
	has to be made with the frame of perimeter channel of size 20mmx27mmx 30mmx55mm thick supported suitable from the ceiling. Ceiling design has to be made according to drawing where ever required. Finally applying two or more coats of plastic emulsion paint of approved brand and shade.					
8	Providing & fixing India gypsum suspended false ceiling which includes pre-coated GI angle of size 24x24x0.9mm thick fixed to the brick wall/partition at the perimeter of ceiling with nylon sleeves and screws at 610mm centres. Then suspending main GI T section [bottom pre-coated] size 24x38x0.7mm and 360mm long from soffit in one direction with the help of metal rawl plug, soffit cleat and GI rod 4mm dia with galvanized spring steel level click 1220mm centers GI cross T section [bottom pre-coated] size 24x38x0.7mm and 600mm long is insert fixed into the slots provided in the main T at 600mm centers to form 600x600mm grid. Providing and laying 12.5mm thick gypboard tiles with metalised polyester film backing tiles of size of 595x595mm can be laid on to grid. PVC universal holding clips are to be placed on sealing panel in each direction. i.e, 4 clips for panel. Frame for light fitting have to be made with cross T section cut and bend fixed with steel screws to the main T section to form suitable size of the light openings.	42.70	Sq.m			
9	Providing & fixing underdeck insulation below roof slabin the form of 50mm thick Tquality expanded polystyrene sheet having density of 16kg/cum with non flammable fold sticking compound/blown bitumen grade 85/25. The EPS sheet shall be tied with lacing wire and GI washers made 24 G GI sheet to 10mm dia and 25mm long rawl plugs/screws fixed to the roof before sticking to the EPS sheets and secure tightly to the under side of roof.	519.39	Sq.m			
10	Supply & fixing of 43 mm th. Hollow core flush door with all round Teak wood frame of size 4"x1" middle & bottom frame of 6"x1"and fixing both side 9mm thick prelaminated exterior board all as per the design of the door and teak wood design beading including polishing all the exposed teak wood surfaces with wax polishing Door has to be fixed with necessary furniture fittings such as Mortice lock of approved make or	33.11	Sq.m			

Sno	Description of Item of work	Quantity	Unit	Figure	Rate in Words	Amount
	Aldrop of approved design, tower bolts, Handles, Door stoppers, etc., complete. Necessary opening in the upper part of the door has to be made with glass and beading prelaminate exterior grade board should be confirm to IS 12823. (750)					
11	Supply, fabrication & fixing of 4 mm thick aluminium composite panel cladding of approved colour and finish fixed to the back-up frame work comprising of 38x25mm aluminium angles fixed to the column wall using anchor boards. All panels are to be fabricated in trays before fixing. 12mm spacing should be there between composite panels to be filled with a baker rod and sealed with weather proof silicon sealant [Dow Corning 789 or equivalent] Aluminium composite panel cladding panels will be in one colour or different approved colour combination. The cost should include supply, fabrication & erection of material alongwith necessary scaffolding safety arrangements sealing the gaps between masonry and cladding.	180.63	Sq.m			
12	Providing and fixing of Glass mosaic mural with name of the building of approved shade and brand including all materials, labour etc., complete.	40.50	Sq.m			
13	Providing & fixing 50 mm thick 48 kg density glass fiber wool in the hollow portion of the partition for sound proofing of partitions.(747)	664.08	Sq.m			
14	Providing wood work in frames of doors, windows & clerestory windows and other frames,wrought framed and fixed in position in second class indian teak wood.(71)	0.99	Cum			
15	Applying and painting with plastic emulsion paint of approved brand & shade to give an even shade on gyp board ceiling ,wall panelling ,& partitions work two or more coats over a coat of cement primer of approved brand.(185)	324.95	Sq.m			
16	Polishing with french spirit polish of approved brand and manufacture of required shade two or more coats on new work including a coat of wood filler.(189)	58.32	Sq.m			

Sno	Description of Item of work	Quantity	Unit	Figure	Rate in Words	Amount
17	Providing and fixing of 5.5mm thick clear glass with wood/Aluminum beading including fixing beading including cost of all materials labour	31.00	Sq.m			
18	Providing and applying plain stained/itching on glass with partly acid wash design in the partitions, design will be as per the drawing. The glass has to be fixed with tapered Teak wood beading of approved design including polishing with matching shade of partion etc., complete (739)	31.00	Sq.m			
19	Providing and fixing wall paneling using 35x50mm thick exterior grade plain particle board for horizontals and verticals placed at 600mm c/c & leveling to plumb with a gap of minimum 35mm for running from electrical pipes etc., complete. Cladding has to be made with 12mm th exterior grade water proof plywood of approved make. Plywood has to be pasted with 2 mm thick laminate of matallic shade of approved brand as per the design shown in the drg. Teakwood skirting of 100 mm x 25 mm has to be fixed to bottom of panels with natural colour polish of approved shade. [732]	120.62	Sq.m			
20	Supply and Spreading of POP(Plaster of paris)material on the Vitrified and granite flooring for protection of the flooring.It has to be done in two layers.After applying First Layer thin plastic sheet has to be laid and apply the second layer.After completing the all interior works entire POP has to be removed .Floor has to be cleaned with approved detergents .	876.7	Sq.m			
21	Providing & fixing hydraulic door closer of approved make with two speed adjustment 90 deg.hold open feature. It should hold a maximum door weight of 80 kg etc. complete.	20.00	Each			
22	Supplying and fixing synthetic washable wall paper of approved make and design including fixing with necessary adhesives etc. complete.	24.00	Sq.m			

Sno	Description of Item of work	Quantity	Unit	Figure	Rate in Words	Amount
23	Providing and applying polymer based Texture for interior wall finish of approved design & make to the interior surface of the building all as per the manufactures instructions over final coat of plastering, including applying approved colour/ Chemical coating. Cost will including all materials scaffolding scraping or cleaning, finishing etc., complete. (690)	24.00	Sq.m			
24	Providing & fixing Gypsteel pre coated [exposed portion only] GIT grid system in 600x600mm module which includes providing & fixing wall angle along the perimeter of the room with the help of nylon sleeves and wooden screws at 300mm centres. Then suspending the main tee of size from soffit with the help of soffit cleat, rawl plugs & wire rod with levelling spring clip at 1200mm c/c. 1200mm cross tee is then interlocked into the pre-cut slots in the main Tees at 600mm centres in direction perpenditular to the main Tee to make a grid at 600x1200mm. Finally 600mm cross tees are then interlocked into the pre cut slots in the 1200mm tees at 1200 mm centres and in direction parallel to the main tee. Cross tees having length more than 600 mm are to be supported independently. 18mm thick Saint Gobain Gyproc India certain teed fine fissured high NRC square/Reveal/Edge mineral fibre tiles of size 595x595mm shall be placed into the grid size of 600x600mm	144	Sq.m			
25	Providing and fixing of 12mm thick clear glass with coloured itching on glass with partly acid wash design on the glass, design will be as per the drawing. The glass has to be fixed with tapered Teak wood beading of approved design including polishing with matching shade of partion etc., complete (739)	12.6	Sq.m			
26	Supply ,fabrication ,errection of 10mm thk Multiwall Polycarbonate sheet of reflective type approved shade GE LEXAN make . Polycarbonate sheet has to be fixed to the structure with Aluminium brackets and EPDM Gasket with necessary anchoring etc complete. Profile of sky light structure should be as per the drawing. Rate should include all Accessories, guy ropes, taxes, Transportation & necessary scaffolding etc complete.	144	Sq.m			

SANITARY AND WATER SUPPLY

Sno	Description of Item of work	Quantity	Unit	Figure	Rate in Words	Amount
1	Providing & fixing WATER CLOSET SQUATTING PAN (INDIAN TYPE W.C PAN) with 100mm SCI P or S trap, 10 litre low level white PVC flushing cistern with manually controlled device (handle lever) conforming to IS 7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required and of type: White Vitreous Orissa pattern W.C pan of size 580 x 440 mm	4	Each			
2	Providing and fixing WHITE VITREOUS CHINA WATER CLOSET PEDESTAL TYPE (EUROPEAN TYPE W.C PAN) with seat and lid, 10 litre low level white P.V.C. flushing cistern with manually controlled device (handle lever) conforming to IS-7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required, with:W.C pan with ISI marked white solid plastic seat and lid.	3	Each			
3	Providing & fixing WASH BASIN with C.I brackets, 15mm C.P brass pillar taps, 32mm C.P brass waste of standard pattern including painting of fittings and brackets, cutting and making good the walls, wherever required, of type: White Vitreous China wash basin size 630x 450 mm with a PAIR of 15 mm C.P brass pillar taps.	7	Each			
4	Providing and fixing STAINLESS STEEL AISI 304 (18/8) KITCHEN SINK as per IS:13983 with C.I brackets and stainless steel plug 40mm including painting of fittings and brackets, cutting and making go the walls wherever required, of type:Kitchen sink WITHOUT drain board size 610 x 510 mm & bowl depth 200 mm	1	Each			
5	Providing and fixing WHITE VITREOUS CHINA FLAT BACK OR WALL CORNER TYPE LIPPED FRONT URINAL BASIN of 580 x 360 x 350 mm with white PVC automatic flushing cistern with fittings CP brass standard flush pipe and C.P. brass spreaders with brass unions & G.I. clamps with waste fittings as per IS 2556, C.I. trap with outlet grating and other couplings in CP brass including painting of fittings and brackets, cutting and making good the walls and floors wherever required, with: Range of three urinal basins with 10 litre white PVC automatic flushing cistern Parryware/ Hindware/ Seabird/ Orient (Coral)	2	Each			

Sno	Description of Item of work	Quantity	Unit	Figure	Rate in Words	Amount
6	Providing and fixing 600x450mm beveled edge mirror of superior glass (of approved quality) complete with 6mm thick hard board ground fixed to wooden cleats with CP brass screws and washers etc. complete.	8	Each			
7	Providing and fixing CP brass Towel rail 600x20mm size complete with brackets fixed to the wooden cleats with CP brass screws.	8	Each			
8	Providing & fixing SOIL, WASTE & VENT PIPE, of: 100 mm dia. sand cast iron S&S .	40	Rm			
9	Providing & fixing SOIL, WASTE & VENT PIPE, of:75 mm dia. sand cast iron S&S .	55	Rm			
10	Providing and fixing TRAP of self cleansing design with screwed down or hinged grating with or without vent arm etc. complete, including cost of cutting and making good the walls and floors etc. with:100 mm inlet and 100 mm outlet with SCI S&S	12	Each			
11	Providing and fixing 18 mm thick granite slab of gang saw mirror polishing premoulded and prepolished machine cut for urinal partition of required size of approved shade, colour layed over 20mm thick base cement mortar 1:4 [1 cement: 4 coarse sand] with joints treatd with maching colour pigment epoxy touchups, including rubbing, curing, moulding and polishing to wedge to give high glass finish etc complete at all levels	3	Sq.m			
12	Providing and fixing three layer PP-R [poly propylene random co-polymer] pipes SDR 7.4 UV stabliized and anti-micro bio fusion welded having thermal stability for hard and cold water supply including all PP-R plane and brass threaded poly propylene random fittings including fixing the pipe with clamps at 1 m spacing. This includes the cost of cutting, chases and making good the same including testing of joints complete, as per direction of Engineer in Charge. For PN-16 pipe 16 mm OD.	90	Rm			

Sno	Description of Item of work	Quantity	Unit	Figure	Rate in Words	Amount
13	Providing and fixing three layer PP-R [poly propylene random co-polymer] pipes SDR 7.4 UV stabliized and anti-micro bio fusion welded having thermal stability for hard and cold water supply including all PP-R plane and brass threaded poly propylene random fittings including fixing the pipe with clamps at 1 m spacing. This includes the cost of cutting, chases and making good the same including testing of joints complete, as per direction of Engineer in Charge. For PN-16 pipe 20 mm OD.	60	Rm			
14	Providing and fixing three layer PP-R [poly propylene random co-polymer] pipes SDR 7.4 UV stabliized and anti-micro bio fusion welded having thermal stability for hard and cold water supply including all PP-R plane and brass threaded poly propylene random fittings including fixing the pipe with clamps at 1 m spacing. This includes the cost of cutting, chases and making good the same including testing of joints complete, as per direction of Engineer in Charge. For PN-16 pipe 25 mm OD.	70	Rm			
15	Providing and fixing three layer PP-R [poly propylene random co-polymer] pipes SDR 7.4 UV stabliized and anti-micro bio fusion welded having thermal stability for hard and cold water supply including all PP-R plane and brass threaded poly propylene random fittings including trenching, refilling, and testing of joints etc complete as per direction of Engineer in Charge. for PN-16 pipe 50 mm OD.	80	Rm			
16	Providing & fixing CP BRASS STOP COCK of standard design and of approved make conforming to IS 8931 for nominal bore of: 15mm	10	Each			
17	Providing and fixing CP BRASS BIB COCK of approved quality and nominal bore of: 15mm	8	Each			
18	Providing & fixing GUN METAL GATE VALVE with CI wheel of approved quality (screwed end) and nominal bore of: -50mm	4	Each			
19	Providing & fixing GUN METAL GATE VALVE with CI wheel of approved quality (screwed end) and nominal bore of: -25mm	4	Each			
20	Providing, laying & jointing GLAZED STONEWARE PIPES of GRADE "A" with stiff mixture of cement mortar in the proportion of 1:1 (1 cement: 1 fine sand) including testing of joints etc. complete, of 100 mm dia.	50	Rm			

Sno	Description of Item of work	Quantity	Unit	Figure	Rate in Words	Amount
21	Providing, laying & jointing GLAZED STONEWARE PIPES of GRADE "A" with stiff mixture of cement mortar in the proportion of 1:1 (1 cement: 1 fine sand) including testing of joints etc. complete, of 150 mm dia.	100	Rm			
22	Providing and fixing squar mouth S.W. gully trap grade 'A' complete with C.I. grating brick masonry chamber with bricks and water tight C.I. cover with fram of 300 X 300mm size (inside) the weight of cover to be not less than 4.5 kg. And fram to be not less than 2.7kg. as per standard design; 125 X 100mm size with 'P' type trap.(345)	4	Each			
23	Constructing brick masonry manhole with locally available best quality of bricks in cement mortar 1:5 (1 cement : 5 fine sand) R.C.C. top slab with1:2:4 (1 cement :2coarse sand :4 graded stone aggregate 20 mm nominal size) , foundation concrete 1:4:8 (1 Cement :4 coarse sand : 8 graded stone aggregate 40 mm nominal size) inside plastering with 12 mm thick with cement mortar 1 :3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement and making channels in 1 :2:4 cement concrete (1 cement :2coarse sand :4 graded stone aggregate 20 mm nominal size) neatly finished complete as per standard type design. Inside size 90 X 80 cm & 45 cm deep including C.I. cover with frame 455 X 610 mm internal dimensions total weight of cover & frame to be not less than 38 Kg (Cover 23 Kg & frame 15 Kg) Cement will be free supply.(353)	3	Each			
24	Constructing brick masonry man - hole with locally available best bricks in cement mortar 1:5(1 cement : 5 fine sand) R.C.C. top slab with1:2:4 (1 cement :2coarse sand :4 graded stone aggregate 20 mm nominal size) , foundation concrete PCC 1:4:8 (1 Cement :4 coarse sand : 8 graded stone aggregate 40 mm nominal size) inside plastering with 12 mm thick with cement mortar 1 :3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement & making channels in 1 :2:4 cement concrete (1 cement :2coarse sand :4 graded stone aggregate 20 mm nominal size) neatly finished complete as per standard type design. Inside size 90 X 80 cm & 60 cm deep including C.I. cover with frame 455 X 610 mm internal dimensions total weight of cover and frame to be not less than 38 Kg (Cover 23 Kg & weight of frame 15 Kg) Cement will be free supply.(355)	3	Each			

Sno	Description of Item of work	Quantity	Unit	Figure	Rate in Words	Amount
25	Constructing BRICK MASONRY MANHOLE WITH SPECIFIED BICKS IN CEMENT MORTAR 1:4 (1 cement:4 coarse sand) RCC top slab with 1:2:4 mix(1ceemnt: 2coarse sand :4 graded stone aggregate 20mm nominal size),foundation concrete 1:4:8 mix(1cement: 4coarse sand: 8graded stone aggregate 40 mm nominal size) inside plastering 12 mm thick with cement mortar 1:3 (1 cement: 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1cement:2coarse sand :4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design etc. with & of:Inside size 120x 90 cm. and 90 cm. deep including CI cover with frame (Heavy duty) 560 mm internal diameter, total weight of cover and frame to be not less than 208 kg (weight of cover 108 kg and weight of frame 100 kg) etc. with locally available best bricks	2	Each			
26	Providing and fixing on wall face UNPLASTICISED RIGID PVC RAIN WATER PIPES conforming to IS:13592 Type-A including jointing with seal ring conforming to IS:15382 leaving 10mm gap for thermal expansion Single Socketed pipes etc. for 110mm dia	120	Rm			
27	Providing and laying 110 mm Dia. UV resistant SWR grade PVC pipe (sudhakar/ prince/ supreme) in all height including the cost of fitting, solution for fixing PVC pipe and MS clamps etc . complete.(644)	30	Rm			
28	Providing and laying 75mm Dia. UV resistant SWR grade PVC pipe (sudhakar/ prince/ supreme) in All height including the cost of fitting, solution for fixing PVC pipe and MS clamps etc . complete.(645)	30	Rm			
29	Providing and laying 110 mm Dia. UV resistant SWR grade PVC pipe (sudhakar/ prince/ supreme) in all height including the cost of fitting, solution for fixing PVC door bend etc. complete.(646)	10	Each			
30	Providing and laying 75 mm Dia. UV resistant SWR grade PVC pipe (sudhakar/ prince/ supreme) in all height including the cost of fitting, solution for fixing PVC door bend etc. complete.(646)	10	Each			
31	Providing and laying 110 mm Dia. UV resistant SWR grade PVC pipe (sudhakar/ prince/ supreme) in all height including the cost of fitting, solution for fixing PVC plain bend etc. complete.(646)	20	Each			

Sno	Description of Item of work	Quantity	Unit	Figure	Rate in Words	Amount
32	Providing and laying 75 mm Dia. UV resistant SWR grade PVC pipe (sudhakar/ prince/ supreme) in all height including the cost of fitting, solution for fixing PVC plain bend etc. complete.(646)	10	Each			
33	Supply and erection of P.V.C. water tank of approved make over roof slab in all heights including transportation and handling etc, complete.(363)	6000	Ltr			
Total						

Contractor

Accepting Officer

i. SCHEDULE – 'B'

ISSUE OF STORES TO THE CONTRACTOR

S. NO	Particulars	Unit	Issue Rate Rupees
1.	Cement non-refundable bags	M.T.	FREE
2.	Mild steel rounds all diameters	M.T.	FREE
3.	Tor steel/Ribbed steel all diameters	M.T.	FREE

- A. The materials listed above will be issued from BHEL/R&D/Stores. It will be the responsibility of the contractor to submit his demand for stores in writing at least seven days in advance of the actual requirement.
- B. Issue of all stores is subject to the extent of their availability at the place of issue noted above. The Contractor should make his own arrangements for any or all of the materials shown above in case the BHEL desires so. The contractor shall not be entitled to any claim or compensation for non supply of the materials or delay in the supply of stores under any circumstances.
- C. The materials will be issued only during the working hours on Tuesday and Friday. The Contractors shall have to transport them to site of work at his own cost as soon as these are issued.
- D. Where cost of stores issued, if any, is recoverable from the contractor, recoveries will be made from the running bills for the gross quantity issued and not on actual consumption on the basis of the net measured quantity on finished work.
- E. The contractor shall, from time to time, render proper accounts of all materials issued to him by BHEL R&D. If he fails to do so, no further issue of the materials will be made to him and he shall be held responsible for any delay in the execution of the work which may occur on this account.
- F. Only Cement, Mild Steel & Tor Steel items are issued free of cost to the contractor. The contractor will have to make good at his own cost any loss or damage to part or whole of the item issued to him as above.

- G. All surplus materials whether issued free of cost or on cost or on cost recovery basis are to be returned to the BHEL stores in good Condition. Quantities of materials consumed in excess of the actual requirement shall be charged for at punitive rates which listed below.

The decision of the Engineer-in-Charge (Civil) as to the extent to which materials have been rendered surplus have been consumed in excess of the actual requirements shall be final and binding on the contractor.

H. I) **CEMENT:**

For the purpose of determining the actual requirement of cement, the theoretical consumption of cement as per CPWD norms shall be considered by the Engineer-in-Charge. As per CPWD norms the following are the variation allowed in Cement consumption.

A > Work costing upto Rs. 2,00,000-00 : +/-5%

B > Work Costing from Rs. 2,00,000-00 to Rs.5,00,000-00 : +/-4%

C > Work costing above Rs. 5,00,000-00 : +/-3%

II) **STEEL:**

Steel will be issued by weight duly weighing at Store as stocked by BHEL R&D. The surplus steel is, represented by the difference between the quantity received and the quantity required and utilised on the work, with an allowance of 5% towards scrap. The contractor will be responsible for their removal from the site in good time as directed by the Engineer-in-Charge. The cut pieces retained as scrap shall be shorter than one metre in length.

Any variation in weight of steel issued should be brought to the notice of the Engineer-in-charge without any delay in writing for consideration.

PUNITIVE RATE FOR EXCESS/SHORT CONSUMPTION

1. CEMENT	Rs. 4,600-00 per M.T
2. MILD STEEL	Rs. 54000-00 per M.T
3. TOR STEEL	Rs. 54000-00 per M.T

SIGNATURE OF CONTRACTOR(S)

ACCEPTING OFFICER

SCHEDULE 'C'

SERVICES VIZ, WATER & LIGHTING TO THE CONTRACTOR

1. WATER:

Water required for construction purpose shall be supplied by BHEL R&D and charged at Rs. 2-00 per 1000 gallons. The supply will be made at convenient point to be determined by the AGM (PROJ.) and contractor has to make his own arrangements to distribute the water to places where required including cost of providing and fixing water meters. The charges for the consumption of water will be as under, where meters could not be provided by the contractor and prior permission for the same was obtained in writing from Engineer-in-Charge.

i) On the total value of periodical maintenance items of buildings	0.25%
ii) On the valued of road works	0.75%
iii) On the total value of other Civil Works	0.50%

Note: In respect of (i) & (ii) items where water is consumed on the works will be considered for arriving at the total value.

In respect of (iii) the value of works of picking metal, earth work and asphaltting will be excluded from the total value of road work.

2. LIGHTING:

Electric power, if required, will be supplied at a convenient metered point to be determined by the AGM (PROJ.). Any extension required to the different work site will have to be arranged by the contractor himself. Energy consumed will be metered and charged at Rs. 1.45 (Rupees one and forty five only per Unit)

SIGNATURE OF CONTRACTOR(S)

ACCEPTING OFFICER

SCHEDULE 'D'**TOOLS AND PLANT TO BE HIRED TO THE CONTRACTOR****(See Conditions 14 & 34A)**

Sl. No.	Particulars	Number available	Hire charges per Unit per Working day Rs.	Frequency of maintenance	+value per unit	place of issue	Number required by
1	2	3	4	5	6	7	8

Signature of Contractor_____

Signature of Issuing Officer_____

Date: _____

Date: _____

Note:

1. The tenderer shall indicate in column 8 the number required by him subject to the maximum indicate in column 3.
2. Column 6 is not to completed if condition 34 A committed from the General Condition of Contract.

SPECIAL CONDITIONS OF CONTRACT

THAT the contractor further undertakes to maintain the following registers as per prescribed proforma.

- a) Register of workmen (Form xiii)
- b) Muster Roll (Form xvi)
- c) Wages Register (Form xvii)
- d) Leave Register
- e) Register of Over time and deductions

2 THAT the company after proper checking of the bills submitted by the said contractor will pay to him during the progress of the said work, at the said contract rates and agreed terms of payment, a sum as determined by the company in respect of the work executed by the contractor.

3 THAT the contract shall come into force with retrospective effect from..... the date on which the letter accepting the tender (letter of Intent) has been communicated to the said contractor.

4 THAT whenever under this contract or otherwise any sum of money shall be recoverable from or payable by the contractor the same may be deducted in the manner as set out in the conditions of contract as aforesaid.

5 THAT all charges on account of Octroi, Terminal and Sales-Tax other duties on materials obtained for the works shall be borne by the said contractor.

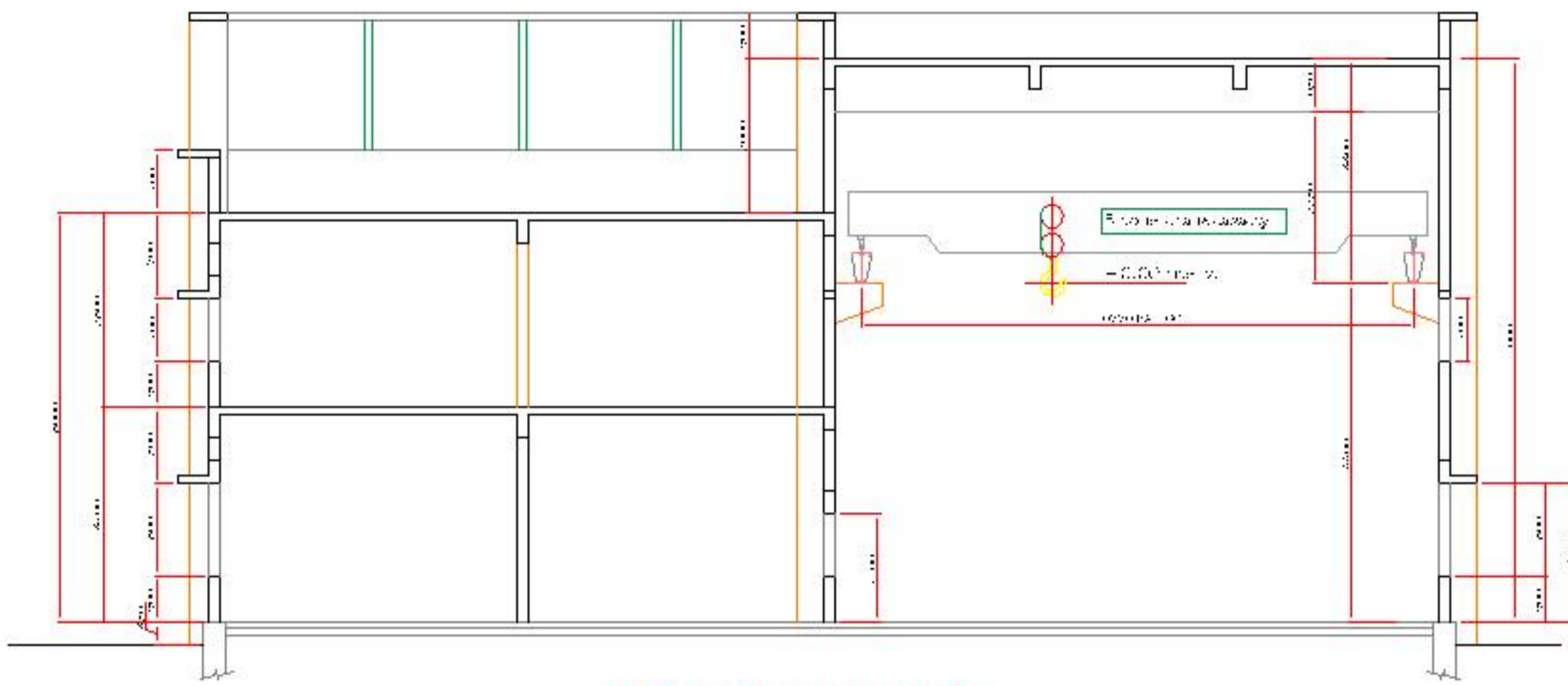
5a) It is also agreed between parties that the second party to the contract will ensure adherence to all statutory requirements under the State Rules in respect of service conditions for the employment of contract labour. The second party also hereby undertakes to get himself licensed from the appropriate authority as a contractor in accordance with A.P. Contract Labour (R&A) Rules, 1971. It is understood by the second party that for this agreement to be effective, the prime condition is his fulfilling the condition being licensed as a contractor under the state Legislation and the continuance of the agreement is subject to his sustained ensurance of the agreement is subject to his sustained endurance of fulfillment of all statutory requirements including those contained in Labour Commissioner's Notification No.8385/79 in respect of employment conditions for contract labour and payment of wages as specified by the State Government. Further as and when there are changes in the service conditions/wages rates for contract labour, as notified by the State Labour Department, the same will be implemented even if the said modification is given at any time after the conclusion of the Agreement. Any violation in respect of absorbance of statutory requirement under the contract Labour (Regulation and Abolition) Act 1970, will make the Agreement liable for immediate termination in regard to paid holidays, the contractor will observe BHEL list of holidays as notified from time to time.

- b) The Contractor shall ensure abidance by all the labour laws especially including contract Labour (R&A) Act, payment of wages, Workmen's Compensation Act, Minimum wages Act, as amended from time to time.
 - c) The contractor will obtain a separate provident fund code for his establishment and ensure implementation of provident fund Act in the case of all eligible employees and in the process shall conform to all the stipulated conditions under the PF Act and rules framed there under.
 - d) Notwithstanding clause (C) above in case of any financial loss incurred by the company on account of the contravention of the provident fund regulations or any regulation of rules touching the same by the contractor, the contractor shall undertake to indemnify the company to the extent of the loss incurred by the company.
6. THAT it is agreed between the parties that the non-exercise of any of the powers conferred on the Authorities of the company, will not in any manner constitute waiver of the conditions here to contained in those presents and the liability of the said contractor either of past or future compensation shall remain unaffected.
7. Any claim or dispute arising under the terms of this document shall only be enforced or settled at any courts located at Hyderabad / Secunderabad / Ranga Reddy only.
8. THAT the expression BHEL wherever occurring means THE BHARAT HEAVY ELCETRICALS LIMITED, Corporate R&D Division Hyderabad-500 093 (Andhra Pradesh)

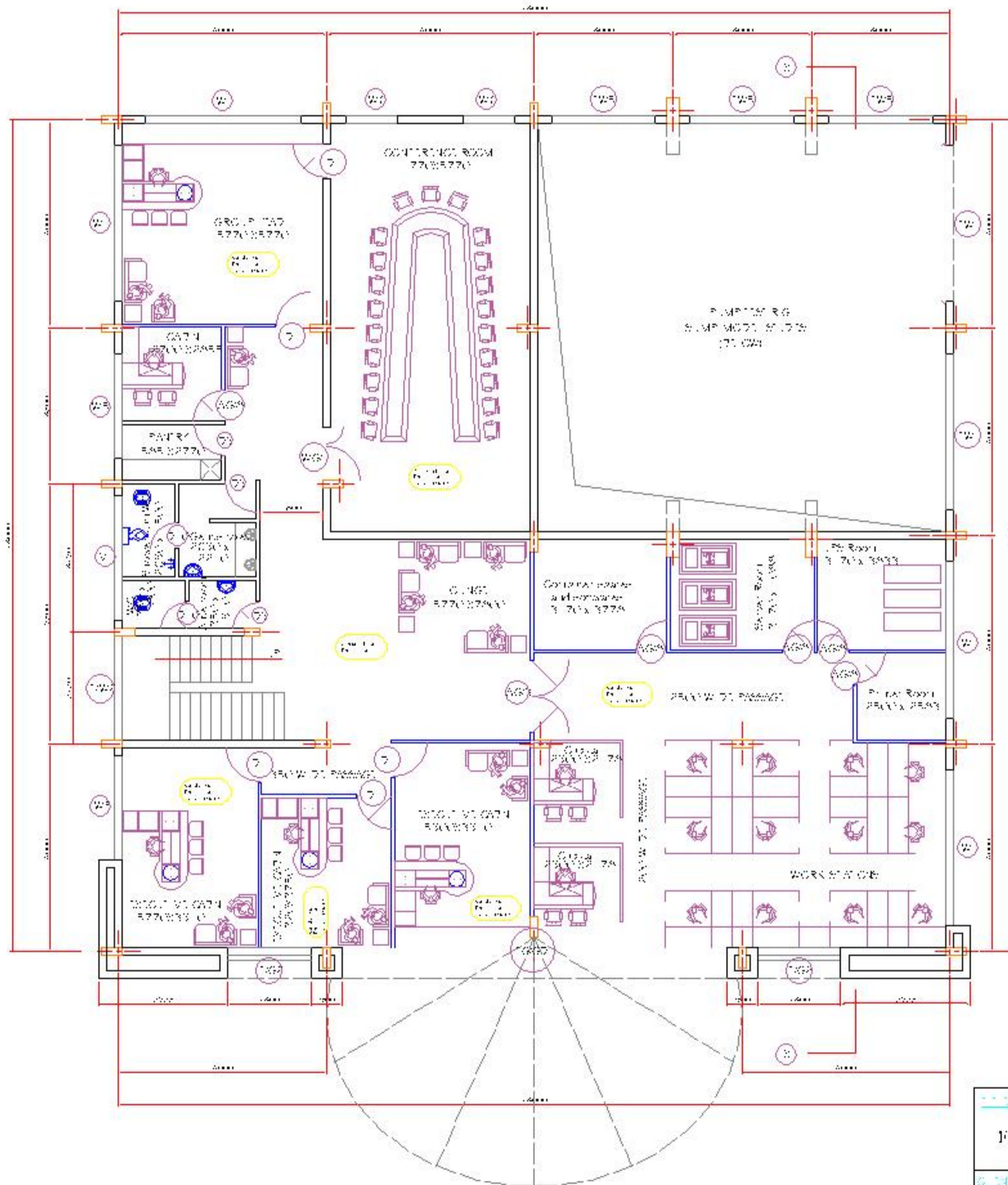
CONTRACTOR (S)

ACCEPTING OFFICER





CROSS SECTION AT X-X



FIRST FLOOR PLAN

COE-COMPRESSORS & PUMPS BUILDING
FIRST FLOOR PLAN & CROSS SECTION

BHEL R & D
HYDRABAD

DRAWING NO. SC/77.0x57.0/1/1/1

DATE	SCALE	STATUS	APPROVED	REVISION
01/01/2024	AS SHOWN	ISSUED FOR TENDERS		

GENERAL NOTES

UNLESS OTHERWISE SPECIFIED

1) ALL DIMENSIONS ARE IN MM

2) ALL LEVELS ARE IN METERS

SRI CONSULTANTS
SRI CONSULTANTS
SRI CONSULTANTS

BHARAT HEAVY ELECTRICALS LIMITED
CORPORATE RESEARCH & DEVELOPMENT DIVISION
VIKASNAGAR : HYDERABAD - 500 093

CIVIL ENGINEERING DEPARTMENT



**General Condition of
Contract for
Civil Engineering Works**

BHARAT HEAVY ELECTRICALS LIMITED
CORP RESEARCH & DEVELOPMENT DIVN
VIKASNAGAR : HYDERABAD - 500 093

CIVIL ENGINEERING DEPARTMENT

GENERAL CONDITIONS OF CONTRACT

1. DEFINITIONS:

In these General Conditions of Contract, the following terms shall have the meaning hereby assigned to them except where the context otherwise requires:

- (a) The "CONTRACT" means the documents comprising the tender including 'Direction to Parties Tendering' and acceptance thereof, together with all the documents referred to therein including General and Special Conditions of Contract, Schedules ('A', 'B', 'C', 'D' and/or General Summary attached to the form of tender, CPWD schedule of Rates as amended up to 2007 the Specifications and the Drawings. All these documents as applicable taken together shall be deemed to form one Contract and shall be complementary to one another.
- (b) The "Tender Documents" mean the form of Tender, the applicable schedule 'A', 'B', 'C' & 'D' and/or General Summary, General & Special Conditions of Contract and the specifications and/or Drawings as given to contractors on payment for the purpose of preparing their tenders.
- (c) The "WORK" means the work described in the Tender Documents, in individual work orders and/or accompanying Drawings and Specifications as may be issued from time to time to the Contractor by the Senior Engineer (Civil)/Manager (Civil) or the Engineer-in-charge within the Powers conferred upon them, including all modified or additional works and obligations to be carried out either at the site or at any Laboratory/Factory or other place as required for the performance of the Contract.
- (d) The "SITE" means the lands and/or other places on, in, into or through which the work is to be executed under the contract or any adjacent land, path or street which may be allotted to or used for the purpose of carrying out the contract.
- (e) The "CONTRACTOR" means the individual, firm or company, whether, incorporated or not, undertaking the work and shall include the legal personal representatives or such individual or the persons comprising the firm or company, or the successors of the firm or company, and the Permitted assignees of such individual; or firm or company.
- (f) The abbreviations "M(C)" means "Manager (Constructions)" who directs the contracts and letters "SE (C)" means "Senior Engineer (Civil)" in-charge of the particular work pertaining to the Contract.
- (g) The "Senior Engineer (Civil)" or "Senior Engineer" means the Engineering Officer appointed by BHEL or his duly authorized representative who shall direct, supervise and be in-charge of the work for the purposes of this Contract.
- (h) "Approved" and "Directed" means the approval or direction of the M (C) or S.E. (C) or person authorized by them for the particular purpose.
- (i) "Bharat Heavy Electricals Limited" herein referred to as "BHEL", shall mean the "Board of Directors", "Executive Director" "General Manager", or other Officers of the said Company including the Manager (C) or Senior Engineer (Civil) authorized to invite tenders and enter into contract for works on behalf of "Bharat Heavy Electricals Limited", Unit: Corporate Research & Development Division, Vikasnagar, Hyderabad - 500 093.
- (j) In the case of Lump-sum Contracts, "CONTRACTOR'S PERCENTAGE" means the percentage offered by the Contractor as addition to or deduction from the cost of buildings, or other works listed in Schedule 'A' to provide a lump-sum quotation for performance of the Contract inclusive of all extra costs, profit, establishment chargers, carriage, insurance, etc., complete.

In the case of percentage Rate Contracts, "Contractor's Percentage" shall, if the context so permits mean the "uniform percentage" tendered by the Contractor and accepted by the Accepting Officer; and the expression "CONTRACT RATE" shall likewise mean the rate in the CPWD Schedule of Rates as amended up to 1981 as adjusted by the said Contractor's percentage, if any.

(k) "Contract Sum" shall mean:

(i) in the case of Lump-sum Contracts, the sum for which the tender is accepted;

(ii) in the case of Percentage, Rate Contracts estimated value of the works as mentioned in the tender adjusted by the Contractor's percentage;

(iii) in the case of Item Rate Contracts, the cost of the work arrived at after extension of the quantities shown in Schedule of quantities by the item rates quoted by the tender for the various items.

(l) The DATE OF "COMPLETION" is the date or dates for completion of the whole or any part of the work as set ascertained in or accordance with individual work orders or the tender documents, or any subsequent agreed amendment thereto.

(m) A "WEEK" means seven days without regard to the number of hours worked or not worked in any day in that week.

(n) A "DAY" means a day of 24 (Twenty Four) hours irrespective of the number of hours worked or not in that day.

(o) A "WORKING DAY" means any day other than that prescribed by the Negotiable Instruments Act as being holiday and consists of the number of hours of labour as commonly recognized by good employers in the trade in the district where the work is carried out or as laid down in the Corporate R&D, BHEL regulations.

(p) "DEVIATIONS ORDER" means an order given by the Senior Engineer (Civil) or Engineer-in-charge to effect an alteration, addition or deduction, which, does not radically and/or substantially affect the scope or nature of the contract.

(q) "EMERGENCY WORKS" mean any urgent measure which, in the opinion of the Engineer-in-charge, become necessary during the progress of the work to obviate any risk of accident or failure or which become necessary for security.

(r) "PROVISIONAL SUM" or "PROVISIONAL LUMP SUM" means a lump sum included by the BHEL in the tender documents and represents the estimated value of work for which details are not available at the time of inviting the tender.

(s) "PROVISIONAL ITEMS" mean items for which approximate quantities have been included in the tender documents.

(t) "DAY WORK" means an item of work requiring the employment of labour with or without materials as the case may be, which, in the opinion of the Senior Engineer (Civil), is not capable of being evaluated by the accepted methods of measurement or assessment and is paid for on the basis of the actual labour and materials utilized on the particular item of work referred to.

(u) "ARCHITECT" means the architect and/or a company carrying on the business of architects including their authorized representatives at site of work, who are employed by BHEL Corporate R&D for their construction work.

(v) "EXCEPTED RISK" are risks due to riots (otherwise than among Contractor's employees) and civil commotion (in so far as both these are uninsurable), war (whether declared or not), invasion, act of foreign enemies, hostilities, civil war, rebellion, revolution, insurrection, military or surged power, any acts of Government, damage from aircraft, acts of God, such as, earth-quake, lightning and unprecedented floods and other causes over which the Contractor has no control and accepted as such by the Accepting Authority

or causes solely due to use or occupation by the BHEL of the part of the works in respect of which a certificate of completion has been issued or a cause solely due to faulty design of works by BHEL.

- (w) "MARKET RATE" shall be the rate as decided by the Senior Engineer on the basis of the cost of materials and labour at the site where the work is to be executed, plus 10 % to cover all overheads and profits.
- (x) "Contractor's Labour Regulations" are the regulations set out in Annexure - "D".
- (y) "ACCEPTING OFFICER" is the officer nominated as such by the GM of BHEL Corporate R&D, Vikasnagar, Hyderabad -500 093, who accepts a particular tender.

II. CONDITIONS (PREAMBLE) :

The Senior Engineer (Civil) of the division of BHEL, having jurisdiction for the time being (hereinafter called the Senior Engineer) or a subordinate officer deputed by him shall within a period of two months from the date of acceptance of the agreement by the competent authority, give to the contractor full & complete particulars of the work to be done hereunder and within like period permit the contractor and his workmen free access to the site on which the work is to be executed. On receiving such particulars and permission, the contractor shall forthwith start the work and shall carry on the same with due diligence and all work executed is to be done in a workmanlike manner. The decision of the Senior Engineer or any officer of BHEL duly authorized in this behalf by such Senior Engineer as to the rate of progress and the quality of work or material shall be final. The contractor shall have the right to cancel the contract and obtain refund of his earnest money, if such particulars and/or the permission are not given within the said period of two months.

II-A. DELEGATION OF AUTHORITY :

Prior to commencement of the works or at the appropriate time, the Accepting Officer shall issue an Administrative Order specifying the names of the persons who will for the time being act as the Senior Engineer's authorized representative in performing specific functions as required of the Senior Engineer in the various clauses of the conditions of Contract.

III. STANDARD PRELIMINARY SPECIFICATIONS :

PREFACE : The following clauses of the Standard preliminary specifications of the Madras Detailed Standard specification only, subject to the modifications noted below shall apply to this agreement.

NB: In cases where the acceptance of this tender is not within the power of the Senior Engineer in charge of the work, he (Senior Engineer) shall exercise such functions as are delegated to the Senior Engineer in the relevant clauses of the Standard preliminary specification applicable to this agreement.

A. INTENT AND REFERENCE TO M.D.S.S.:

1. It is intended by these MDSS specifications, to describe:

- (a) the character of the material to be used.
- (b) the method of execution of work; and
- (c) the contractor's responsibilities and liabilities to the Bharat Heavy Electricals Ltd., and his workmen and general conditions of Contract which are to be accepted by every contractor who executes work entrusted to him by the Bharat Heavy Electricals Limited.

Wherever the term 'Standard Specification' or the abbreviation "M.D.S.S." is used in estimates or contract documents, it shall refer to the relevant specification in the Madras Detailed standard specifications book and its addenda volume.

2. TERM "SPECIFICATION" APART FROM "STANDARD SPECIFICATION" :

Wherever the term "Specification" is used in contract documents apart from "Standard Specification" it shall mean the specification or plan prepared for the particular item referred to in the documents, or the instruction of the Contractor in executing the item of work.

3. SUB-SPECIFICATION :

Works of similar nature having many common clauses in their specifications are grouped under one specification number with a "General" preface thereto, and the sub-specifications are therefore given alphabetical affix.

4. ADDITIONS AND ALTERATIONS TO THE M.D.S.S. :

Additions and alterations to the MDSS will be incorporated in the addenda volume as authorized by the Senior Engineer.

5. POWERS OF SENIOR ENGINEER TO SUPPLEMENT OR ALTER THE M.D.S.S. :

Senior Engineers may alter the standard specification for any particular contract, which is within their respective powers of sanction, when such alteration is found necessary, by attachment of a correction sheet to the contract form, bearing the standard specification number, the correction, and the signature of the Dy. Manager, Senior Engineer, together with the signature of the contractor. Similarly additional specifications for items for which there are no standard specifications will be made by attachment to the contract documents of addenda specification sheets bearing the signature of the Senior Engineer as the case may be and the signature of the Contractor.

6. EVIDENCE OF EXPERIENCE :

Tenders shall, if required, present satisfactory evidence to the Senior Engineer that they have been regularly engaged, constructing such works as they propose to execute and that they are fully prepared with the necessary capital, machinery and materials to Begin the work promptly and to conduct it as required by the M.D.S.S. and the other specifications for the particular work tendered for, in the event of their tender being accepted.

7. LEGAL ADDRESS-NOTICES :

Tenders should give in their tender, their place of residence and postal address. The delivering at the above named place or posting in a post box regularly maintained by the Post Office Department or sending by letter registered for acknowledgement of any notice letters or other communication to the contractor shall be deemed sufficient service thereof upon the contractor in writing as may be changed at any time by an instrument executed by the contractor and delivered to the Senior Engineer.

Nothing contained in the agreement and its contract condition shall be deemed to preclude or render in operative the service of any notice, letter, or other communication upon the contractor personally.

B. STATEMENT OF APPROXIMATE QUANTITIES IN SCHEDULE "A"

8. QUANTITIES APPROXIMATE AND CONTRACTOR TO VERIFY THE NATURE AND AMOUNT OF WORK :

The quantities mentioned in tender notices and given in agreement Schedule - A are worked out from the relevant drawings in Bharat Heavy Electricals Limited and the Architects engaged by them, and may or may not be the actual required for execution. The Senior Engineer/Dy. Manager (Civil) does not expressly or by implication agree that the actual amount of the work to be done will correspond there with but reserves the right to increase or decrease the quantity of any class or portion of the work as he deems necessary.

Tenderers must satisfy themselves by a personal examination of the site of the proposed work, by examination of the plans and specification and by other means as they prefer as to the accuracy and sufficiency of the statement of quantities and all conditions affecting the work, and shall not at any time after the submission of their tender, dispute or complain of such statement of quantities not assert that there was any misunderstanding in regard to the nature or amount of the work to be done nor in consequence apply for extension of time for completion beyond the agreement date and/or claim for extra cost.

9. APPROXIMATE NOT TO MEAN DEVIATION FROM DRAWING & SPECIFICATION

This declaration of the approximate nature of the statement of quantities Schedule - A does not, however, in any way imply that the quantities will be increased for departure by the contractor from strict compliance with sanctioned drawing and specifications to suit his own convenience or reduce his cost.

C. DRAWING AND SPECIFICATIONS :

10. CONTRACT DOCUMENTS :

The Accepting Officer shall furnish to the Contractor on demand "FREE OF COST" two copies of signed Drawings and one copy of signed agreement comprising preamble to agreement, General and Special Specifications, Schedules "A", "B", "C", "D", etc., excluding General Conditions of Contract and two copies of all further drawings issued during the progress of work.

However, for any additional copies of the agreement or drawings required by the Contractor the same will be supplied on payment of the specified cost.

The contractor shall keep one copy of all the Drawings and of the Specifications on the site and the Senior engineer or his representative shall have access to them.

11. PERFORMANCE :

(a) The work shall be carried out in accordance with the directions and to the reasonable satisfaction of the Senior Engineer, in accordance with the drawing and specifications which form part of the Contract and in accordance with such further drawings, details and instructions, supplementing or explaining the same as may from time to time be given by the Senior Engineer.

(b) It shall be the responsibility of the Contractor to give timely notice to the Senior Engineer, regarding anything shown on the drawings and not mentioned in the specifications or mentioned in the specifications and not shown in the drawings, or any error or discrepancy in drawings or specifications and obtain his orders thereon. Figured dimensions are to be taken and not those obtained from scaling the drawing. In any discrepancy between drawings and specifications the letter shall prevail. In any such case or in case any feature of the work is not fully described and set- forth in the drawings and specifications, the contractor shall forthwith apply to the Senior Engineer for such further instructions drawings or specifications as he requires, it being understood that the subject is to be dealt with under building procedure of best modern practice. The Senior Engineer will furnish the further instructions, drawing or specifications, if in his opinion, they are required by competent workmen, for the proper execution of the work.

(c) Any error in description or quantity in Schedule- A or any omission therefrom shall not vitiate the contract or release the contractor from the execution of the whole or any part of the work comprised therein according to the Drawings and Specifications or from any of his obligation under the Contract.

12. DEVIATION :

The Contractors shall not make alteration, addition, or omission from the work as described in the tender documents except in pursuance of the written instructions of the Senior Engineer. No such deviation from the work described in the tender documents shall be valid unless the same has been specifically confirmed and accepted by the Accepting Officer in writing and incorporated in the Contract.

The Accepting Officer may deviate, either by way of addition or deduction from the work so described, provided that the contract sum be not thereby varied on the whole by more than the percentage set out in the tender. The value of all additions and deductions will be added to, or deducted from the contract sum. Whenever the Accepting Officer intends to exercise such a right his intention shall specify the deviations which are to be made, the lump sum assessment or the proposed basis of the payment, the extra time allowed if any and the date of completion of the entire contract.

Any objection by the contractor to any matter concerning the order shall be notified by him in writing to the Senior Engineer (Civil)/ Engineer-in-charge within seven days from the date of such order, but under no

circumstances shall the work be stopped, (unless so ordered by the Senior Engineer (Civil) owing to differences or controversy that may arise from such an objection). In the absence of such a notification of objection by the contractor, he will be deemed to have accepted the order and the conditions stated therein in event of the contractor failing to agree with the Senior Engineer regarding the terms of the proposed deviation, the objection shall be referred to the General Manager whose decision shall be final, conclusive and binding on the Contractor.

13. SIGNED DRAWING - NO AUTHORITY TO THE CONTRACTOR :

No signed drawing shall be taken as in itself an order for variation unless either it is entered in the agreement schedule of drawing under proper attestation of the contractor and the Senior Engineer, or unless it has been sent to the contractor by the Senior Engineer with covering letter confirming that the drawing is an authority for variation for the contractor under reference.

14. FINISHED SIZES :

The whole of the specified or figured dimensions of drawings are to be finished sizes after dressing or planning of cutting, subject however to the condition that, unless marked 'Net', 1/6" will be allowed for planning for each planned finished surface of wood work, when the contractor is permitted to use carefully sawn market size cut scantlings. This allowance will only be permitted in the case of the section 5/8" thick or over. The figured dimension of masonry walls and reinforced concrete exclusive of the thickness of plaster or skirting or cement of wall linings, unless otherwise specifically stated.

D. MATERIALS AND WORKMANSHIP :

15. QUALITY :

All materials, articles and workmanship shall be the best of their respective kind for the class of work described in the contract specification, and schedule materials being obtained from sources approved by the Senior Engineer. The word 'BEST' as used in these specifications shall mean, that in the opinion of the Senior Engineer, there is no superior quality of material or finish of articles in the market and that there is no better class of workmanship in the contract schedule. The Contractor shall, upon the request of the Senior Engineer, furnish him with the vouchers to prove that materials are such as are specified.

Samples of materials shall be furnished at the Contractor's expense to the Senior Engineer when called for in the tender notice or ordered to be furnished by the Senior Engineer prior to execution of any work.

16. MEASUREMENT AND MIXING :

In the case of loose materials such as lime, sand, cement, broken stone, surki, mortar, etc., the proportions demanded by the specifications must be measured in properly constructed measuring boxes, or in such other manner as shall be instructed by the Senior Engineer. Measurement is not to be done in loose heaps when intimate mixtures, such as, mortar, concrete, etc., are to be formed. The mixing must always be done on closely constructed platforms, so that, there will be no leakage of any of the materials through the floor of the platform, and also that no foreign material can be incorporated during the mixing. These platforms must be approved by the Senior Engineer. The cost of such measuring boxes and all the work referred to herein shall be borne by the Contractor.

17. DATA :

The materials and labour utilized in the execution of work by the contractor shall not be less than that given in the standard data as adopted or approved by B.H.E.L. for the relevant items.

18. LAY-OUT MATERIAL STACKS :

The Contractor shall deposit materials for the purpose of the work on such parts only of the ground as may be approved by the Senior Engineer. He shall submit, for the approval of the Senior Engineer, before starting work a detailed site survey clearly indicating positions and areas where materials shall be stacked and sheds built.

19. SOURCE OF PURCHASE OF MATERIALS AND STORES :

The Senior Engineer shall, during the progress of work, have power to cause the contractor to purchase and use such materials or supplies from B.H.E.L., brick fields, stores or other sources as may be specified in the contract, for the purposes therein specified.

20. CONTRACTOR LIABLE FOR MATERIALS SUPPLIED BY B.H.E.L. :

The Contractor shall be responsible for all materials and other articles and things which may be supplied by B.H.E.L., from the time he takes delivery thereof and shall use them only for the purposes of this contract and shall make good any loss, damage, wastage or undue wear and tear that may take place from whatever cause and pay to B.H.E.L. for such loss, damage or wastage, undue wear and tear, such sum as the Senior engineer may determine.

21. TEST, INSPECTION & REJECTION OF DEFECTIVE MATERIALS & WORK

(a) The contractor shall, provide proper facilities at all time, for the testing of materials and inspection of the work by the Senior Engineer and the Senior Engineer shall accordingly also have access at all times to the place or storage or manufacture where materials, are being made for use under the contract, to determine that manufacture is proceeding in accordance with the drawing and specifications.

(b) The Contractor shall, upon demand, also forward for the Senior Engineer's inspection test certificate supplied by the vendor's when he is purchasing consignment of cement, steel and other materials of which such certificate are usually available.

(c) The Senior Engineer shall have power to reject at any stage, any work which he considers to be defective in quality or materials of workmanship and shall not be debarred from rejecting wrought materials by reason of his having previously passed them in an un-worked condition any portion of the work, or materials rejected or pronounced to be inferior or not in accordance with the drawing and specifications, shall be taken down and removed from the work-site at the contractor's expense, within 24 hours after written instructions to that effect have been given by the Senior Engineer. Replacement shall at once be made in accordance with the specifications and drawings, at the contractor's expense.

In case of default on the part of the contractor to carry out such orders, the Senior Engineer shall have power to employ and pay other persons to carry out the orders at the contractor's risk and all expenses consequent thereon and incidental thereto shall be borne by the contractor.

In lieu of rejecting work not done in accordance with the contract, the Senior Engineer may allow such work to remain, and in that case shall make such allowance for the difference in value, as in his opinion may be reasonable.

(d) WORKS OPENED FOR INSPECTION :

The contractor shall at the request of the Senior Engineer, within such time as the Senior Engineer shall name, open for inspection any work covered up; and should the contractor refuse or neglect to comply with such a request, the Senior Engineer may employ other workmen to open up the same. If the said work has been covered up in contravention of the Senior Engineer's instructions, or if on being opened up, it be found not in accordance with the drawings and specifications or the written instructions of the Senior Engineer, the expenses of opening it and covering it up again, whether done by the contractor or such other workmen, shall be borne by, or recovered from, the contractor, if the work has not been covered up in contravention of such instructions, or if on being opened up it be found to be in accordance with the drawings, specifications or the written instructions of the Senior Engineer, then the expenses aforesaid shall be borne by BHEL, and shall be added to the contract sum, provided always that in the case foundations, or any other urgent work so opened up and requiring immediate attention, the Senior Engineer shall within reasonable time after the receipt of a notice from the contractor that the work has been so opened, make or cause the inspection thereof to be made, and at the expiration of such time if such inspection shall not have been made, the contractor may cover up the same, and shall not be required to open it up again for inspection except at the expense of B.H.E.L.

22. DEFECTS, SHRINKAGE, ETC., AFTER COMPLETION :

Any defects, shrinkage or other faults which may appear within Twelve months which shall be termed the Defects & Liability Period from the completion and final taking over of the works arising, in the opinion of Senior Engineer, from faulty material of workmanship not in accordance with the drawings and specifications or the instructions of the Senior Engineer shall, upon the direction in writing of the Senior Engineer, and within such reasonable time as shall be specified therein, be amended and made good by the Contractor at his own cost, unless the Senior Engineer shall decide that the contractor ought to be paid for the same at the rates agreed or such reduced or other rates as the Senior Engineer may fix and in case of default the Senior Engineer may employ and pay other persons to amend and made good such defects, shrinkage, other faults or damage, and all expenses consequent thereon and incidental thereto shall be borne by the Contractor.

Provided that in the event of B.H.E.L. taking over portions of the works and when they are completed the liability of the contractor under this clause, shall extend to a period of Twelve months from the date of final taking of the works irrespective of the actual dates on which portions of the works were taken over.

23. SENIOR ENGINEER'S /MANAGERS'S DECISION :

It shall be accepted as an inseparable part of the contract that in matters regarding materials, workmanship, removal of improper work, interpretation or the contract drawings and contract specifications, mode of procedure; and the carrying out of the works, the decision of the Senior Engineer shall be final and binding on the contractor, and in the case of any difference of opinion between the contractor and the Senior Engineer the decision of the Manager shall be final and conclusive.

24. DISMISSAL OF WORKMEN :

The contractor shall on the request of the Senior Engineer, immediately dismiss from the work any persons employed thereon who may, in the opinion of Senior Engineer, be incompetent or misconduct himself, and such person shall not be again employed on the works without the written permission of the Senior Engineer, but the contractor may appeal to the Manager against such dismissal.

25. CONTRACTOR'S SUPERVISION :

The Contractor shall either himself supervise the execution of the Contract or shall appoint a competent Agent approved by the Senior Engineer to act in his stead.

The Contractor shall employ an Engineer/Agent having at least a 'Degree of Bachelor of Civil Engineering' from a recognized University on any work with at least a Contract value exceeding rupees two lakhs, and having at least a Diploma in Civil Engineering from a recognized college, on work with a contract value exceeding Rs.50,000/- but not exceeding rupees two lakhs.

The employment of an Engineer/Agent as aforesaid shall not be necessary if the Contractor himself is in possession of a recognized technical qualification and is in the opinion of the Senior Engineer capable of receiving instructions of the Engineer-in-charge and of executing the work to the satisfaction of the Engineer-in-charge.

If the Contractor fails to appoint a suitable Engineer/Agent as aforesaid, the Senior Engineer shall have full powers to suspend the execution of work and stop payment of any advances that may have become due until such date as suitable Engineer/Agent is appointed and the Contractor shall be held responsible for the delay caused to the work and no extension of time on account shall be given to him as stipulated in Condition-58 below:

Orders given to the Contractor's Agent/Engineer shall be considered to have the same force as if they had been given to the Contractor himself.

26. BHEL MAISTRIES OR AGENTS :

The BHEL may be represented on the works by an agent, clerk of the works, or maistries who is not borne on the official list of officers and subordinates of the Bharat Heavy Electricals Limited. He (if appointed) shall, in the absence of the Senior Engineer, furnish the contractor with Senior Engineer's or his representative's instructions and directions as to the progress and execution of the work and the contractor shall duly comply with such instructions and directions and shall on the written, requisition of the maestri, clerk of work or agent,

stay the further progress of any portion of the works which in his judgement is being constructed with unsound or improper materials or workmanship until the opinion and determination of the Senior Engineer shall be obtained thereon, but such maestri, clerk of works or agent, is to have no power whatever to order any extra works or deviation from the specifications and drawings.

E. INCLUDED IN THE CONTRACT RATES :

27. The items mentioned in this section 'E' are to be provided by the Contractor and are therefore to be allowed for in this contract rates for the various items of work in the contract schedule, notwithstanding any contrary 'mammal' procedure claimed by the contractor, unless there are definite superseding instructions in the specifications relating to the contract in question.

27 (a) DEFINING CONTRACT SCHEDULE RATES :

The rate entered in a contract Schedule for any class of work shall be for finished work in situ and shall include all contingent expenses whether direct construction expenses involved in the building in place in accordance with the drawing and specifications, or whether they are expenses imposed by an outside authority such as local body. Such contingent expenses shall not entitle the contractor to claim an extra in respect thereof.

28. CARRIAGE :

- (a) Rates for finished work shall always include the cost of conveyance and all leads, lifts, loading unloading and stacking in the manner and at the place ordered by the officer in immediate charge of the work, unless circumstances necessitate provision for a separate schedule items, in which case such will be specified in the tender notice or schedule, when materials are supplied by B.H.E.L., the place of supply shall be specified in Schedule 'B' and no extra payment will be made for conveyance, leads, lifts, loading, unloading or stacking, if the place of supply is not so specified, the parties intending to tender should obtain the information from Senior Engineer before tendering. Otherwise, the absence of information in regard to place of supply will not entitle the Contractor to any extra payment.
- (b) Wherever the term 'carriage' or 'conveyance' is used in Schedule item, it shall, in the absence of other schedule provision or modifying description in the specification be taken to include all leads, lifts, loading, unloading and stacking in uniform stacks to the satisfaction of the Senior Engineer, with careful attention to close packing in the case of the materials which are to be measured in stacks as a basis of payment for finished work.

Note: If for carriage there is a separate schedule item provision with a specification, payment for carriage will ordinarily be by bulk or weight at a mileage rate between specified places and on the basis of the method adopted in the standard schedule of rates for carriage of materials. The distance will be measured by the nearest practicable and cheapest route, whether metalled or unmetalled road or cart-track.

- (c) When carts or vehicles of any sort are engaged by the day, the quantity of materials to be conveyed, the distance to be travelled and the number of trips to be made shall, if he considers it necessary, be fixed by the Senior Engineer.
- (d) The contractor is responsible for making good all the loss in transporting materials entrusted to him or his agents whether caused by wastage, breakage, theft, or any other cause.
- (e) No payment, shall, in any case, be made for the return trip with carts empty. Where there are loads also for return trip, the agreement rates should allow for reduced cost thereby on each set of materials so conveyed.

29. CONSTRUCTION PLANT:

The contractor shall include in his tendered price and shall provide and install all necessary construction plant and shall use such methods and appliances for the performance of all the operations connected with the work embraced under the contract as will secure a satisfactory quality of work and rate of progress which, in the opinion of the Senior Engineer will ensure the completion of the work within the time specified. If at any time before the commencement or during the progress of work, or any part of it, such methods or appliances appear

to the Senior Engineer to be insufficient or inappropriate for securing the quality of the work required, or the said rate of progress, he may order the contractors to increase their efficiency, or to improve their character and the contractor shall comply with such orders; but the failure of the Senior Engineer to demand such increase of efficiency or improvement shall not relieve the contractor from his obligation to secure the quality of work and the rate of progress required by the contract, and the contractor alone shall be responsible for the efficiency and safety of his plant, appliances and methods.

It is, however, open to the Senior Engineer to lend or supply to the Contractor any tools, implements, materials and machinery that the Senior Engineer may consider desirable, but for any such tools, implements and machinery that may be lent or supplied to the contractor by B.H.E.L., the contractor shall pay such deposit and hire-purchase price as may be determined by the Senior Engineer. All articles that may be so lent or hired to the contractor shall be returned in good serviceable condition by him to the Senior Engineer before the final bill for the work is paid and any shortage or damage shall be recovered from the contractor in the final bill at such rate as may be determined by the Senior Engineer after making such allowances as he may consider suitable for fair wear and tear.

30. SCAFFOLDING INSTRUCTIONS :

All requisite scaffolding shall be provided at the contractor's expense and shall be double, i.e., it must have two sets of upright supporters. Care must be taken to ensure the safety of the work, people and the contractor must comply with such instructions as the Senior Engineer may issue to ensure such safety. The Contractor will be entirely responsible for any damage or injuries to persons or property resulting from ill-erected scaffolding, defective ladders or otherwise arising out of his default, in this respect.

31. TEMPORARY STRUCTURES :

The contractor shall erect and maintain at his own cost temporary weather-proof sheds at such places and in manner approved by the Senior Engineer for keeping materials under cover. The contractor shall also provide and maintain at his own expense such temporary fences, faces, guards, bridges and roads as may be necessary for the execution of his contract work for safeguarding or accommodating the public. If the Senior Engineer shall order any departure from any arrangements made by the contractor, the contractor shall comply with such orders as the Senior Engineer may issue to safeguard or accommodate the public. Sheds for housing workmen shall be provided at the contractor's expense, if in the opinion of the Senior Engineer, such are necessary or desirable.

32. WATER AND LIGHTING :

The Contractor shall pay all fees and provide water and light as required from Municipal mains or other sources, and shall pay all charges therefor (including storage tanks, meters, etc.) for the use of the works and workmen, unless otherwise arranged and decided on, in writing, with the Senior Engineer. The water for the works shall be so far as practicable, free from earthy, vegetable, or organic matter, and from salts or other substance likely to interfere with the setting of mortar or otherwise prove harmful to the work. In the event of water and electric current being supplied by B.H.E.L. the point of supply, conditions, and recovery charge for the same shall be as specified in Schedule - C.

33. LATRINE FOR WORK PEOPLE :

The contractor shall provide and erect, prior to the commencement of work, sufficient latrines for use of the work people, male and female and shall keep the same disinfected and clean at all times during the progress of the works, and shall remove the same, disinfect the ground and make good all damage on the completion of the works.

34. SUN PROTECTION KEEPING DRY AND PUMPING :

The contractor shall at his own expense arrange all requisite protection of the work and materials against sun or rain effects and shall keep all portions of the work free from water to the satisfaction of the Senior Engineer and shall use his own plans for the purpose, unless otherwise specifically provided in the contract specifications.

35. TOOLS AND SEIGNIORAGE :

The contractor shall unless otherwise specifically stated in the tender notice and subsequently on this basis in the contract, be responsible for the payment wherever payable of all import duties, tools, octroi duties, Seigniorages, quarry fees, etc., on all materials and articles that he may use.

The contractor shall be solely responsible for the payment of sales tax under the provisions of the relevant Act, as in force for the time being and the rates for the various item of work shall remain unaffected by any change that may be made from time to time in the rate at which such tax is payable.

Notwithstanding anything contained in relevant Tariff Act, the rates for items involving the use or supply of articles obtained by the Contractor from outside India shall remain unaffected by any changes that may be introduced in the Customs Duties.

36. SETTING OUT WORKS :

The contractor shall be responsible for the correct setting out of all works, providing at his own cost all labour, materials and staff required for so doing.

37. CLEANING UP DURING PROGRESS AND FOR DELIVERY :

All rubbish shall be burnt or removed from the site as it accumulates. All floors, stairs, landings, doors, windows surface and soil drains shall be cleaned down and put in a thoroughly complete, clean, sound, and workman like state to the satisfaction of the Senior Engineer before the work is finally handed over, all rubbish and surplus materials not required by the Senior Engineer having first been removed by the contractor. The contractor shall give notice in writing to the Senior Engineer when the work is so ready to be handed over and shall be responsible for its maintenance until it is taken by the Senior Engineer.

F. RESPONSIBILITIES AND LIABILITIES OF THE CONTRACT :

EXPLANATION :

This section sets forth some responsibilities which the contractor shall assume-in addition to those mentioned in other sections of this "Preliminary Specification" - under every contract which he enters into with the Bharat Heavy Electricals Limited, and he should therefore calculate his unit prices for schedule items of work accordingly.

38. PATENT RIGHTS :

The contractor shall fully indemnify B.H.E.L., or the agent, servant, or employee of B.H.E.L., against any action, claim or proceeding relating to infringement or the 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 articles/or part thereof included in the contract.

In the event of any claim being made or action brought against Corporate Research & Development Unit, B.H.E.L., in respect of any of the matters aforesaid, the contractor shall immediately be notified thereof for taking necessary action provided that payment of indemnity shall not apply when such infringement has taken place in complying with the specific direction issued by the B.H.E.L., but the contractor shall pay any royalties payable in respect of any such use.

39. OCTROI & OTHER DUTIES :

All charges on account of Octroi, Terminal or Sales Tax and/or other duties on materials obtained for the work (excluding materials provided by Corporate R&D, B.H.E.L., on payment) shall be borne by the Contractor.

40. ROYALTIES :

Royalties fixed from time to time as per prevalent local rules will be recovered for materials, which the Contractor may be allowed to remove from quarries situated on land which is in charge of the B.H.E.L., authorities.

41. OBSERVANCE OF LAWS-LOCAL REGULATIONS AND NOTICES ATTACHMENTS :

The contractor shall conform to the regulations and by-laws of any local authority for any water or lighting supplied by B.H.E.L., with whose systems the structure is proposed to be connected and shall before making any variations from the drawings or specifications that may be necessitated by so conforming, give to the Senior Engineer written notice, specifying the variations proposed to be made and the reasons for making them and apply for instructions thereon. In case the contractor shall not receive such instructions within seven days from the date of receipt by Senior Engineer, he shall proceed with the work, conforming to the provision, regulation, or by-law in question; and any variations in the drawings or specifications so necessitated shall be dealt with under Clause 62. The contractor shall give all notices required by the said Acts, regulations or by-laws and pay all fees in connection therewith, unless otherwise arranged and decided on in writing with the Senior Engineer. He shall also ensure that no attachments are made against materials or work forming part of or for the use of the contract; in every case referred to in this clause the contractor shall protect and indemnify B.H.E.L., against any claim or liability arising from or based on the violation of any such law, ordinance, regulation order, decree, or attachment, whether by himself or his employees.

42. APPRENTICES ACT :

The contractor shall comply with the provisions of the Apprentices Act, 1961 and the Rules and Orders issued there under from time to time. If he fails to do so, his failure will be a breach of the contract and the Manager in his discretion, cancel the contract. The contractor shall also be liable, for any pecuniary liability arising on account of any violation by him of the provisions of the Act.

43. LABOUR :

The Contractor shall furnish to the Sr. Engineer in-charge at the intervals specified by him, a distribution return of the number and description by trades of the labour employed on the works. The Contractor shall also submit on the 4th and 19th of every month to Engineer-in-charge a true statement showing in respect of second half of the preceding month and the first half of the current month (i) the accidents that occurred during the said fortnight showing the circumstances under which they happened and the extent of damage and injury caused by them and(ii) the number of female workers who have been allowed Maternity Benefit as provided in the Maternity Benefit Act, 1961 or Rules made thereunder and the amount paid to them.

The Contractor shall pay labour employed by him either directly or through Sub-Contractors wages not less than fair wages as defined in the Contractor's Labour Regulations vide Annexure - 'D'.

The Contractor shall in respect of labour employed by him either directly or through Sub-Contractors comply with or cause to be complied with Contractor's Labour Regulations in regard to all matters provided therein.

The Contractor shall comply with the provisions of Contract Labour (Regulation & Abolition Act, 1970) the Payment of Wages Act, 1936, minimum wages Act, 1948. Workmen Compensation Act, 1923, Industrial Disputes Act, 1947, Maternity Benefit Act, 1961, and Mines Act, 1952, etc., or any modifications thereof or any other law relating thereto and rules made thereunder from time to time.

The Contractor shall be liable to pay his contribution and the employee's contribution to the State Insurance Scheme in respect of all labour employed by him for the execution of the contract, in accordance with the provision of "The Employee State Insurance Act, 1947" as amended from time to time. In case the contractor fails to submit full details of his account of labour employed and the contribution payable, the Sr. Engineer shall recover from the running bills of contractor an amount of contribution as assessed by him. The amount so recovered shall be adjusted against the actual contribution payable for Employee's State Insurance.

The Sr. Engineer shall on a report having been made by an Inspecting Officer as defined in the Contractor's Labour Regulation have the power to deduct from the moneys due to the contractor any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason or non-fulfillment of the conditions of the Contract for the benefit of workers, non-payment of wages or of deductions made from his or their wages which or not justified by the terms of the contract or non-observance of the said Contractor's Labour Regulations.

The Contractor shall indemnify the Corporative Research and Development Unit, BHEL against any payment to be made under and for observance of the Regulations aforesaid without prejudice to his right to claim indemnity from his sub- contractors.

In the event of the Contractor committing a default or breach of any of the provisions of the aforesaid Contractor Labour Regulations, as amended from time to time or furnishing any information or submitting or filling any Form/Register/Slip under the provisions of these Regulations which is materially incorrect then on the report of the inspecting Officers as defined in the contractor's labour Regulations, the Contractor shall without prejudice to any other liability pay to the Corporate Research & Development Unit, BHEL a sum of Rs.5,000/- as liquidated damages for every default breach or furnishing, making, submitting, filling materially incorrect statement as may be fixed by the Sr. Engineer and in the event of the Contractor's default continuing in this respect the liquidated damage may be enhanced to Rs.50.00 per day for each day of default to a maximum of 5 percent of this estimated cost of works put in tender.

The Sr. Engineer shall deduct such amount from bills or security deposit of the Contractor and credit the same to the Welfare Fund constituted under Regulations. The decision of the Sr. Engineer in this respect shall be final and binding.

MODEL RULES OF LABOR WELFARE:

The Contractor shall at his own expense comply with or cause to be complied with model Rules for Labour Welfare as appended to these conditions or rules framed by Government from time to time for the protection of health and for making sanitary arrangements for workers employed directly or indirectly on the works. In case the Contractor fails to make arrangements as aforesaid the Sr. Engineer shall be entitled to do so and recover the cost thereof from the Contractor.

SAFETY CODE :

The Contractor shall at his own expense arrange for the Safety provisions as appended to these conditions or as required by the Sr. Engineer in respect of all labour directly or indirectly employed for performance of the works and shall provide all facilities in connection therewith. In case the Contractor fails to make arrangements and provide necessary facilities as aforesaid, the Sr. Engineer shall be entitled to do so and recover the cost thereof from the Contractor.

Failure to comply with Model Rules for Labour Welfare, Safety Code or the provisions relating to report, on accidents and to grant of maternity benefits to female workers shall make the Contractor liable to pay to the Corporate Research and Development Unit, BHEL as liquidated damages an amount not exceeding Rs.50.00 for each default or materially incorrect statement. The decision of the Sr. Engineer in such matters based on reports from the Inspecting Officer as defined in the Contractor's Labour Regulations as appended to these conditions shall be final and binding and deductions for recovery of such liquidated damages may be made from any amount payable to the Contractor.

44. ACCIDENTS-HOARDING-LIGHTING OBSERVATIONS : WATCHMEN :

- (a) When excavations have been made or obstacles have been but in public thoroughfares or in places where there is any likelihood of accidents, the Contractor shall comply with any requirement of law on the subject, and shall provide suitable hoarding, lighting and watchmen as necessary.
- (b) It shall be the Contractor's sole responsibility to protect the public and his employees against accident from any cause and he shall indemnify BHEL against any claims for damages for injury to persons or property, resulting from any such accidents; and shall, where the provisions of the Workmen's Compensation Act, apply, take steps properly insure against any claims thereunder.
- (c) On the occurrence of an accident which results in the death of any of the workmen employed by the Contractor or which is so serious as to be likely to result in the death of any such workmen, the Contractor shall, within 24 hours of the happening of such accident, intimate in writing to the Senior Engineer of the BHEL the fact of such accident. The Contractor shall indemnify BHEL against all loss or damage sustained by BHEL resulting directly or indirectly from his failure to give intimation in the manner aforesaid including the penalties or fines if any payable by BHEL as a consequence of failure by BHEL to give notice under the Workmen's Compensation Act or otherwise conform to the provisions of the said Act in regard to such accident.

45. BLASTING :

Blasting executed by Contractors in connection with works of BHEL shall be carried out in the manner described under 'Blasting Operations' Instructions to Contractor's of M.D.S.S. :

46. PROTECTION OF ADJOINING AND EXISTING PREMISES :

The Contractor is to protect the whole of the adjoining and, where necessary, the existing premises and all works and all the fitting to all buildings on and adjoining the site against structural and decorative damage caused by the execution of these works and make good in all respects all such damage done or occurring to the same, and leave such reinstatement in perfect order. He is also to make good any damage done in the execution of the work to existing public or private footway or roadways.

47. PERMIT OTHER WORKMEN CO-OPERATION AFFORD FACILITIES :

The Senior Engineer shall have full power to send workmen upon the premises to execute fitting and other works not included in the contract, for these operations the contractor is to afford every reasonable facility during ordinary working hours provided that such operations shall be carried on in such a manner as not to impede the progress of the work included in the contract, but the contractor is not to be responsible for any damage which may happen to or be occasioned by any such fittings or other works, provided that he complies with the Senior Engineer's instructions in connection there with, and provided that the damage is not caused by himself or his workmen.

The Contractor shall, at all times, co-operate, assist, attend on, and afford facilities for such specialists as may be employed by the Senior Engineer on other works in connection with the building, allowing them, free of charge, the use of all plant, light and water installed in the works. The contractor shall also cause such special work or protect it as instructed, to avoid injury during progress of the works. For failure so to protect, the contractor must make good any damage caused.

48. HOLES FOR WATER SERVICE,GAS,ELECTRICAL AND SANITARY FITTINGS:

The Contractor shall leave all holes in masonry and floors for the insertion of water services, gas and electrical connections and sanitary fittings in the exact position indicated by the Senior Engineer during the progress of the work. These holes must be properly built up, in a workmanlike manner, at the contractor's cost as soon as the fittings have been installed, in cases where the installations are made during the construction of the building and where in the opinion of the Senior Engineer, delays in settlement of accounts will not thereby occur.

49. CONTRACTOR'S RISK AND INSURANCE :

The work executed by the contractor under the contract shall be maintained at the contractor's risk until the work is taken over by the Senior Engineer. The contractor shall accordingly arrange his own insurance against fire and other usual risks during such period unless otherwise specified.

Provided, however, that the contractor shall not be liable for all or any loss or damage occasioned by or arising out of acts of God, and in particular unprecedented flood, volcanic eruption, earthquake or other convulsion of nature, invasion the act of foreign enemies, hostilities or warlike operations (before or after declaration of war) rebellion, military or usurped power.

50. HOLIDAYS :

No work shall be done on Sundays or other declared holidays of BHEL without the written permission of the Senior Engineer; and the contractor shall comply with the provisions of the Factories Act, if and so far as the same are applicable.

G. MISCELLANEOUS :

51. SAND AND GRAVEL :

The Contractor shall not make any excavation upon the site for the purpose of obtaining gravel, sand or soil other than shown on or implied by the drawings, except with the previous permission of the Senior Engineer.

52. OLD CURIOSITIES :

All old curiosities, relics, coins, minerals, etc., found in excavation or pulling down, shall be handed over to the Senior Engineer. Should any ancient masonry, or other old work of interest be opened up, the Senior Engineer's attention shall be called to the same before demolition or removal.

53. ASSIGNMENT OR SUB-LETTING :

The Contractor shall not, without the written consent of the Senior Engineer, assign the contract or sub-let any portion of the same. Ordinarily no sub-letting will be permitted but in case such should be permitted by the Senior Engineer, it shall in no way free the contractor from any of his responsibilities under any clause of the preliminary specifications or of the 'Agreement'.

54. SPECIALISTS :

The Senior Engineer shall during the progress of the work, have power to select, nominate or recommend tradesmen or specialists to supply material or execute such portion of the work as he may consider desirable in the interest of the BHEL.

55. RATIFICATION OF THE SENIOR ENGINEER :

Should the acceptance of the tender be beyond the authorized powers of the Senior Engineer as per delegation of powers of BHEL, the orders and decision of such Senior Engineer with regard to extension of time for completing the Contract or the termination of the Contract or of the employment of specialists for certain portions of the work as described in the previous clause will be subject to the ratification of the higher authority who accepted the tender.

56. ORDER BOOK :

An order book shall be kept at the site of the work and in the custody of the Engineer in direct charge of the work. As far as possible, all orders regarding the work are to be entered in this book. All entries shall be signed and dated by the Engineer in direct charge of the work and by the contractor or by his representative. In important cases, the Senior Engineer or the Deputy Manager will countersign the entries which have been made. The order book shall not be removed from the work except with the written permission of the Senior Engineer.

H. DATE OF COMMENCEMENT, COMPLETION, DELAYS, EXTENSIONS, SUSPENSIONS OF WORK AND FORFEITURE :

57. DATE OF COMMENCEMENT AND COMPLETION :

On notification of possession of the site (or premises) being given to the Contractor as provided in paragraph 8 supra, he shall forthwith begin the work, shall regularly and continuously proceed with them and shall complete the same (except for printing or other work, which in the opinion of the Senior Engineer, it may be desirable to delay) by the date of completion, as stipulated in the agreement, subject, nevertheless, to the provisions of extension or time mentioned in the next clause. The contractor shall under no circumstances be entitled to claim any damages from Bharat Heavy Electricals Limited if he incurs any expenses or liabilities to payment under the contract before the date of commencement defined above, the contractor shall have the right to withdraw from the contract and obtain refund of this Security Deposit if such intimation of handing over the site is delayed more than two months from the date of acceptance of the agreement by competent authority.

58. DELAYS & EXTENSION OF TIME :

No claim for compensation on account of delay or hindrances to the work from any cause whatever shall lie, except, as hereinafter defined. On receipt of an application from the contractor in the proforma as Annexure-B, reasonable extension of time will be allowed by the Senior Engineer or by the Officer competent to sanction the extension, for unavoidable delays, such as may result from causes, which, in the opinion of the Senior Engineer are undoubtedly beyond the control of the contractor. The Senior Engineer shall assess the period of delay or hindrance caused by any written instructions issued by him at twenty five percent in excess of the actual working period so lost.

In the event of the Senior Engineer failing to issue necessary instructions and thereby causing delay and hindrance to the contractor, the latter shall have the right to claim an assessment of such delay by the Deputy Manager (Civil). The contractor shall lodge in writing with the Senior Engineer a statement of claim for any delay or hindrance referred to above, within fourteen days from its commencement, otherwise no extension of time will be allowed.

Whenever authorized alteration or additions made during the progress of the work are of such a nature in the opinion of the Senior Engineer as to justify an extension of time in consequence thereof, such extension will be granted in writing by the Senior Engineer or other competent authority when ordering such alterations or additions.

59. DELAYS IN COMMENCEMENT OR PROGRESS OR NEGLECT OF WORK AND FORFEITURE OF EARNEST MONEY SECURITY DEPOSIT AND WITH-HELD AMOUNTS:

- (a) Time shall be considered as of the essence of the contract. If, at any time, the Senior Engineer shall be of the opinion that the contractor is delaying commencement of the work or violating any of the provisions of the contract or neglecting or delaying the progress of the work as indicated in Annexure - 'C' he shall so advise the contractor in writing and at the same time demand compliance. If the Contractor neglects to comply with such demand with seven days after receipt of such notice, it shall then or at any time thereafter, be lawful for the Senior Engineer to determine the contract which determination shall carry with it the forfeiture of the security deposit and the total of the amount withheld under Cl. 67 below, together with the value of such work as may have been executed and not paid or such proportion of such total sums, as shall be assessed by the Senior Engineer.
- (b) If, however, the Senior Engineer notwithstanding the failure of the Contractor to comply with the demand referred to in paragraph (a) of this clause, failure to maintain the 'Rate Progress' specified in the Agreement plus any extension of time that may have been allowed to the Contractor as defined in Clause 58, shall permit the contractor to proceed with the whole or part of the work, such permission shall not be deemed to be a waiver in any respect by the Senior Engineer of the right of forfeiture under this clause: Provided, however, that any such forfeiture under this sub-clause shall not exceed 5 percent of the total of the finished contract amount; provided however that any authority higher in rank than the Senior Engineer may in his absolute discretion waive or modify any penalty or forfeiture imposed by the Senior Engineer under the provisions of this clause.
- (c) It shall be a further right of the Senior Engineer under this clause at any time that the 'Rate of Progress' programmed in the agreement is not maintained to given any part of the work to any other contractor at his discretion in order to maintain 'Rate of Progress' and the contract shall then be determined for only that portion of the work given to the other contractor. The forfeiture under Paragraph (b) of this clause will in these circumstance be applied :

60. SUSPENSION OF THE WORKS BY THE CONTRACTOR :

If the contractor (except on account of any legal restraint not occasioned by his own wilful act or default or orders from Bharat Heavy Electricals Limited, preventing the continuance of the work, or on account of the causes for which an extension of time has been sanctioned by competent authority) shall suspend the work, or sublet the work or a portion thereof without sanction of the Senior Engineer, or in the opinion of the Senior Engineer, shall neglect or fail to proceed with due diligence in the performance of his part of the contract as laid down in the schedule rate of progress or if he shall continue to default or repeat such default in the respects mentioned in Clause 22, the Senior Engineer shall have power to give notice in writing to the Contractor requiring that the works be proceeded with in accordance with the terms of the contract. Such notice shall not be unreasonable, or vexatiously given, and must signify that it purport to be a notice under the provisions of this clause, and must specify the act or default on the part of the contractor upon which it is based. After such notice shall have been given the contractor shall not be at liberty to remove from the site of the works, or from the ground contiguous thereto, any plant or materials belonging to him, which shall have been placed thereon for the purpose of the work; and BHEL shall have a lien upon all such plant and materials, to submit from the date of such notice being given until the notice shall have been complied with. The BHEL shall have power to post watchman at site of the works and or the ground contiguous thereto in order to prevent the removal of any plant or materials upon which the BHEL shall have a lien. If the contractor shall fail for fourteen days after such notice has been given, to comply with the same to the satisfaction of the Senior Engineer as certified by him in

writing. Bharat Heavy Electricals Limited, may enter upon and take possession of the works and site and of all such plant and materials thereon (or on any ground contiguous thereto) and all such plant and materials as above mentioned shall thereupon be at the disposal of Bharat Heavy Electricals Limited, absolutely, for the purpose of completing the work. If BHEL shall exercise the above power to enter upon the works and take possession of the works, plant and material they may engage any other person to complete the works, and excludes the contractor, his agents and servants from entry, upon or access to the same except that the contractor or any person nominated by him may have access at all reasonable times to inspect, survey and measure the works, already executed by him. And BHEL shall there upon take such steps as they may consider necessary for completing the works without undue delay or expense, using for that purpose the plant and materials above mentioned and obtain such additional plant and material as the Senior Engineer shall decide if necessary for the due completion of the work. Upon the completion of the works, the Senior Engineer shall certify the amount of the expenses properly incurred consequent on and incidental to the default of the contractor as aforesaid, and in having the works completed by other persons, having credited the contractor with have value of the materials utilized as aforesaid. Should the amount so certified be less than the amount which would have been due to the contractor on the completion of the works by him, the difference shall be paid to the contractor by Bharat Heavy Electricals Limited and should the amount of the former exceed the latter, the difference shall be paid by the contractor to Bharat Heavy Electricals Limited. BHEL shall not be liable to make any payment to the contractor on account of the use of such plant for the completion of the works under the provisions therein before contained. Bharat Heavy Electricals Limited may at any time give notice in writing to the contractor to remove any of his plant or materials from the site and not required for completion of the work. If such plant and/or materials are not removed within fourteen days after notice shall have been so given BHEL may remove and sell the same, holding the proceeds less the cost of removal and sale to the credit of the contractor.

In case BHEL shall exercise the power contained in this clause and shall complete the works by any other person as therein provided, the Senior Engineer, after instituting such enquiries as he may deem fit, with or without notice to the contractor, shall certify what amount (if any) had at the time of the Bharat Heavy Electricals Limited, exercising such powers as aforesaid, been reasonably earned or would reasonably accrue to the contractor in respect of work then actually done by him in the premises and such certificates shall be final and binding on the contractor.

Notwithstanding anything contained in Clause 49 above, when possession of the work and site is taken by BHEL, in exercise of the power contained in this clause the portion of the work actually completed by the contractor in the premises shall be maintained by Bharat Heavy Electricals Limited, at the risk and expense of the contractor until the whole of the work is completed by other agency and possession thereof taken by the Bharat Heavy Electricals Limited.

61. SUSPENSION OF WORK ON ORDERS OF BHEL :

(a) The contractor shall, on receipt of the order in writing of the Sr. Engineer suspend and progress of the works or any part thereof for such time and in such manner as Sr. Engineer may consider necessary for any of the following reasons

- (i) on Account of any default on the part of the Contractor or
- (ii) for proper execution of the works or part thereof for reason other than the default of the contractor; or
- (iii) for safety of the works or part thereof.

(The Contractor shall, during such suspension properly protect and secure the works to the extent necessary and carry out the instructions given in that behalf by the Sr. Engineer).

(b) If the suspension in ordered for reasons (ii) and(iii) in sub-para (a) above:

- (i) the Contractor shall be entitled to an extension of time equal to the period of every such suspension plus 25 %.
- (ii) if the period of suspensions exceeds thirty days,the Contractor shall, in addition, be entitled to compensation, as the Sr. Engineer may consider reasonable, in respect, of salaries and/or wages paid by the Contractor to his employees and labour at site, remaining idle during the period of

suspension, provided the contractor submit his claim supported by details of the Sr. Engineer within 14 days of the expiry of the period of 30 days.

- (c) If the works or part thereof is suspended on the orders of the Sr. Engineer for more than three months at a time, except when suspension is ordered for reason (i) in sub-para (a) above, the contractor may after receipt of such order serve a written notice on the Sr. Engineer requiring permission within fifteen days from receipt by the Sr. Engineer or the said notice, to proceed with the works or part thereof in regard to which progress has been suspended and if such permission is not granted within that time, the contractor, if he intends to treat the suspension, where it affects only a part of the works as an omission of such part by BHEL, or where it affects the whole of the works, as an abandonment of the works by the BHEL shall within ten days of expiry of such period of 15 days, give notice in writing of his intention to Engineer-in-charge. In the event of Contractor treating the suspension as an abandonment of the contract by BHEL, he shall have no claim to payment of any compensation on account of any profit or advantage which he may have derived from the execution of the work in full but which he could not derive in consequence of the abandonment. He shall, however, be entitled to compensation, as the Sr. Engineer may consider reasonable, in respect of salaries and/or wages paid by him to his employees and labour at site, remaining idle in consequence and of materials collected which could not be utilized on the Works, provided the contractor submits his claim supported by the details to the Sr. Engineer within 28 days of the expiry of the period or 3 months.

62. PAYMENT FOR SUBSTITUTED OR ADDITIONAL ITEMS :

Any unforeseen additional work that may become necessary and is accordingly carried out under this agreement under proper written orders shall be measured and valued by the Senior Engineer or his representative at the rates contained in Schedule 'A'. If there is no rate in Schedule 'A' for any work ordered to be carried out by the Senior Engineer then the rates for the items of works will be fixed as follows and are binding on the contractor. A supplemental slips signed and dated by the contractor and the Senior Engineer (or the higher sanctioning authority as, the case may require) shall be entered and attached to the agreement.

- (i) For any items of work the execution of which is in substitution of an item contemplated and appearing in Schedule 'A' the rate shall be, the approved datum/standard schedule of rate of BHEL at the time of accepting the tender of the contractor plus/minus percentage variation of the original item to the approved datum/standard schedule of rate on BHEL as appearing in the comparative statement.
- (ii) For any other item of work, the rate shall be the approved datum/standard schedule of rate of BHEL, prevailing at the time of commencement of the work plus/minus the percentage variation of the total value of the work as awarded to the total estimated value, as appearing in the comparative statement.

63. NO PAYMENT FOR UNSANCTIONED EXTRAS :

It shall be distinctly understood that no payment whatever will be made to the contractor for variation by way of extras in cases where such variations have been made without the written sanction of the Senior Engineer.

64. ACCOUNTS, RECEIPTS AND VOUCHERS :

The contractor shall at any time, upon the request of the Senior Engineer, furnish him with all invoice, accounts, receipts and other vouchers that he may require in connection with the contract.

65. FRAUD, WILFUL NEGLIGENCE OR DEFAULT :

No final or other certificate of payment or of completion, or acceptance or settlement of accounts shall, in any circumstances relieve the contractor from his liability for any fraud or wilful neglect or default in the execution of the contract or any wilful or unauthorized deviations from the drawings, specifications, instructions and directions for the time being binding upon him.

66. UNFIXED MATERIALS :

The contractor may also be paid during the progress of the work 75% of the value of any materials which are in the opinion of the Sr. Engineer in accordance with the contract, and are actually required for incorporation in the

work and which have been brought on to the site in connection therewith and are adequately stored and/or protected against damage by weather or other causes; but which have not at the time of payment of the advances have been incorporated in the work. Payment of such advances however, shall be purely at the discretion of the Senior Engineer provided always that payment shall not be made under these periodical certificates in respect of perishable materials like, lime, cement, sand, etc. The payment shall be made upon production of an indemnity bond by the Contractor.

Any sums due from the contractor on account of tools and plans, stores any other items provided by Bharat Heavy Electricals Limited shall be deducted from the respective advances.

The Senior Engineer shall from time to time certify the sums payable to the Contractor after relating the reserves.

67. PAYMENT :

- (a) The quantity of work executed shall be measured and payments made ordinarily, monthly. These measurements are to be verified by the contractor before payment and in token of having verified and accepted the measurement, the contractor should sign at the end of measurements, recording as follows :

"I have verified on ----- the measurements recorded on page ---- of M.B. ----- and I accept the same as correct".

If any recording of measurements are not acceptable to the Contractor(s), he should make a note to that effect indicating also the date on which he has recorded the note. On the completion of the work or the termination of this agreement, final measurement will be made and the account adjusted accordingly.

- (b) The earnest money deposit by the contractor shall be retained as part of the Security for the fulfillment of the agreement.

1) Security Deposit

Security Deposit should be collected from the successful tenderer. The rate of Security Deposit will be as below.

Up to Rs.10 lakhs	10%
Above Rs.10 lakhs up to Rs.50 lakhs	Rs. 1 lakh + 7.5% of the amount exceeding Rs. 10 lakhs
Above Rs. 50 lakhs	Rs.4 lakhs + 5% of the amount exceeding Rs. 50 lakhs

The Security Deposit should be deposited before start of the work by the contractor.

2. Security Deposit may be furnished in any one of the following forms.

- i) Cash (as permissible under the Income Tax Act)
- ii) Pay Order, Demand Draft in favour of BHEL R&D.
- iii) Local cheques of schedule banks subject to realization.
- iv) Security available from Post Office such as National savings Certificate, Kissan Vikas Patras etc.(Certificate should be held in the name of contractor furnishing the security and duly pledge in favour of BHEL and discharged on the back.)
- v) Bank Guarantee from schedules Banks/Public Financial Institutions as defined in the Companies Act subject to a maximum of 50% of the total security deposit value. The balance 50% has to be remitted either by cash or in the other form of security. The Bank Guarantee format should have the approval of BHEL R&D.
- vi) Fixed Deposit Receipt issued by scheduled Banks/Public Financial Institutions as defined in the companies Act. The FDR should be in the name of contractor, A/c BHEL R&D, duly discharge on the back.
- vii) Security Deposit can also be recovered at the rate 10% from the running bills. However in such cases at least 50% of the security deposit should be deposited before start of the work and the balance 50% will be recovered from the running bills.

viii EMD of the successfully tender shall be converted and adjusted against the security deposit.

ix) The Security deposit shall not carry any interest.

Note: Acceptance of Security Deposit against Sl. No.(iv) and (vi) above will be adjusted to Hypothecation or endorsement on the documents in favour of BHEL R&D. However, BHEL R&D will not be liable or responsible in any manner for the collection of interest or renewal of the documents or in any other matter connected therewith.

2.2 Security Deposit shall not be refundable to the contractor except in accordance with the terms of the contract.

2.3 The head of Unit may waive the Security Deposit in respect of Public Sector Undertakings, particularly on a reciprocal basis.

On the completion of entire works the contractor will receive the final payment of all the moneys due or payable to him under or by virtue of the contract except the Deposits detailed above, provided there is no recovery from or forfeiture by the contractor to be made under Clause 59.

(c) REFUND OF SECURITY DEPOSIT:

50% of Security Deposit mentioned above may be refunded to the contractor in respect of all contracts on completion of work and after payment of final bill and the balance 50% on expiry of the defects and liability period referred to at Clause 22 herein before provided the contractor shall have rendered "No Demand Certificate" in case of works where maintenance period is not involved, 100% of the security deposit may be refunded after payment of final bill provided that the contractor shall have rendered a "No Demand Certificate".

68. INTEREST ON MONEY DUE TO THE CONTRACTOR :

No omission by the Senior Engineer to pay the amount due shall vitiate or make void the contract nor shall the contractor be entitled to interest upon any guarantee fund or payment in arrear nor upon any balance which may, on the final settlement or his accounts be found to be due to him.

69. ACCEPTANCE OF FINAL MEASUREMENTS :

The contractor agrees that before payment of the final bill shall be made on the contract, he will sign and deliver to the Senior Engineer either in the measurement book or otherwise as demanded, a valid release and discharge from any and all claims and demands whatsoever for all matters arising out of or connected with the contract as in the proforma given below;

"I have no claim and demand outstanding against Bharat Heavy Electricals Limited, Corporate Research & Development Division, Hyderabad - 500 093 for the work done or for labour or materials supplied or on any other account arising out of or connected with the contract except "Deposits" detailed in Clause 67 (b) and the payment of this bill shall be in final and full settlement of all my claims and demands in respect of the work to which Agreement No.----- dated ----- --relates".

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And also produce a valid certificate from the Income Tax authorities that all income tax payable by him up-to-date has been duly paid; provided that nothing in this clause shall discharge or release the contractor from his liabilities under the contract. It is further expressly agreed that the Senior Engineer, in supplying the final measurements certificate, need not be bound by the preceding measurements and payments. The final measurements, if any, of the Senior Engineer shall be final, conclusive and binding on the Contractor.

70. RECOVERY OF MONEY FROM CONTRACTOR IN CERTAIN CASES :

In every case in which provision is made of recovery of money from the contractor, BHEL shall be entitled to retain or deduct the amount thereof from any moneys that may be due or may become due to the contractor under these presents and/or under any other contract or contracts or any other account whatsoever. This includes

recovery of any sum becoming due as a result of post technical audit of works and bills. The contractor shall pay the claim on demand in the event of any sum not available with BHEL for recovery.

71. CONTRACTOR DYING, BECOMING INSOLVENT, INSANE OR IMPRISONED :

In the event of the death or insanity or insolvency or imprisonment of the contractor or where the contractor being a partnership or firm becomes dissolved or being a corporation goes into liquidation, voluntary or otherwise, the contractor may at the option of the Senior Engineer be terminated by notice in writing posted at the site of the works and advertised in one issue of local daily and all accepted and acceptable works shall forthwith be measured-up and paid for at the rates provided in the contract schedule where such apply or otherwise by the most recent schedule of rates of the Division approved by competent authority, to the person or persons received and give a discharge for the payment.

72. ARBITRATION :

All disputes between the parties to the contract arising out of or relating to the contract, other than those for which the decision of the Deputy Manager/Senior Engineer/Accepting Officer or of any other person is by the contract expressed to be final and conclusive shall after written notice by either party to the contract to the other part be referred to the sole arbitration of any officer of Bharat Heavy Electricals Limited, appointed as arbitrator by the ED/GM of Bharat Heavy Electricals Limited, Corporate Research & Development Division in his sole discretion.

Unless the parties otherwise agree, such reference shall not take place until after the completion of the works or after determination, abandonment or breach of the contract. The venue of arbitration shall be such places as may be fixed by the Arbitrator in his sole discretion. The Arbitrator as per CPWD procedure may from time to time with the consent of the parties enlarge the time for making and publishing the award.

The award of the Arbitrator shall be final, conclusive and binding on both parties to the contract.

73. ABILITY / EXECUTION :

The tenderers should be professionally qualified or they should undertake to employ required number of professionally qualified staff as determined by Senior Engineer of Bharat Heavy Electricals Limited. The tenderer should see that one of such technical staff is always at the site during working hours, personally checking all items of work and paying extra attention to such works as may deem special attention (e.g.) Structural Steel work, Reinforced Concrete works, etc. For the non- employment of the technical staff at any time during the period of execution and also before handing over the works to Bharat Heavy Electricals Limited, the contractor can be penalized, to the total of such penalty on one or more occasions not exceeding one percent of the contract value.

74. DISCLOSURE OF INFORMATION REGARDING RELATIVE :

Should a tenderer or a contractor on the list of approved contractors, have a relative or in the case of a firm or company of contractors, any of its shareholder's or share holder's relative employed in the Engineering Department of the Bharat Heavy Electricals Limited, the authority inviting tenders shall be informed of this fact at the time of submission of the tender, failing which, the tender may be disqualified, or if such fact subsequently comes to light, the contract may be rescinded in accordance with the relevant provisions in the General Conditions of Contract.

Date :

Witness :

Signature of the party
making the Tender :

Residence :

ACCEPTED BY ME :

**CORPORATE RESEARCH & DEVELOPMENT DIVISION,
BHARAT HEAVY ELECTRICALS LIMITED**

CONTRACT OR CONTRACTOR'S LABOR REGULATIONS (See Condition-43)

1. DEFINITION :

In these regulations, unless otherwise expressed or indicated, the following words and expressions shall have the meaning hereby assigned to them:

- (a) "Labour" means workers employed by a contractor directly or indirectly through a sub-contractor, or by an agent on his behalf on a payment not exceeding Rs.1,000/- per month.
- (b) "Fair Wage" means wages, which shall include wages for weekly day of rest and other allowances, whether for time and price work after taking into consideration prevailing market rates for similar employments in the neighborhood but shall not be less than the minimum rates of wages fixed under the Minimum Wages Act.
- (c) "Contractor" for the purpose of these Regulations shall include an agents or sub-contractor employing labour on the work taken on contract.
- (d) "Inspecting Officer" means any Labour Enforcement Officer, or Assistant Labour Commissioner of the Chief Labour Commissioners Organization:
- (e) "Form" means a form appended to these Regulations.

2. NOTICE OF COMMENCEMENT :

The contractor shall, within SEVEN days of commencement of the work, furnish in writing to the Inspecting Officer of the area concerned the following information with a copy to the Sr. Engineer-in-charge.

- (a) Name and situation of the work.
- (b) Contractor's Name and address.
- (c) Particulars of the Department for which the work is undertaken.
- (d) Name and address of sub-contractors as and when they are appointed.
- (e) Date of commencement and probable duration of the work:
- (f) Number of workers employed and likely to be employed.
- (g) 'Fair wages' for different categories of workers.

3. (i) Number of hours which shall constitute a normal working day:

The number of hours which shall constitute a normal working day for an adult shall be NINE hours. The working day of an adult worker shall be so arranged that inclusive of intervals, if any, for rest it shall not spread over more than twelve hours on any day. When an adult worker is made to work for more than NINE hours on any or for more than FORTY EIGHT hours in any week he shall in respect of overtime work, be paid wages at double the ordinary rate of wages.

(ii) Weekly day of rest: Every worker shall be given a weekly day of rest which shall be fixed and notified at least TEN days in advance. A worker shall not be required or allowed to on the weekly rest day unless he has or will have a substituted rest day, on one of the five days immediately before or after the said rest day. Provided that no substitution shall be made which will result in the worker working to more than ten days consecutively without a rest day for a whole day.

Where in accordance with the foregoing provisions a worker works on the rest day and has not been given a substituted rest day and he shall be paid wages for the work done on the weekly rest at the overtime of wages.

Note : The expression 'Ordinary Rate of Wages' means the fair wage the worker is entitled to.

4. DISPLAY OF NOTICE REGARDING WAGES, WEEKLY, DAY OF REST, ETC. :

The contractor shall before he commences his work on contract display and correctly maintain and continue to display and correctly maintain in a clean and legible condition in conspicuous places on the works, notice in English and in the local Indian languages spoken by majority of workers, giving the rate of fair wages, the hours of work for which such wages are payable the weekly rest day workers entitled to and name and address of the Inspecting Officers and shall send a copy each of such notices to the Inspecting Officers and the Senior Engineer/Engineer-in-charge.

5. FIXATION OF WAGE PERIODS :

The Contractor shall fix wage periods in respect of which wages shall be payable. No wage period shall normally exceed one week.

6. PAYMENT OF WAGE PERIODS :

- (i) Wages due to every worker shall be paid to him direct.
All wages shall be paid in current coins or currency or in both.
- (ii) Wages of every worker employed on the contract shall be paid where the wage period is one week, within THREE DAYS from the end of the wage period, and in any other case before the expiry of the 7th day or 10th day from the end of the wage period according as the number of workers does not exceed 1,000 or exceeds 1,000.
- (iii) When employment of any worker is terminated by or on behalf of the contractor, the wages earned by him shall be paid before the expiry of the day succeeding the one on which his employment is terminated.
- (iv) Payment of wages shall be made at the work site on a working day except when the work is completed before expiry of the wage period, in which case final payment shall be made at the work site within 48 hours of the last working day and during normal working time.

NOTE : The term "working day" means a day on which the work, on which labour is employed, is in progress.

7. REGISTER OF WORKMEN :

A register of workmen shall be maintained in the Form appended to these regulations and kept at the work site or as near to it as possible, and the relevant particulars of every workmen shall be entered therein within THREE days of his employment.

8. EMPLOYMENT CARD :

The Contractor shall issue an employment card in the form appended to these regulations to each worker on the day of work or entry into his employment. If a worker has already any such card with him issued by the previous employer the contractor shall merely endorse that employment card with relevant entries. On termination of employment, the Employment Card shall again be endorsed by the Contractor and returned to the worker.

9. REGISTER OF WAGES, ETC.:

- (i) A register of wages-cum-muster roll in the form appended to these regulations shall be maintained and kept at the work site or as near it as possible.
- (ii) A wage slip in the form appended to these regulations, shall be issued to every worker employed by the contractor at least a day prior to disbursement of wages.

10. FINES AND DEDUCTIONS WHICH MAY BE MADE FROM WAGES :

(i) Wages of worker shall be paid to him without any deductions of any kind except the following:

(a) Fines.

(b) Deduction absence from duty, i.e., from the place or the places where by the terms of his employment he is required to work. The amount of deduction shall be in proportion to the period for which he was absent.

(c) Deduction for damage to or loss of goods expressly entrusted to the employed person for custody, or for loss of money which he is required to account for where such damage or loss is directly attributable to his neglect or default.

(d) Deductions for recovery of advances or for adjustment of over-payment of wages. Advance granted shall be entered in a register.

and (e) Any other deduction which the Corporate Research & Development Division, Bharat Heavy Electricals Limited may from time to time allow.

(ii) No fine shall be imposed on any worker save in respect of such acts and commission on his part as have been approved by the Chief labour Commissioner.

(iii) No fine shall be imposed on a worker and no deductions for damage or loss shall be made from his wages until the worker has been given opportunity or following causes against such fines or deductions.

(iv) The total amount of fines which may be imposed in any one wage period on a worker shall not exceed an amount equal to three paise in a rupee of the wages payable to him in respect of that wage period.

(v) No fine imposed on a worker shall be recovered from him in installments or after expiry of sixty days from the date on which it was imposed. Every fine shall be deemed to have been imposed on the day of the act or omission in respect of which it was imposed.

(vi) The Contractor shall maintain both in English and the local Indian language a list, approved by the Chief Labour Commissioner, clearly stating the acts and omissions for which penalty or fine may be imposed on a workman and display it in good condition in a conspicuous place on the work site.

(vii) The Contractor shall maintain a register of fines and register of deductions for damage or loss in the forms appended to these regulations which should be kept at the place of work.

11. REGISTER OF ACCIDENTS :

The Contractor shall maintain a register of accidents in such form as may be convenient at the work place but the same shall include the following particulars :

(a) Full particulars of the labour who met with the accident.

(b) Rates of wages.

(c) Sex.

(d) Age.

(e) Nature of accident and cause of accident.

(f) Time and date of accident.

(g) Date and time when admitted in Hospital.

- (h) Date of discharge from the Hospital.
- (i) Period of treatment and result of treatment.
- (j) Percentage of loss of earning capacity and disability as assessed by Medical Officer.
- (k) Claim required to be paid under Workmen's Compensation Act.
- (l) Date of payment of Compensation.
- (m) Amount paid with details of the person to whom the same was paid.
- (n) Authority by whom the compensation was assessed.
- (o) Remarks.

12. PRESERVATION OF THE REGISTERS :

The Register of workmen and the Register of Wage-cum-Muster Roll required to be maintained under these Regulations shall be preserved for 3 year after the date on which the last entry is made therein.

13. ENFORCEMENT :

The Inspecting Officer shall either on his own motion or on a complaint received by him carry out investigations, and sane a report to the Senior Engineer/Engineer-in-charge specifying the amounts representing workers' dues and amount of penalty to be imposed on the Contractor for breach of these Regulations, that have to be recovered from the Contractor, indicating full details of the recoveries proposed and the reasons therefore. It shall be obligatory on the part of the Senior Engineer/Engineer-in-charge on receipt of such are port to deduct such amounts from payment due to the contractor.

14. DISPOSAL OF AMOUNTS RECOVERED FROM THE CONTRACTOR :

The Sr. Engineer/Engineer-in-charge shall arrange payment to workers concerned within FORTY FIVE days from receipt of a report from the Inspecting Officer except incases where the contractor had made an appeal under Regulation, 16 of these Regulations. In cases where there is an appeal, payment of worker's dues would be arranged by the Sr. Engineer/Engineer- in-charge, wherever such payments arise within THIRTY days from the date of receipt of the decision of the Regional Labour Commissioner (RLS).

15. WELFARE FUND :

All moneys that are recovered by the Sr. Engineer/ Engineer-in-charge by way of worker's dues which could not be disbursed to workers within the time limit prescribed above, due to reasons such as where about of workers not being known, death of a worker, etc., and also amounts recovered as penalty, shall be credited to be kept under the custody of Corporate Research & Development Division, Bharat Heavy Electricals Limited, Hyderabad - 500 093 for such benefit and welfare of workmen employed by Contractor.

16. APPEAL AGAINST DECISION OF INSPECTING OFFICER :

Any persons aggrieved by a decision of the Inspecting Officer may appeal against such decision, to the Regional Labour Commissioner concerned within THIRTY days from the date of the decision, forwarding simultaneously a copy of his appeal to the Sr. Engineer/ Engineer-in-charge the decision of the Regional Labour Commissioner shall be final and binding upon the contractor and the workmen.

17. REPRESENTATION OF PARTIES :

- (i) A workman shall be entitled to be represented in any investigation or enquiry under these regulations by an Officer of a registered trade union of which he is a member or by an Officer of a Federation of trade unions to which the said trade union is affiliated or where the workmen is not a member of any registered trade union, by an officer of a registered trade union, connected with, or any other workmen employed in, the worker is employed.

(ii) A Contractor shall be entitled to be represented in any investigation or enquiry under these Regulations by an officer of an association of contractor of which he is a member or by an officer of a Federation of associations of contractors to which the said association is affiliated or where the contractor is not a member of any association of contractors by an officer of an association of employers, connected with, or by any other employer engaged in the industry in which the contractor is engaged.

(iii) No party shall be entitled to be represented by a legal practitioner in any investigation or enquiry under these Regulations.

18. INSPECTION OF BOOKS AND OTHER DOCUMENTS :

The Contractor shall allow inspection of the Registers and other documents prescribed under these Regulations by Inspecting Officers and the Sr. Engineer/Engineer-in-charge or his authorized representative at any time and by the worker or his agent on receipt of due notice at a convenient time.

19. INTERPRETATION, ETC. :

On any question as to the application, interpretation or effect of these Regulations, the decision of the Chief Labour Commissioner or Deputy Chief Labour Commissioner (Central) shall be final and binding.

20. AMENDMENT OF :

These Labour Regulations are subject to the amendments that may be carried out by the Central/State Governments to any Act, Rules, etc., which govern these Labour Regulations.

The General Conditions of Contract contains Pages from 1 to 27.

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ACCEPTING OFFICER
