

TENDER

(TENDER No. TA/TCL/**40/19-20**)

FOR

**CONSTRUCTION OF RCC OVERHEAD
WATER STORAGE TANKS (2 NOS.) OF 450
KL CAPACITY EACH IN BHEL TOWNSHIP,
BHOPAL.**



**TOWNSHIP CIVIL MAINTENANCE
BHARAT HEAVY ELECTRICALS LIMITED
(A Government of India Undertaking)
BHOPAL – 462022 (M.P.)**

TENDER

(NIT NO. TA/TCL/40/19-20)

FOR

**CONSTRUCTION OF RCC OVERHEAD WATER
STORAGE TANKS (2 NOS.) OF 450 KL
CAPACITY EACH IN BHEL TOWNSHIP,
BHOPAL.**

TECHNICAL BID

**THIS PART IS TO BE FILLED IN WHEREVER
NECESSARY,**

**SIGNED WITH DATE AND WITH COMPANY SEAL AND
SUBMITTED AS PART – I OF THIS TENDER IN A SEPARATE
ENVELOPE MARKED AS TECHNICAL BID**



**TOWNSHIP CIVIL MAINTENANCE
DIVISION**

BHARAT HEAVY ELECTRICALS LIMITED

(A Government of India Undertaking)

BHOPAL – 462 022 (M.P)

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BHARAT HEAVY ELECTRICALS LIMITED, BHOPAL
(TOWNSHIP CIVIL MAINTENANCE& CONSTRUCTION DIVISION)
NOTICE INVITING TENDER

Township Civil Maintenance & Construction Division, BHEL Bhopal invites sealed bid in two part (**Part-I: Techno-commercial Bid; Part-II: Price Bid**) for following work from experienced and financially sound bidders who fulfil the qualifying criterion contained in the tender document:

NIT No & Date	TA/TCL/40/19-20 Dated 06.12.2019
1) Name of work	Construction of RCC Overhead Water Storage Tanks (2 Nos.) of 450 KL capacity each in BHEL Township, Bhopal.
2) Estimated Cost of Work	As per Schedule "A" (Excluding GST)
3) Completion Period	8 (Eight) Months Or Exhaustion of Contract amount, whichever is earlier.
4) Qualification Criteria	<p>(i). Technical/Work Experience criteria :- The bidder should have the experience of having successfully done similar work(s) against completed work order(s) during the last seven years ending last day of month previous to the one in which Tender shall be opened. The total value(s) of work(s) executed by the bidder against similar completed work order(s) for qualifying against this tender shall be either of the following:</p> <ul style="list-style-type: none"> ▪ Total executed value against one similar completed work order not less than Rs. 85.46 lakh, OR ▪ Total executed value against each of the two similar completed work orders not less than Rs. 53.41 lakh OR ▪ Total executed value against each of the three similar completed work orders not less than Rs. 42.73 lakh <p>Similar work(s) shall mean Construction of RCC overhead tank(s) of any type having a minimum staging of 12 meters.</p> <p>Note:- 1. Similar completed works order(s) as mentioned above shall mean completed work order(s) consisting exclusively of the above mentioned similar work(s) or consisting of civil work(s) of any type in addition to the above mentioned similar work(s). 2. The tenderer shall submit relevant documents such as copies of work order and work completion/experience certificate etc. in support of his experience along with the technical bid. Experience of work(s) done for private customer(s) shall not be considered under any circumstance.</p> <p>(ii). Turnover Criteria:- Average annual financial turn-over during the last three years ending 31st March, 2018 {i.e. 2015-16 (audited), 2016-17 (audited) & 2017-18 (audited) as applicable} shall be at least Rs 32.04 lakh (supporting documents shall be submitted by the tenderer in this regard).</p> <p>(iii). Bidder must possess PAN & GST Identification No. (as applicable). Copy of PAN card and GSTIN should be enclosed along with the offer.</p> <p>(iv). PF & ESI Nos. are a statutory requirement. It is, therefore, desirable that the tenderer submits them along with his techno-commercial bid. A tenderer may, however, be considered for</p>

	<p>qualification techno-commercially even if he is, already, not in possession of the same or if he does not submit them along with his techno-commercial bid.</p> <p>Such a tenderer, on becoming successful and upon award of work, shall, however, be required to mandatorily submit PF & ESI registration numbers within 15 days or some such period as specified by the department (as the case may be) after the date of issuance of Letter of Intent (LOI) but before deployment of labour to commence the work failing which penal action as deemed fit shall be taken by the department against the tenderer.</p> <p>Such a tenderer shall, in this regard, give an undertaking in writing along with his techno-commercial bid that he would submit PF & ESI registration numbers subsequent to award of work through LOI as desired by the department.</p> <p>In spite of the above said declaration/undertaking, if the tenderer fails to submit PF registration number and/or ESI registration number, penal action as deemed fit by the department shall be taken against such default by the tenderer.</p> <p>Note:-</p> <p>A. All the above mentioned criteria shall be met by the bidder himself and not by any associate bidder.</p> <p>B. The bidder is required to submit documentary evidence in support of each of the above qualifying criteria.</p>
5) Earnest Money	<p>Rs 2,13,660/- The EMD shall be accepted in any of the following modes:-</p> <p>(i) Electronic fund transfer credited in BHEL account (before tender opening). Fund transfer in e-mode shall be through NEFT/RTGS/Net-banking/POS/SB COLLECT etc. The online receipt shall be enclosed in techno-commercial bid. For NEFT/RTGS payment, refer bank details as per Annexure "X" of tender document. For SB Collect/Net Banking payment, follow the link mentioned at sr. no. 9(ii) of NIT sheet.</p> <p>(ii) Banker's Cheque/Pay order/Demand Draft in favour of BHEL (along with offer).</p> <p>(iii) Fixed Deposit Receipt (FDR) issued by scheduled banks/public financial institutions as defined in the Companies Act (FDR shall be in the name of contractor, a/c BHEL).</p> <p>In addition to the above, the EMD amount in excess of Rs 2.00 lakh may also be accepted in the form of Bank Guarantee from scheduled bank. The bank guarantee in such cases shall be valid for at least 6 months.</p> <p>NOTE:-Benefit under the public procurement policy for MSEs, Order 2012 in regard of EMD is not applicable in this tender.</p>
6) Tender cost	<p>Rs. 1000/- + GST extra @12% The Tender Cost shall be accepted only in e-Mode (NEFT/RTGS/Net-banking/POS/SB COLLECT etc.) The online receipt shall be enclosed along with the techno-commercial bid. For NEFT/RTGS payment, refer bank details as per Annexure "X". (Tender Cost is mandatory & non-returnable). For SB Collect/Net banking payment, follow the link mentioned at 9(ii) of this NIT.</p> <p>NOTE:-Benefit under the public procurement policy for MSEs, Order 2012 in regard of Tender cost is not applicable in this tender.</p>
7) Penalty Clause	As per clause 31 of General terms and conditions of tender.
8) Venue for submission & opening of tender	Office of DGM (TCL-PLG.), Hostel No. 4, Piplani, BHEL, Bhopal Ph no: - 2503215, 2505844.
9) Other information	<p>i) The Contractor has to obtain & submit the central labour license as per prevailing rules after award of the work/LOI.</p> <p>ii) "Online e-payment" facility through SB-collect is available on intranet as well as internet. This is for deposition of Tender Cost, Security deposit and Earnest money deposit by the participating tenderers.</p> <p>Following is the link:- http://www.bhelbpl.co.in/qcins/iccs.htm</p>

<p>[For first time user "Help Documents" is also available on page under which general information relating to procedure for depositing amount is available on page number 2 and 3. In addition to above for specific query related to type of deposit, demo with the template is also on respective page mentioned on page no 2 of the help documents.]</p> <p>iii) After issuance of LOI, the contractor shall complete all the required formalities of contract agreement in time as stipulated in LOI failing which penalty shall be imposed as per clause no. 10 of Special terms and condition of tender.</p>	
IMPORTANT DATES	
Due date & time of bid submission	On 26.12.2019; UPTO 03:30 PM
Due date & time of bid opening (Techno commercial Bid)	At 26.12.2019; 4:00 PM onward

NOTE:

1. For detail, refer tender documents.
2. Detailed tender documents can be obtained from the office of DGM (TCL-PLG.) or can be downloaded from website of BHEL (https://www.bhel.com/index.php/latest_tenders).
3. BHEL reserves the right to accept or reject any of the bid / all the bids or cancel or withdraw the invitation of tender without assigning any reason whatsoever and in such case no bidder/intending bidder shall have any claim arising out of such action by BHEL.
4. All corrigenda, corrections, amendments, time extensions, clarifications etc., to the tender notice will be hosted on BHEL website (www.bhel.com). Bidders should regularly visit website to keep themselves updated.
5. BHEL reserves the right to conduct Reverse Auction in place of sealed price bid opening for deciding L-1. For details of RA condition, refer tender document.

DGM (TCL-PLG.)

Hostel No 4, Sampada Bhavan

BHEL, Piplani, Bhopal-462022

Ph: 0755-2503215/2505844,

Email: dktaunk@bhel.in, atulahirwar@bhel.in

TECHNICAL BID

NIT No. TA/TCL/40/19-20

FOR

**CONSTRUCTION OF RCC OVERHEAD WATER
STORAGE TANKS (2 NOS.) OF 450 KL
CAPACITY EACH IN BHEL TOWNSHIP,
BHOPAL.**

SECTION – II

INSTRUCTIONS TO TENDERERS



**TOWNSHIP CIVIL MAINTENANCE
DIVISION**

BHARAT HEAVY ELECTRICALS LIMITED

(A Government of India Undertaking)
BHOPAL – 462 022 (M.P)



BHARAT HEAVY ELECTRICALS LIMITED: BHOPAL
TOWNSHIP CIVIL MAINTENANCE DIVISION

INSTRUCTIONS TO BIDDERS

NIT NO. TA/TCL/40/19-20

NAME OF WORK: - CONSTRUCTION OF RCC OVERHEAD WATER STORAGE TANKS (2 NOS.) OF 450 KL CAPACITY EACH IN BHEL TOWNSHIP, BHOPAL.

1.0 The bid is invited in two parts viz. Part-I: Techno-commercial Bid; Part-II: Price Bid.

1.1 Part-I (Techno-commercial) Bid : Techno-commercial bid should contain documents in the same order as listed below:

- 1.1.1** Covering letter as per Annexure "A"
- 1.1.2** Check List as per Annexure "B"
- 1.1.3** Tender Fee in the prescribed form as mentioned in NIT
- 1.1.4** EMD in the prescribed form as mentioned in NIT
- 1.1.5** No deviation certificate- Technical-ANNEXURE-H
- 1.1.6** No deviation certificate- Commercial-ANNEXURE-I
- 1.1.7** Certificate conforming knowledge about site conditions – ANNEXURE - J
- 1.1.8** This bid document, each page signed and stamped with all tables/Declaration forms/information sheets (Annexure A to Annexure J) duly filled in legible writing
- 1.1.9** Copy of work orders and completion certificates in support of past relevant work experience as per bidder Qualifying Criteria mentioned in NIT & Special Conditions of this tender document
- 1.1.10** Copy of duly audited balance sheet and Profit & Loss A/c of past three years ending **31st March 2018**.
- 1.1.11** Banker's certificate to prove bidder's financial strength to undertake the work duly indicating the financial limits the bidder enjoys.
- 1.1.12** An attested copy of the Power of Attorney, in case an individual other than the sole Proprietor signs the tender
- 1.1.13** Type of Firm with supporting documents
 - 1.1.13.1** IN CASE OF AN INDIVIDUAL: His full name, experience, address and nature of business.
 - 1.1.13.2** IN CASE OF PARTNERSHIP FIRMS: The names of all the partners with addresses and their experience. A copy of the partnership deed/ Instrument of Partnership duly certified by a Notary Public shall be enclosed.
 - 1.1.13.3** IN CASE OF COMPANIES: Date and place of registration including date of commencement certificate in case of public companies and the nature of business carried on by the Company. Certified copies of memorandum and Articles of Association are also to be furnished. Also indicate names, addresses and experience of the Directors.
- 1.1.14** Human Resource totally available with the bidder with organisation structure.
- 1.1.15** Photocopy of PAN card in which PAN is readable.
- 1.1.16** Copy of GSTIN.
- 1.1.17** Copy of Provident Fund Number issued by RPFC if already possessed by bidder.(as applicable)
- 1.1.18** Copy of ESI Registration Number if already possessed by bidder. (as applicable)

Note: -

- (i) Any deviation written elsewhere in the offer other than that in the document specified at Sl.No. 1.1.5 & 1.1.6 shall be treated as unread and shall not be considered for any purpose.
- (ii) The bidder should not give their price offer in Techno-commercial Bid. The techno-commercial bid containing price offer shall be rejected.

1.2 Part-II (Price) Bid: Price bid should contain only Price Offer to be submitted strictly as per enclosed Price Schedule. The Price Bid not submitted as per Price Schedule (placed under Section VI) may not be considered.

1.3 Part-I and Part-II Bids duly signed should be put in separately sealed envelopes and each envelopes must be marked clearly as Part-I



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Techno-commercial Bid or Part-II Price Bid as the case may be. NIT Number and bidder's name & address should also be clearly mentioned on these envelopes. These two envelopes must be put in a third bigger envelope and sealed properly. Top of the outer cover/envelop should contain following information :

- 1. NIT No. & Title of Work**
- 2. Bid Opening date & time**
- 3. Address/Venue of Bid Submission**
- 4. Bidder's Name & Address**

- 2.0** The tender shall be submitted on or before the time & date specified in NIT if tender is delivered in person should be dropped into tender box for works contract kept in the **Hostel No 4, Sampada Bhawan Ground Floor, BHEL, Piplani, Bhopal-462022** and if it is sent through post/ courier it should be addressed to :

DGM (TCL-PLG)

Hostel No 4 Sampada Bhawan Gr. Floor
BHEL, Piplani, Bhopal-462022

- 3.0** Tenders can be submitted personally or by courier/post. Tenders submitted by post shall be sent preferably as "REGISTERED POST ACKNOWLEDGEMENT DUE / SPEED POST" and shall be posted with due allowance for any postal delay. The tenders received after the due date and time of opening are liable to be rejected. Telegraphic offers and offers received by telex / fax will not be considered.

- 4.0** Tenders shall be opened by authorised officer of BHEL in the office of DGM (TCL-PLG.), Hostel No 4 Sampada Bhawan BHEL, Piplani Bhopal at the time and date specified in the Notice Inviting Tender in the presence of such of those tenderer or their authorised representatives who may like to be present. ***Tender offer envelope received in open/worn out condition will not be accepted. Price bids will be opened for those bidders who are found to qualify after scrutiny of techno-commercial bid part – I in case BHEL decides not to conduct RA.***

The tenderer shall closely peruse all the clauses, specifications and drawings indicated in the Tender Documents before quoting. The offers should be strictly in accordance with the tender specifications & General Instructions to the tenderer. Should the tenderer require any clarification on the tender specification, or is interested in offering any deviation from the tender specification, he shall contact the authority inviting the tender for clarification before submission of the tender atleast 3 days prior to the date of opening of tender. **No deviation w.r.t. terms & conditions of the tender are acceptable.**

- 5.0** If there are varying or conflicting provisions made in any of the documents forming part of the tender, the accepting authority shall be deciding authority with regard to the intension of the document.

- 6.0** Before submission of the bid, the bidder is advised to inspect the site of work and the environments and be acquainted with the actual working and other prevalent conditions, facilities available etc. and furnish the certificate as per enclosed Annexure "J". No claim will be entertained later on grounds of lack of knowledge.

- 7.0** Tenderer must fill up all the schedules and furnish all the required information as per the instructions given in various sections of the tender specification. **Each and every page of the Tender Specification along with Unpriced price schedule must be SIGNED, STAMPED AND SUBMITTED ALONG WITH THE TECHNO-COMMERCIAL OFFER by the tenderer in token of complete acceptance thereof.** The information furnished shall be complete in itself.



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- 8.0** The tenderer shall quote the rates in figures (international numerals to be used) as well as in words (English language to be used). If on check there are found to be differences between the rates given by the contractor in words and figures or in the amount worked out by him in the schedule of quantities and general summary, the same shall be adjusted in accordance with the following rules:
- In the event of a discrepancy between rates quoted in words and figures by tenderer, the rate quoted in words shall be taken as correct.
 - In the event of an error occurring in the amount column of Schedule of Quantities because of wrong extension of the unit rate and quantity, the unit rate shall be regarded as firm and extension shall be amended on the basis of the rate.
 - All errors in totalling in the amount column and in carrying forward totals shall be corrected.
- 9.0** In case of repetition of some items in different sections, the lowest rate quoted by the Contractor for such item of work in any section / sub-head of schedule of quantities shall be considered as the quoted rate for the item in all the different section/sub-head for payment.
- 10.0** In case the lowest tendered amount (estimated cost + amount worked on the basis of percentage above/below) of two or more contractors is same, such lowest contractors will be asked to submit sealed revised offer in the form of letter mentioning percentage above/below on estimated cost of tender including all sub sections/sub heads as the case may be, but the revised percentage quoted above/below on tendered cost or on each sub section/sub head should not be higher than the percentage quoted at the time of submission of tender. The lowest tender shall be decided on the basis of revised offers. In case any of such contractor refuses to submit revised offer, then it shall be presumed that the said party is not interested to work & their offer shall not be considered further for deciding L1. If the revised tendered amount of two or more contractors received in revised offer is again found to be equal, the lowest tender among such contractors, shall be decided by draw of lots in presence of finance representative, tendering authority & the lowest contractors those have quoted equal amount of their tenders.
- 11.0 All entries in the tender shall either be typed or be written in ink. Bid should be free from correction, overwriting, using corrective fluid etc. Any interlineation, cutting, erasure or overwriting shall be valid only if they are attested under full signature(s) of person(s) signing the bid. Else bid shall be liable for rejection.**
All overwirings/cuttings etc. will be numbered by bid opening officials and announced during bid opening.
- 12.0** Only tenderer who have previous experience in the work of the nature & description detailed in this tender specification are expected to quote for this work. Offer from tenderer who does not have a proven and established experience in the field is not likely to be considered.
- 13.0** The tenderer shall give full information in respect of the following: -
- 13.1** Permanent Account Number as allotted by the Income Tax Department.
 - 13.2** GSTIN.
 - 13.3** Financial viability as per proforma enclosed as per Annexure - 'C'.
 - 13.4** A statement giving particulars of the various services rendered / in progress for similar works by the tenderers indicating the particulars & value of each work, site location, duration, date of completion as per Annexure - 'D'.
 - 13.5** The human resource/manpower that are totally available with him, & that will be employed by the tenderer for this work in the form of month-wise &



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category-wise deployment plan duly indicating the no. of Engineers, Supervisors, skilled & unskilled workers etc. (Proforma at Annexure –'E' also to be filled).

- 13.6** A list of Tools & Tackles that the tenderer is having & those which will be deployed on this job as per proforma as per Annexure-'F'.
- 13.7** An attested copy of the Power of Attorney, in case an individual other than the sole Proprietor signs the tender.
- 13.8** Declaration sheet as per proforma at Annexure – 'G'.
- 13.9** Check list and schedule of general particulars, duly filled in, signed and stamped as per Annexure-'B'.
- 13.10** PF code number allotted by the Regional Provident Commissioner & ESI Number.

Note: - All the data required to be enclosed with the tender as per the requirements of this section need to be furnished neatly typed, signed and stamped in the given formats only & wherever necessary documentary proof also needs to be enclosed. In the absence of the above information the tender may be considered as incomplete and may lead to rejection.

- 14.0** The offer shall be kept open for acceptance for a period of **06 (Six) months** from the date of opening of techno-commercial offer. In case Bharat Heavy Electrical Limited calls for negotiations, such negotiations shall not amount to cancellation or withdrawal of the original offer, which shall be binding, on the tenderer. All expenses for attending such negotiations are to be born by the tenderer.
- 15.0** The acceptance of Tender will rest with BHEL which does not bind itself to accept the lowest tender or any tender and reserves to itself full rights to reject any or all the tenders without assigning any reason thereof and in such case no bidder shall have any claim arising out of such action by BHEL.
- 16.0** The Tenderers are required to quote for the complete scope of work with the lowest possible rate. The Tenderers quoting for part of the work or incomplete in any respect are likely to be rejected.
- 17.0** Conditional and unsigned tenders, tenders containing absurd or unworkable rates and amounts, tenders which are incomplete or otherwise considered defective and tenders not in accordance with the tender conditions, specifications, etc., are liable to be rejected.
- 18.0** If a tenderer expires after the submission of his tender or after the acceptance of his tender, BHEL may at its discretion, cancel such tender. If a partner of a firm expires after the submission of the tender or after the acceptance of the tender, BHEL may cancel such tender at its discretion unless the firm retains its character.
- 19.0** BHEL will not be bound by any Power of Attorney granted by the tenderer or by changes in the composition of the firm made subsequent to the execution of the contract. BHEL may, however, recognise such Power of attorney and changes after obtaining proper legal advice, the cost of which will be chargeable to the contractor concerned.
- 20.0** If the tenderer deliberately gives wrong information in his tender, BHEL reserves the right to reject such tender at any stage or to cancel the contract, if awarded and forfeit the Earnest Money / Security Deposit / any other moneys due.
- 21.0** Canvassing in any form in connection with the tender is strictly prohibited and the tenders submitted by the Contractor who resorts to canvassing are liable to be rejected.
- 22.0** Should a tenderer or, in the case of a firm or Company, its Partner(s) / major shareholder(s) / Director(s) have relation(s) employed in BHEL, the authority inviting



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tender shall be informed of the fact along with the offer. Otherwise, BHEL may, at its sole discretion, reject the tender or cancel the contract and forfeit the Earnest Money /Security Deposit.

- 23.0** BHEL reserves the right to accept or reject any of the bid / all bids with or without deviation or cancel / withdraw the invitation for bid without assigning any reason whatsoever and in such case no bidder shall have any claim arising out of such action by BHEL.
- 24.0** The successful tenderer should not sub-contract the part or complete work detailed in the tender specification without written permission of BHEL. The tenderer is solely responsible to BHEL for the work awarded to him.
- 25.0** Responsibility of authenticity of documents submitted by the tenderer lies totally with them. If at any stage it is found that any document submitted by them is not authentic then BHEL will take any action against the tenderer as deemed fit. The tenderer will be whole responsible for such resulting action.
- 26.0** BHEL reserves the right to go for Reverse Auction (RA) (Guidelines as available on www.bhel.com) instead of opening the sealed envelope price bid, submitted by the bidder. This will be decided after techno-commercial evaluation. **Bidders to give their acceptance with the offer for participation in RA. Non-acceptance to participate in RA may result in non-consideration of their bids, in case BHEL decides to go for RA.**

Those bidders who have given their acceptance to participate in Reverse Auction will have to necessarily submit 'Process compliance form' (to the designated service provider) as well as 'Online sealed bid' in the Reverse Auction. Non-submission of 'Process compliance form' or 'Online sealed bid' by the agreed bidder(s) will be considered as tampering of the tender process and will invite action by BHEL as per extant guidelines for suspension of business dealings with suppliers/ contractors (as available on www.bhel.com).

The bidders have to necessarily submit online sealed bid less than or equal to their envelope sealed price bid already submitted to BHEL along with the offer. The envelope sealed price bid of successful L1 bidder in RA, if conducted, shall also be opened after RA and the order will be placed on lower of the two bids (RA closing price & envelope sealed price) thus obtained. The bidder having submitted this offer specifically agrees to this condition and undertakes to execute the contract on thus awarded rates.

If it is found that L1 bidder has quoted higher in online sealed bid in comparison to envelope sealed bid for any item(s), the bidder will be issued a warning letter to this effect. However, if the same bidder again defaults on this count in any subsequent tender in the unit, it will be considered as fraud and will invite action by BHEL as per extant guidelines for suspension of business dealings with suppliers/ contractors (as available on www.bhel.com)."

As a reminder to the bidders, system will flash following message (in RED Color) during the course of 'online sealed bid':

"Bidders to submit online sealed bid less than or equal to their envelope sealed bid already submitted to BHEL"



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ANNEXURE "A"

OFFER OF THE CONTRACTOR

DGM (TCL-PLG.)

**Hostel No 4, SampadaBhawan
BHEL, Piplani, Bhopal-462022**

Dear Sir,

I/We hereby offer to carry out the work detailed in Tender Specification No. (NIT No.) **NIT NO. TA/TCL/40/19-20** issued by Bharat Heavy Electrical Limited BHOPAL in accordance with the terms and conditions thereof.

I/We have carefully perused the following listed documents connected with the above work and agree to abide by the same.

1. NIT
2. Instructions to Tenderers
3. General Terms and Conditions
4. Special Conditions
5. Technical Specifications
6. Price Schedule

I/We have deposited / forwarded here with the Tender Fee and Earnest Money deposit. Details of Tender Fee and EMD payment are furnished in the check list.

EMD shall be refunded should our offer not be accepted. Should our offer be accepted, I/We further agree to deposit the required amount of Security Deposit for the work as provided for in the tender specification with in the stipulated time as may be indicated by BHEL BHOPAL.

I/We further agree to obtain and submit Central Labour License as per prevailing rules after award of Work/LOI.

I/We further agree to execute all the works referred to in the said documents upon the terms and conditions contained or referred to there in and as detailed in the appendices annexed there to.

Signature of the Tenderer
Address

PLACE:
DATE:



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ANNEXURE – “B”

CHECKLIST & SCHEDULE OF GENERAL PARTICULARS

NOTE: - Bidder shall fill in the following details and no column should be left blank.

1.	Name & Address of the Bidder		
2.	Email Address		
3.	Contact Details	PhoneNo. (Office)	
		Mobile No	
		Fax No	
4.	Name & designation of the official of the tenderer to whom all the references shall be made		
5.	Bidder's proposal No. & date		
6.	Whether Tender Fee submitted. Please give details.		
7.	Whether EMD submitted. Please give details.		
8.	Validity of offer / rates quoted for six months from the date of opening of techno-commercial bid.	Yes / No	
9.	PAN No. as per clause no. 13.1 (Photocopy enclosed)	Yes / No (PAN NO. ----- ---)	
10.	P.F. Code No as per clause 13.10, (photocopy enclosed.)	Yes / No (PF NO. ----- ---)	
11.	ESI No. (photocopy enclosed)	Yes / No (ESI NO. ----- ----	
12.	GSTIN (photocopy enclosed)	Yes / No (GSTIN ----- -)	
13.	Financial status as per clause No.13.3 (in the format Annexure “C”)	Yes / No	
14.	Detail of experience as per clause No. 13.4(in the format Annexure “D”)	Yes / No	
15.	Format Annexure “E”	Yes / No	
16.	List of tools & tackles as per clause No.13.6 (in the format Annexure “F”)	Yes / No	
17.	Attested copy of power of attorney as per clause 13.7	Yes / No	
18.	Details about type of the firm with relevant supporting document	Yes / No	
19.	Declaration sheet as per clause 13.8 (in the format Annexure –“G”)	Yes / No	
20.	Whether signed copy of tender document submitted as per clause 7.0	Yes/No	
21.	No Deviation Filled (Technical) as per Annexure “H”	Yes / No	
22.	No Deviation Filled (Commercial) as per Annexure “I”	Yes / No	
23.	Certificate conforming knowledge about site condition as per Annexure “J”	Yes / No	
24.	Acceptance for participation in RA (Reverse Auction)	Yes / No	

Signature of Contractor

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Signature of BHEL official



BHARAT HEAVY ELECTRICALS LIMITED: BHOPAL
TOWNSHIP CIVIL MAINTENANCE DIVISION

INSTRUCTIONS TO BIDDERS

NIT NO. TA/TCL/40/19-20

ANNEXURE – “C”

FINANCIAL VIABILITY

- | | | | |
|----|--|-----------------------------------|-----------------------|
| 1. | Owner's capital in the business (in case of partnership, please mention percentage shares and amounts) | | Rs. |
| 2. | Quantum of business done during the last Three financial years | 2017-18
2016-17
2015-16 | Rs.
Rs.
Rs. |
| 3. | Value of fixed assets of the businesses in last three financial years | 2017-18

2016-17
2015-16 | Rs.

Rs.
Rs. |
| 4. | Guarantee limits (if any) enjoyed by the firm | | Rs. |
| 5. | Over draft limits (if any enjoyed by the firm) | | Rs. |
| 6. | Please enclose audited profit and loss account and balance sheet for last 3 years (indicate no. of sheets) | | |
| 7. | Certificate from Scheduled Bank to prove contractor's financial capacity to undertake the work duly indicating the financial limits the tenderer enjoys. | | |

Note:-

- 1. All the above documents should be duly certified by auditors / Bank as may be applicable.**

Name & signature of the bidder
(seal)



BHARAT HEAVY ELECTRICALS LIMITED: BHOPAL
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INSTRUCTIONS TO BIDDERS

NIT NO. TA/TCL/40/19-20

ANNEXURE – “D”

INFORMATION OF SIMILAR JOBS EXECUTED / IN PROGRESS IN PAST SEVEN YEARS

S.No.	Agency by whom awarded	Location of the Project	Particulars of the works awarded	Contract value	Date of completion

Note: Please enclose copy of work orders and completion certificates

Name & signature of the bidder

(Seal)



BHARAT HEAVY ELECTRICALS LIMITED: BHOPAL
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INSTRUCTIONS TO BIDDERS

NIT NO. TA/TCL/40/19-20

ANNEXURE – “E”

DECLARATION FOR DEPLOYMENT OF LABOURERS

I / We, (NAME OF THE FIRM)..... hereby
confirm that against this work bearing NIT No. dated that
maximum numbers of labourer shall be deployed by me/us on any day will be Nos.
during the contract period.

Name & signature of the bidder

(Seal)



BHARAT HEAVY ELECTRICALS LIMITED: BHOPAL
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INSTRUCTIONS TO BIDDERS

NIT NO. TA/TCL/40/19-20

ANNEXURE – “F”

LIST OF EQUIPMENTS

Sl. No.	Name of equipment	Quantity Owned	Quantity proposed to be deployed for this job

Name & Signature of the bidder
(Seal)

Signature of Contractor

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Signature of BHEL official



BHARAT HEAVY ELECTRICALS LIMITED: BHOPAL
TOWNSHIP CIVIL MAINTENANCE DIVISION

INSTRUCTIONS TO BIDDERS

NIT NO. TA/TCL/40/19-20

ANNEXURE – “G”

DECLARATION SHEET

I / We, (NAME OF THE FIRM)
..... hereby certify that, all the information and data furnished by me / us
with regard to this Tender Specification (NIT No.)
are true and complete to the best of my / our knowledge. I / We have gone through the
specification, conditions and stipulations in detail and agree to comply with the requirements
and intent of specification.

I / We, further certify that I / we am / are the duly authorised representative(s) of
the under mentioned tenderer and a valid power of attorney to this effect is also enclosed.

I / We, hereby declare that I / we shall treat the tender documents, drawings,
specifications and other records connected with the work as secret / confidential and shall
not communicate information / derived there from to any persons other than a person to
whom I / We am / are authorised to communicate the same or use the information in any
manner prejudicial to the safety of the same.

Tenderer's Name & Address:

Name & signature of the bidder
(Seal)



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INSTRUCTIONS TO BIDDERS

NIT NO. TA/TCL/40/19-20

ANNEXURE – “H”

CERTIFICATE OF NO-DEVIATION (TECHNICAL)

I/WE, M/s

HEREBY CERTIFY THAT NOTWITHSTANDING ANY CONTRARY INDICATIONS/ CONDITIONS ELSEWHERE IN OUR OFFER DOCUMENTS, I/WE HAVE NEITHER SET ANY TERMS AND CONDITIONS NOR THERE IS ANY DEVIATION TAKEN FROM THE CONDITIONS OF BHEL'S TENDER SPECIFICATIONS- TECHNICAL OTHER THAN MENTIONED BELOW AND I/WE AGREE TO ALL OTHER TERMS AND CONDITIONS MENTIONED IN BHEL'S TENDER SPECIFICATION- TECHNICAL WITH ASSOCIATED AMENDMENTS AND CLARIFICATIONS:

S.N.	Tender Spec. Ref doc.	Clause Reference	Clause description as appearing in tender document	Deviation
1.0				
2.0				
3.0				
4.0				
5.0				
6.0				
7.0				

SIGNATURE OF THE BIDDER WITH SEAL



BHARAT HEAVY ELECTRICALS LIMITED: BHOPAL
TOWNSHIP CIVIL MAINTENANCE DIVISION
INSTRUCTIONS TO BIDDERS
NIT NO. TA/TCL/40/19-20

ANNEXURE – "I"

CERTIFICATE OF NO-DEVIATION (COMMERCIAL)

I/WE, M/s

HEREBY CERTIFY THAT NOTWITHSTANDING ANY CONTRARY INDICATIONS/ CONDITIONS ELSEWHERE IN OUR OFFER DOCUMENTS, I/WE HAVE NEITHER SET ANY TERMS AND CONDITIONS NOR THERE IS ANY DEVIATION TAKEN FROM THE CONDITIONS OF BHEL'S TENDER SPECIFICATIONS-COMMERCIAL OTHER THAN WHAT ARE MENTIONED BELOW AND I/WE AGREE TO ALL OTHER TERMS AND CONDITIONS MENTIONED IN BHEL'S TENDER SPECIFICATION-COMMERCIAL WITH ASSOCIATED AMENDMENTS AND CLARIFICATIONS:

S.N.	Tender Spec. Ref doc.	Clause Reference	Clause description as appearing in tender document	Deviation
1.0				
2.0				
3.0				
4.0				
5.0				
6.0				
7.0				

SIGNATURE OF THE BIDDER WITH SEAL



**BHARAT HEAVY ELECTRICALS LIMITED: BHOPAL
TOWNSHIP CIVIL MAINTENANCE DIVISION**

INSTRUCTIONS TO BIDDERS

NIT NO. TA/TCL/40/19-20

ANNEXURE – “J”

**CERTIFICATE CONFIRMING KNOWLEDGE
ABOUT SITE CONDITION**

REFERENCE: NIT NO. TA/TCL/40/19-20

We, M/S

Hereby declare and confirm that we have visited the project site, in BHEL Bhopal referred in Tender Specification under reference above and acquired full knowledge and information about the site conditions.

We further confirm that the above information is true and correct and we shall not be eligible for any additional payment of any nature on account of lack of knowledge or non-familiarization of site conditions.

SIGNATURE OF THE BIDDER WITH SEAL

TECHNICAL BID

No. TA/TCL/40/19-20

FOR

**CONSTRUCTION OF RCC OVERHEAD
WATER STORAGE TANKS (2 NOS.) OF
450 KL CAPACITY EACH IN BHEL
TOWNSHIP, BHOPAL.**

SECTION – III

GENERAL TERMS AND CONDITIONS



**TOWNSHIP CIVIL MAINTENANCE DIVISION
BHARAT HEAVY ELECTRICALS LIMITED**

**(A Government of India Undertaking)
BHOPAL – 462 022 (M.P)**



BHARAT HEAVY ELECTRICALS LIMITED: BHOPAL
TOWNSHIP CIVIL MAINTENANCE DIVISION

GENERAL TERMS & CONDITIONS

NIT NO. TA/TCL/40/19-20

NAME OF WORK:- CONSTRUCTION OF RCC OVERHEAD WATER STORAGE TANKS (2 NOS.) OF 450 KL CAPACITY EACH IN BHEL TOWNSHIP, BHOPAL.

1.0 DEFINITIONS:-

The following terms and expressions shall have the meaning hereby assigned to them except where the context otherwise requires.

- 1.1 'Company/Corporation'** shall mean "**BHEL**" which stands for Bharat Heavy Electricals Limited, a Company registered under the Indian Companies Act, 1956 with its Registered Office at BHEL House, Siri Fort, New Delhi, Pin-110049 through its office at Piplani, Bhopal – 462022 or its authorised Officers or its Engineers or other employees authorised to deal with any matters with which these persons are concerned on its behalf.
- 1.2 'CONTRACTOR'** shall mean the individual, firm or Company who enters into contract with BHEL for providing the services as per this Tender and shall include their legal representative, administrators, successors and permitted assigns.
- 1.3 'CONTRACT' or 'CONTRACT DOCUMENT'** shall mean and include the Notice inviting tender, the agreement, the work order, the accepted appendices of rates, schedules of quantities, if any, General Terms & Conditions of the Contract, Special Conditions of the contract, Instructions to Tenderers, drawings, technical specifications, the special specifications, if any, & the Letter of Intent / acceptance letter issued by BHEL. Any conditions or terms stipulated by the tenderer in the tender documents or subsequent letters shall not form part of the contract unless specifically accepted in writing by BHEL in the letter of intent and incorporated in the Work Order.
- 1.4 'TENDER DOCUMENTS'** shall mean the NIT, Instructions to Tenderers, General Conditions of Contract, Special Conditions, Price Schedule and Technical Specifications and drawing if any.
- 1.5 'LETTER OF INTENT'** shall mean the intimation by a letter / telegram / fax to the tenderer that the tender has been accepted in accordance with provision contained in that letter. The responsibility of the contractor commences from the date of issue of this letter and all the terms and conditions of contract are applicable from this date.
- 1.6 'COMPLETION TIME'** shall mean the period specified in the Letter of Intent or date mutually agreed upon for completing the work / services stipulated in the work order to the satisfaction of the Engineer being of required standard and conforming to the specifications of the contract.
- 1.7 'TESTS'** shall mean and include such test or tests to be carried out by the contractor as are prescribed in the contract or considered necessary by BHEL in order to ascertain the quality, workmanship, performance and efficiency of the contracted work or part thereof.



**BHARAT HEAVY ELECTRICALS LIMITED: BHOPAL
TOWNSHIP CIVIL MAINTENANCE DIVISION**

GENERAL TERMS & CONDITIONS

NIT NO. TA/TCL/40/19-20

- 1.8 'APPROVED, DIRECTED or INSTRUCTED'** shall mean approved, directed or instructed by BHEL Engineer / Site Engineer / Project- in-charge/ Engineer-in-Charge.
- 1.9 'WORK' or 'CONTRACT WORK'** shall mean and include the work to be done by the Contractor as specified in the Tender documents.
- 1.10 A "Day"** shall mean a day of 24 hours from midnight to midnight irrespective of the number of hours worked in that day.
- 1.11 "Engineer-in-charge"** shall mean the Engineering officer appointed by the undertaking or his duly authorised representative who shall direct, supervise and be in charge of the works for purposes of this contract.
- 1.12 "Expected Risks"** 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 usurped power, any acts of Government, damage from aircraft, acts of god, such as earthquake lightening 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 se or occupation by the company/corporation of the part of works in respect of which a certification has been issued or a cause solely due to company's/corporation faulty design of works.
- 1.13 "Market Rate"** shall be the rate as decided by the Engineer-in-charge on the basis of the cost of materials and labour at the site where the work is to be executed plus overheads and profit. (As per CPWD Norms).
- 1.14 Schedule(s)** referred to in these conditions shall mean the relevant schedule(s) annexed to the tender papers issued by the company/corporation or the standard schedule of rates prescribed by the company/corporation and the amendments there to issue from time to time.
- 1.15 The "Site"** shall mean the lands and/or other places on, under, in or through which the work is to be executed under the contract including any other lands or places which may be allotted by the company/corporation or used for the purposes of the contract.
- 1.16 "Temporary works"** shall mean all temporary works of every kind required in or about the execution, completion or maintenance of the works.
- 1.17 "Urgent works"** shall mean any urgent measures which, in the opinion of the Engineer-in-Charge, become necessary during the progress of the works to obviate any risk of accident or failure or which become necessary for security.



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GENERAL TERMS & CONDITIONS

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1.18 A "Week" shall mean seven days without regard to the number of hours worked in any day in that week.

1.19 The "Works" shall mean the works to be executed in accordance with the contract or part(s) there of as the case may be and shall include all extra or additional, altered or substituted works or temporary and urgent works as required for performance of the contract.

2.0 Law Governing the Contract and Court of Jurisdiction.

The contract shall be governed by the law for the time being in force in the Republic of India. The Civil Court at Bhopal shall alone have exclusive jurisdiction in regard to all claims in respect of this Contract.

3.0 Secrecy of Tender Documents

The tenderer shall give an undertaking under the official secret Act for maintaining secrecy of the tender documents, drawings or other records connected with the work given to him. None of these documents shall be used by the contractor for any purpose other than that of this contract. The unsuccessful tenderer shall return all the drawings / documents given to them.

4.0 Works to be carried out

The work to be carried out under the Contract shall, except as otherwise provided in these conditions, include all labour, materials, tools, plants, equipment and transport which may be required in preparation of and for and in the full and entire execution and completion of the works. The descriptions given in the Schedule of Quantities (Schedule-A) shall, unless otherwise stated, be held to include wastage on materials, carriage and cartage, carrying and return of empties, hoisting, setting, fitting and fixing in position and all other labours necessary in and for the full and entire execution and completion of the work as aforesaid in accordance with good practice and recognized principles.

5.0 Sufficiency of Tender

The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the rates and prices quoted in the Schedule of Quantities, which rates and prices shall, except as otherwise provided, cover all his obligations under the Contract and all matters and things necessary for the proper completion and maintenance of the works.



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TOWNSHIP CIVIL MAINTENANCE DIVISION**

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**6.0 Discrepancies
And Adjustment
of
Errors**

- i. The several documents forming the Contract are to be taken as mutually explanatory of one another, detailed drawings being followed in preference to small scale drawing and figured dimensions in preference to scale and special conditions in preference to General Conditions.
- ii. In case of any conflicting provisions/discrepancy given in different sections of the tender following shall be the order of preference forming the basis for arriving at a conclusion :
 - a) Description in schedule of quantities of Price Schedule
 - b) Technical Specifications
 - c) Special Conditions if any
 - d) General terms & conditions
- iii. If there are varying or conflicting provisions made in any one document forming part of the contract, the Accepting Authority shall be the deciding authority with regard to the intention of the document and his decision shall be final and binding on the contractor.
- iv. Any error in description, quantity or rate in Schedule of Quantities or any omission there from shall not vitiate the Contract or release the Contractor from the execution of the whole or any part of the works comprised therein according to drawings and specifications or from any of his obligations under the contract.



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CLAUSES OF CONTRACT

CLAUSE 1

EARNEST MONEY

- (1) Every tender must be accompanied by the prescribed amount of Earnest Money Deposit in full. EMD shall be accepted only in any of the following modes:-
 - (i) Electronic fund transfer credited in BHEL account (before tender opening). Fund transfer in e-mode shall be through NEFT/RTGS/Net-banking/POS/SB COLLECT etc. The online receipt shall be enclosed in techno-commercial bid. For NEFT/RTGS payment, refer bank details as per Annexure "X" of tender document. For SB Collect/Net Banking payment, follow the link mentioned at sr. no. 9(ii) of NIT sheet.
 - (ii) Banker's Cheque/Pay order/Demand Draft in favour of BHEL (along with offer).
 - (iii) Fixed Deposit Receipt (FDR) issued by scheduled banks/public financial institutions as defined in the Companies Act (FDR shall be in the name of contractor, a/c BHEL).
In addition to the above, the EMD amount in excess of Rs 2.00 lakh may also be accepted in the form of Bank Guarantee from scheduled bank. The bank guarantee in such cases shall be valid for at least 6 months.
Tenders received without Earnest Money in full or not in the manner prescribed above will not be considered.
- (2) The Earnest Money Deposit of the successful tenderer will be retained towards part of Security Deposit.
- (3) In the case of unsuccessful tenderer, the Earnest Money will be refunded after finalisation of the tender and acceptance of award of work by successful bidder.
- (4) BHEL reserves the right of forfeiture of Earnest Money Deposit if:
 - a) After opening the tender, the tenderer revokes his tender within the validity period or increases his earlier quoted rates.
 - b) The tenderer Fails to submit 50% of the total security deposit before start of work if so warranted.
 - c) The tenderer does not commence the work within the period as per LOI/ Contract. In case the LOI/contract is silent in this regard, it will be within 15 days after award of work.

CLAUSE 1A

ONE TIME EMD

For SAS jobs, other than R&M jobs, the maximum value of EMD as well as one time EMD in a Unit (for exemption from payment of EMD with each such tender in that unit) will be five lakhs.

CLAUSE 2

SECURITY DEPOSIT

- i) Upon acceptance of tender, the successful tenderer must deposit the required amount of security deposit, after adjusting the amount of Earnest Money duly deposited with the Tender, within the time specified in the letter of intent for satisfactory completion of work.
- ii) The total amount of Security Deposit will be 5% of the contract value. EMD of the successful tenderer shall be converted and adjusted towards the required amount of Security Deposit.
- iii) The security deposit, calculated as above shall be deposited within 15 days from the date of issue of letter of intent but before the start of work in any one of the following forms.



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- E-Mode (NEFT/RTGS/Net-banking/POS/SB COLLECT etc.) For NEFT/RTGS payment, refer bank details as per Annexure "X".
- Securities available from Post offices such as National Savings Certificates, KisanVikasPatras etc. (Certificates should be held in the name of Contractor furnishing the security and duly endorsed/ hypothecated/ pledged, as applicable, in favour of BHEL and discharged on the back).
- Bank Guarantee from Scheduled Banks/Public Financial Institutions as defined in the companies Act. The bank Guarantee format should be in the prescribed proforma as per **ANNEXURE "B". The Bank Guarantee should be from any one of our consortium bank as per list enclosed at Annexure "C".**
- Fixed Deposit Receipt issued by Scheduled Banks/Public Financial Institutions as defined in the companies Act. The FDR should be in the name of the contractor, A/C BHEL, duly discharged on the back.
- Security Deposit can also be recovered at the rate of 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% may be recovered from the running bills if contract value exceeds Rs 20.00 lakhs.

In case of small value contracts not exceeding Rs 20.00 lakhs, work can be started before the required security deposit is collected. However, payment can be released after collection/recovery of security deposit as per prevailing rule/practice.

- iv) Validity of the Bank Guarantee furnished towards Security Deposit under clause 2 (iii) above, shall be valid up to the period of completion of work as stipulated in the Letter of Intent plus 03 (three) months claim period and the same will be kept valid by proper renewal till the satisfactory completion of the Warrantee/Defect Liability period.
- v) If the value of the work done at any time exceeds the accepted Contract value, the Security Deposit shall be correspondingly enhanced and the extra Security Deposit shall be immediately deposited by the Contractor otherwise it shall be recovered from payments due to him. Failure to deposit the Security Deposit within the stipulated time may lead to forfeiture of Earnest Money and cancellation of the award of work. BHEL reserves the right of forfeiture of Security Deposit in addition to other claims and penalties in the event of the Contractor's failure to fulfil any of the contractual obligations or in the event of termination of contract as per terms and conditions of contract. BHEL reserves the right to set off the Security Deposit, against any claims of any other contracts with BHEL.
- vi) In case a Fixed Deposit Receipt of any bank is furnished by the Contractor to BHEL as part of the Security deposit and the bank goes into liquidation or for any other reason is unable to make payment against the said Fixed Deposit Receipt, the loss caused thereby shall be borne by the Contractor and the Contractor shall forthwith or on demand furnish additional security to BHEL to make good the deficit.



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CLAUSE 3

RETURN OF SECURITY DEPOSIT

If the contractor fully performs and completes the works in all respects to the entire satisfaction of BHEL and presents an absolute "No Demand Certificate" in the prescribed form and returns properties belonging to BHEL taken, borrowed or hired by him for carrying out the said works, half the amount of Security Deposit will be released along with final bill to the contractor after deducting all costs, expenses and other amounts that are to be paid to BHEL under this or other contracts entered into with the Contractor. Balance half of the amount of security deposits will be released only after the defect liability period is over. In case contractors wants refund of total security money deposited by him along with final bill, the contractor will have to submit a BG of an amount equivalent to 50% of the total security deposit at the time of final bill with validity up to the expiry of Warrantee period + 3 months claim period.

CLAUSE 4

SIGNING OF AGREEMENT

After issuance of LOI, the Contractor shall have to complete all the required formalities & will be required to sign a contract with BHEL on Non-judicial stamp paper as per Annexure - "A" in time as stipulated in LOI. The cost towards agreement shall be borne by the contractor.

CLAUSE 5

SUB-LETTING OF CONTRACT

The contractor shall not sublet any portion of the contract without the prior written approval of the Accepting authority. In case of subletting with due written approval of accepting authority the contractor shall not be relieved from any obligation, duty or responsibility under the contract.

CLAUSE 6

COMMENCEMENT & COMPLETION OF WORK

- i. The contractor shall commence the work within the time indicated in the Letter of Intent/WO and shall proceed with the same with due expedition without delay. No mobilisation charges of any kind are payable.
- ii. At the time of mobilisation of work at site, the contractor is required to submit the Copies of following documents to site Engineer for verification:
 - (a) BG as per contract.
 - (b) Contract Agreement
 - (c) Indemnity Bond
 - (d) Valid Test Certificates for the Plant & Machinery being deployed at site.
 - (e) Valid Insurance Policy covering third party liability, workmen compensation & tool & tackles brought to site.
 - (f) Proper Labour Licence.
 - (g) Work force deployment schedule for posting to site.
 - (h) Detail work schedule (L-3 network)
- iii. If the successful tenderer fails to commence the work within the stipulated time, BHEL at its sole discretion will have the right to cancel the contract.
- iv. The Earnest money and / or Security Deposit will stand forfeited without any further reference to the Contractor without prejudice to any of BHEL's other rights and remedies in this regard.



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GENERAL TERMS & CONDITIONS

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- v. All the works shall be carried out under the direction and to the satisfaction of BHEL. The work executed under the contract, shall be taken over by BHEL when it has been completed in all respects & site is made clear.

CLAUSE 7

WORK EXECUTION & SCHEDULE

- i. The Contractor is responsible for the correct execution of the work in accordance with the scopes/drawings provided to him. The levels, measures and other information concerning the existing site as shown on the drawings or as described are supposed to be correct but the contractor shall verify them for himself and no extra claim, whatsoever shall be entertained on account of any discrepancy or omission in such matters or on account of the description turning out to be different from what was expected.
- ii. In case the contractor requires any clarifications, conditions, drawings etc., the Engineer-In-charge shall be contacted.
- iii. The contractor will be required to submit detail work schedule before start of work, and he shall submit a Bar chart/PERT Chart/CPM to the Engineer-in-charge indicating how the contractor proposes to complete the work within the stipulated time as per the contract. This Bar Chart/PERT Chart/CPM should clearly indicate the various activities in the proper sequence of construction. Once this programme of construction has been submitted by the contractor and approved by the Engineer-in-charge, the contractor shall follow the detailed work schedule, organise labour / material to suit the completion period of work & abide by the approved construction programme with the progress indicated in the chart. The detailed work schedule shall be organised to suit the completion period of work within the shutdown given by the customer.
- iv. The work under the contract will be deemed to be completed in all respect, only upon the approval of work completion certificate by BHEL. The contractor shall obtain no dues from concerned BHEL department.
- v. On final completion of work the contractor shall submit the construction completion certificate, and obtain approval from BHEL.
- vi. The entire schedule as approved shall be strictly followed by contractor. If for any reason beyond the control of the contractor the work is held up, then the contractor shall bring it to the notice of BHEL.
- vii. Any delay in completion of work or non-achievement of periodical targets due to reasons attributable to the contractor, will have to be compensated by the contractor either by increased manpower and resources or by working extra hours or more than one shift at no extra cost to BHEL.
- viii. Contractor shall not stop work or abandon the site for what so ever reason or dispute, excepting for force majeure conditions. All problems/dispute shall be separately discussed and settled without affecting the progress of work, stoppage or abandonment of work, other than under force majeure conditions, shall be treated as breach of contract and dealt with accordingly.
- ix. The contractor shall not claim any compensation due to reduction in the scope of work due to changes in design, which curtail the quantum of work.

CLAUSE 8

DRAWINGS & DOCUMENTS

- i) The drawings mentioned in this specification and issued during the execution of work, shall supplement the requirements specified and form part of the same. Only three copies of each will be provided to contractor during the execution of work.



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GENERAL TERMS & CONDITIONS

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- ii) Out of three (3) set of drawings furnished to the contractor, the contractor shall return one (1) complete set of as built drawings, prior to handing over, with all approved modifications during installation, duly marked in red, neatly, clearly and accurately.
- iii) Drawings enclosed with the tender, are only indicative about documents shall define the nature of work. Work shall be executed as per the latest revision of drawings issued later on. This may require additions or deletions to the original scope of work.
- iv) Change of scope of work shall be documented as follows:-
 - a) Revision of drawings
 - b) Revision of technical specification.
 - c) Design concession report.
 - d) Written instruction by the Engineer.

CLAUSE 9

METHOD OF WORKMANSHIP

- i) All work shall be performed in a first class, neat and good workmanship manner by technical staff skilled in the trade involved.
- ii) The construction/erection shall be carried out in such a manner as to preserve access to other facilities already in place.
- iii) In case there is no specification laid down in the contract for a class of work, such work shall be carried out in accordance with the instructions and requirements of the Engineer.
- iv) The contractor shall execute the work in the most professional manner in the stipulated time. Accuracy of work and timely execution shall be the essence of this contract. The contractor shall be responsible to ensure that the quality, assembly and workmanship conform to the dimensions and clearance given in the drawings and / or as per the instructions of the Engineer.

CLAUSE 10

INTEREST CHARGES

No interest shall be payable by BHEL on Earnest Money, Security Deposit/or on any moneys due to the Contractor by BHEL.

CLAUSE 11

PROGRESS REPORT & FIELD OFFICE RECORD

- i. The contractor shall prepare and submit weekly progress report/charts, manpower deployment, material receipt report and such other reports as required by the engineer for the monitoring and smooth progress of work. Progress report should explicitly indicate progress achieved against the targets, reasons for delay and action plan to compensate for such delay.
- ii. The contractor shall maintain records pertaining to the quality of work and inspection and testing compliance with all technical requirements. Where safety of work is involved the contractor shall submit written procedure to the Engineer.

CLAUSE 12

MEASUREMENT OF WORK

- i) Before taking any measurement of any work, the Engineer- in-charge or a subordinate deputed by him shall give reasonable notice to the contractor. If the contractor fails to attend at the measurements after such notice or fails to countersign or to record the



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difference within a week from the date of measurement in the manner required by the Engineer-in-Charge then in such event the measurements taken by the Engineer-in-Charge or by the subordinate deputed by him shall be final and binding on the contractor and the contractor shall have no right to dispute the same.

- ii) For progressive/running bill payments, the contractor shall present detailed measurement sheets, in duplicate, duly indicating all relevant details based on technical documents and connected drawings for work done during the month/ period under different categories in line with terms of payment as per letter of intent. The basis of arriving at the quantities/ weight shall be the relevant documents and drawings released by BHEL. These measurement sheets shall be prepared jointly with Engineer and signed by both the parties.
- iii) These measurement sheets will be checked by the Engineer and quantities and percentage eligible for payment under different groups shall be decided by him. The abstract of quantities and percentage so arrived at based on the terms of payment shall be entered in the measurement book and signed by both the parties.
- iv) Based on the above quantities the contractor shall prepare the bills in the prescribed proforma and work out the financial value. These will be entered in the Measurement Book and signed by both the parties. Payment shall be made by BHEL after affecting the recoveries due from the contractor.
- v) All recoveries due from the contractor for the month / period shall be effected in full from corresponding running bills unless specific approval from competent authority is obtained to the contrary.
- vi) Measurement shall be restricted to that quantity for which it is required to ascertain the financial liability of BHEL under this contract.
- vii) Measurements shall be taken jointly by persons duly authorised by BHEL and the contractor. Passing of bills covered by such measurement does not amount to acceptance of the completion of the work measured by BHEL. Any left out work has to be completed by the contractor, as directed.
- viii) Final measurement bill shall be prepared in the proforma prescribed for the purpose, based on the certificate issued by the Engineer that the entire work as stipulated in the tender specification has been completed in all respect to the entire satisfaction of BHEL. The contractor shall give unqualified 'NO CLAIM AND NO DEMAND CERTIFICATES'. All the tools and tackles loaned to him should be returned in satisfactory condition to BHEL. The abstract of final quantities and financial values shall also be entered in the Measurement Book and signed by both parties. The final bill shall be paid within a reasonable time after the completion of the work.

CLAUSE 13

PAYMENT OF RUNNING/INTERIM BILLS

- i) Contractors shall present the bill within reasonable time. Bill pertaining to period more than three months old shall not be cleared by CLC. Such bills shall require special approval of competent authority for clearance. Bills more than 06 months old will be cleared after bringing the same to the notice of Head of the Unit.
- ii) Running bills/final bill shall be supported with copies of wage sheets, PF as well as ESI challans in addition to other formats as per BHEL's standard practice.



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iii) Payment of running bills shall be made within 60 days from the date of submission of bills (by the contractor) duly verified by Site Engineer.

CLAUSE 14

PAYMENT OF FINAL BILL

- i) It will be sole responsibility of the contractor to submit final bill in time, not exceeding three months from the date of completion of work. The bill submitted after three months from the completion of work shall be treated as late bill.
- ii) The final bill shall be submitted by the contractor in the same manner as specified in interim bills within three months of physical completion of the work or within one month of the date of the final certificate of completion furnished by the Engineer-in-Charge whichever is earlier. No further claims shall be made by the contractor after submission of the final bill and these shall be deemed to have been waived and extinguished. Payments of those items of the bill in respect of which there is no dispute and of items in dispute, for quantities and rates as approved by Engineer-in-Charge, will, as far as possible be made within the period specified hereinunder, the period being reckoned from the date of receipt of the bill by the Engineer-in-Charge or his authorized Asstt. Engineer, complete with account of materials issued by the Department and dismantled materials.
 - a) If the Tendered value of work is up to Rs. 15 lac : 3 months.
 - b) If the Tendered value of work exceeds Rs. 15 lac : 6 months.

CLAUSE 15

OVERPAYMENTS & UNDERPAYMENTS

- i) Whenever any claim for the payment of a sum of money to the Company/Corporation arises out of or under this Contract against the Contractor the same may be deducted by the Company/Corporation from any sum then due or which at any time thereafter may become due to the Contractor under this Contract and failing that under any other Contract with the Company/Corporation or from any other sum due to the Contractor from the Company/Corporation (which may be available with the company/Corporation) or from his security deposit, or he shall pay the claim on demand.
- ii) The Company/Corporation reserve the right to carry out post-payment audit and technical examination of the final bill including all supporting, vouchers, abstrates, etc. the Company/Corporation further reserve the right to enforce recovery of any overpayment when detected, notwithstanding the fact that the amount of the final bill be included by one of the parties as an item of dispute before an arbitrator appointed under Condition vide clause 41 of this Contract and notwithstanding the fact that the amount of the final bill figures in the arbitration award.
- iii) If as a result of such audit and technical examination any overpayment is discovered in respect of any work done by the Contractor or alleged to have been done by him under the Contract, it shall be recovered by the Company/Corporation from the Contractor by any or all of the methods prescribed above or if any underpayment is discovered the amount shall be duly paid to the Contractor by the Company/Corporation.
- iv) Provided that the aforesaid right of the Company/Corporation to adjust overpayments against amounts due to the Contractor under any other Contract with the Company/Corporation shall not extend beyond the period of two years from the date of payment of the final bill or in case the Final bill is a MINUS bill, from the date amount payable by the Contractor under the MINUS final bill is communicated to the Contractor.
- v) Any amount due to the Contractor under this Contract for underpayment may be adjusted against any amount then due or which may at any time thereafter become due before



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payment is made to the Contractor, from him to the Company/Corporation on any other Contractor or account whatsoever.

CLAUSE 16

RIGHTS OF BHEL

BHEL reserves to itself the following rights in respect of this Contract without entitling the Contractor to any compensation as below:

CLAUSE 16A

**CARRYING OUT PART/FULL WORK
AT RISK & COST OF CONTRACTOR**

To withdraw any portion of work and / or to restrict / alter quantum of work as indicated in the contract during the progress of work and get it done through another agency and / or by the departmental staff at the risk and cost of Contractor, in the event of Contractor not starting the work in time, poor progress of work, inability to get the work done completion of Contract, poor quality of work, persistent disregard of instructions of BHEL, assignment transfer, or subletting of the contracted work without written permission of BHEL, non-fulfilment of any contractual obligations etc. and to claim / recover compensation for such losses from the contractor including BHEL's supervision charges and overheads from Security Deposit / other dues in addition to any other action that may be taken.

CLAUSE 16B

TERMINATION OF CONTRACT

To terminate the contract after due notice and forfeit the Security Deposit and recover the loss sustained in getting the balance work done through other agencies at contractor's risk & cost in addition to liquidated damages in the event of following after giving a show cause notice with notice period of 15 days:

- i. Contractor's continued poor progress. Withdrawal from or abandonment of the work before completion of the work.
- ii. Corrupt act of the contractor.
- iii. Insolvency of the contractor. Persistence disregard of the instructions of BHEL. Assignment, transfer, subletting of the contract work without BHEL's written permission. Non-fulfilment of any contractual obligations or obligations under the law.

CLAUSE 16C

RECOVERY/ PENALTY

- i) To recover any money due from the Contractor from out of any money due to the Contractor under this or any other Contract or from the Security Deposit.
- ii) To claim penalty or compensation for losses sustained including BHEL's supervision charges and overheads in case of termination of contract and/or to levy liquidated damages for delay in completion of work.
- iii) To effect recoveries from any amounts due to the contractor under this or any other contract or in any other from the moneys which BHEL is forced to pay to anybody due to contractors failure to fulfil any of his obligations.



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- iv) To deploy BHEL's skilled and/ or semi-skilled workmen in case of emergency / poor progress / deficiency in skill on the part of the employees of the contractor and to recover the expenditure on account of the same from the money due to the contractor.

CLAUSE 16D

RESTRICT OR INCREASE THE WORK

- i) To restrict or increase the quantum of work to suit site requirements, since the tender specification is based on preliminary documents and quantities furnished therein are indicative and approximate. The rates quoted shall not be subjected to revision by the contractor in such case.
- ii) While every endeavour will be made by BHEL to this end, BHEL cannot guarantee uninterrupted work due to conditions beyond its control. The contractor will not be entitled to any compensation/ extra payment/overrun on this account.
- iii) In the event of any dispute of technical nature, the decision of BHEL Engineer shall be final and binding on the Contractor.

CLAUSE 17

SUSPENSION OF WORK & FORE CLOSURE OF CONTRACT

- i. BHEL reserves the right to suspend and restart execution of the contract without invalidating the provisions of the contract. Orders for suspension or restart of the contract will be issued by BHEL to the contractor in writing. If the suspension is on account of safety of the work or for reasons other than default of contractor then the contractor shall be entitled to an extension of time equal to the period of every such suspension plus 25%. No price variation or any additional claim/compensation on this account shall be admitted. If the suspension is on account of default on the part of the contractor no time extension or compensation shall be permitted.
- ii. If at any time after acceptance of tender BHEL decides to abandon or reduce the scope of work for any reason whatsoever the Engineer-in-Charge shall give notice in writing to that effect to the contractor & the contractor shall have no claim to any payment of compensation or otherwise whatsoever on account of any profit or advantage which he might have derived from the execution of the work in full but which he did not derive in consequence of foreclosure of the whole or part of the works. In the event of such foreclosure after acceptance of tender the contractor shall be paid at contract rates full amount of works executed at site & in addition a reasonable amount as certified by the Engineer-in-Charge for the items mentioned below which could not be utilized on the works in the full extent because of Foreclosure.
- (a) Any Expenditure incurred on site infrastructure work/enabling works.
- (b) Any Expenditure incurred on materials meant for incorporation in the work lying unutilized which the contractor does not desire to retain. The cost of such materials shall however take into account purchase price, cost of transportation & deterioration which may have been caused to material whilst in the custody of contractor.
- (c) For Contractors material not retained by BHEL reasonable cost of transportation of such materials from site to contractors permanent store or to his other works whichever is less shall be payable.
- (d) Reasonable compensation for transfer of T & P from site to contractors permanent store or to his other works whichever is less shall be payable to the contractor.



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- (e) In case of foreclosure all surplus material issued to the contractor either free of charge or on chargeable basis & lying at site shall be returned by the contractor to BHEL after proper reconciliation taking into account normal wastage & allowance for any deterioration/damage as may be permitted.

CLAUSE 18

EXTENSION FOR DELAY

If the works be delayed due to

- a) Force majeure or
- b) Delay on the part of the other contractors or tradesmen engaged by the BHEL in executing work not forming part of the contract, or
- c) Any other cause which, in the absolute discretion of BHEL is beyond the contractor's control then upon the happening of any such event cause delay, the contractor shall immediately give notice thereof in writing but shall nevertheless use constantly his best endeavours to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of BHEL to proceed with the work.

Requests for extension of time, to be eligible for consideration shall be made by contractor in writing within fifteen days of the happening of the event causing delay. The contractor may also, if practicable, indicate in such a request the period for which extension is desired, the working plan for remaining work.

In any such case Engineer-in-charge, BHEL or any other officer authorized by BHEL may give a fair and reasonable extension of time for completion of the work. Such extension (Grant/Denial) shall be communicated to the contractor by the Engineer-in-charge in writing, within 3 (three) month of the date of receipt of such request by the Engineer-in-charge.

CLAUSE 19

FORCE MAJEURE

- a) The following shall amount to force majeure conditions: Acts of God, act of any Government, War, sabotage, riots, civil commotion, police action, revolution, flood, fire, cyclone, earthquake, abnormally bad weather and epidemic and other similar causes over which the Contractor has no control.
- b) If the Contractor suffers delay in the execution of the Contract, due to delay caused by force majeure conditions, as defined above, the agreed time for completion of the work covered by this contract shall be extended by a period of time equal to the period of the delay, provided the Contractor immediately reports to BHEL in writing the causes for the delay. The Contractor shall not be eligible for any compensation on account of any extension in time of completion given to Contractor due to force majeure conditions.

CLAUSE 20

INSURANCE

- a) It shall be the sole responsibility of the contractor to get insured the property, materials, machineries, tools & tackles etc. belonging to him.
- b) It shall be the sole responsibility of the contractor to insure his workmen against risks of accidents and injury while at work as required by the relevant rules and to pay compensation, if any, to them as per Workmen's Compensation Act. The work will be carried out in a BHEL Township area and all the Rules and Regulations which are in force from time to time shall be followed by the contractor.



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- c) If due to contractor's carelessness, negligence and / or non-observance of safety and other precautions, any accident / injury occurs to other persons / public, damage to BHEL's property and/or personnel occurs, and if BHEL is unable to recover in full its claim from the Insurance Company, the deficit will be recovered from the contractor. The contractor shall be responsible for necessary compensation and other expenses in full, if so decided by the appropriate authority.
- c) It shall be the responsibility of the contractor to provide security arrangements for the equipment/materials belonging to BHEL & handed over to the contractor for use in the work till these are incorporated in the work & accepted by BHEL or are returned to BHEL Stores.

CLAUSE 21

**REJECTION OF BID DUE TO
UNSATISFACTORY PERFORMANCE IN THE PAST**

The bid of the contractor may be rejected due to unsatisfactory performance in the past at any of the BHEL units, any other PSU or Govt. Organisation.

CLAUSE 22

EXTRA/ADDITIONAL ITEMS OF WORK:

- (i) Any NEW ITEM of work which is not contained in the price schedule enclosed in the tender but found essential during execution of the contract for satisfactory completion of the total work then it will come under the ambit of Extra Item of Work. In case such extra item is executed the rate for the same shall be determined in the following ways and in the same priority:
- (a) In case such extra item is contained in CPWD DSR 2012, the rate of such item shall be same as given in DSR 2012 with percentage above/below as quoted by the successful bidder against the price schedule annexure based on DSR 2012.
- (b) In case determination of rate of extra item is not possible by manner described above, the rate for extra item shall be derived on prevailing market rates and on actual basis by observing the consumption of materials (with allowable wastage as per standard practice), deployment of labours and other incidentals with 15% as contractor's premium and over heads. For this purpose the contractor has to maintain and produce proper record duly certified by the BHEL Engineer. Decision of BHEL in this regard shall be final and binding on the contractor.
- (ii) The contractor on receipt of drawings from BHEL shall inform within 15 days item to be executed as extra / additional item of work. The contractor shall also submit rate of such items as derived by the method at 9.1 (a) or (b) as may be applicable.
- (iii) Under no circumstances the contractor shall suspend the work on the plea of non-settlement of rates falling under the clause or claim any compensation on that account.
- (iv) BHEL reserves the right to carry out such extra/additional items of work through any other contractor or in such a manner as he considered advisable.

CLAUSE 23

TERMINATION OF CONTRACT ON DEATH OF CONTRACTOR



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Without prejudice to any of the rights or remedies under this contract, if the contractor dies, the Engineer-in-Charge on behalf of the BHEL shall have the option of terminating the contract without compensation to the contractor.

CLAUSE 24

INSPECTION & APPROVAL

- i. All works embracing more than one process shall be subject to examination and approval at each stage thereof and the Contractor shall give due notice to the Engineer-in-charge or his authorized representative when each stage is ready. In default of such notice, the Engineer-in-charge shall be entitled to appraise the quality and extent thereof.
- ii. No work shall be covered up or put out of view without the approval of the Engineer-in-Charge or his authorised representative and the Contractor shall afford full opportunity for examination and measurement of any work which is about to be covered up or put out of view and for examination of foundations before permanent work is placed thereon. The contractor shall give due notice to the Engineer-in-charge or his authorized representative whenever any such work or foundation is ready for examination and the Engineer-in-charge or his representative shall without unreasonable delay, unless he considers it unnecessary and advises the Contractor accordingly, attend for the purpose of examining and measuring such work or of examining such foundations. In the event of the failure of the Contractor's to give such notice he shall if required by the Engineer-in-charge, uncover such work at the Contractor's expense.
- iii. Company or Corporation officers concerned with the Contract shall have powers at any time to inspect and examine any part of the works and the Contractor shall give such facilities as may be required for such inspection and examination.

CLAUSE 25

REMOVAL OF WORKMEN

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

CLAUSE 26

LAND OF BHEL

- i) Land belonging to BHEL shall not be occupied by the contractor without the written permission of BHEL.
- ii) **PERMANENT BENCH MARKS:-** Where ever directed by the Engineer, the contractor shall provide permanent bench marks. Likewise any other levels or lines or points specifically required by the Engineer shall be built in. The contractor shall carefully protect and preserve such important mark during execution of the work.

CLAUSE 27

CONTRACTOR TO KEEP SITE CLEAN

The contractor shall keep the area of work clean and shall remove the debris etc. while executing day-to day work. Upon completion of work, the contractor shall remove from the vicinity of work, all scrap, packing materials, rubbish, unused and other materials and deposit them in places specified by the Engineer. The Contractor shall also demolish the entire hutment's sheds, offices, etc. constructed and used by him and shall clean the



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debris. In the event of his failure to do so, the same will be arranged to be done by the Engineer and the expenses for the same shall be recovered from the contractor.

CLAUSE 28

CONTRACT QUALITY ASSURANCE AND QUALITY PLAN

- i. The contractor shall submit a quality assurance program containing the quality management and procedures that are proposed to be followed in the performance of the works during various phases. The quality assurance programs to be followed for the execution of the contract will be mutually discussed and agreed.
- ii. Within an agreed scheduled period after the LOI, the contractor shall submit a quality plan, detailing out the specific quality control procedure to be adopted for controlling the quality characteristics relevant to major activities to be undertaken. BHEL will approve the plan identifying the hold points for inspection. During the inspection, in case the materials are rejected, it shall be the responsibility of the contractor to furnish approved materials & removal of rejected material. The contractor shall be fully responsible for the proper execution of all quality plans and shall also perform all quality control activities, inspection and tests agreed with BHEL to demonstrate full compliance with the specification requirements. BHEL shall witness test/inspection, etc. as per the hold points indicated in the quality plans. Records of all field/Lab tests shall be furnished by the contractor as & when asked for by BHEL. All the records should be kept by the contractor in safe custody and should be handed over to BHEL upon completion of Project. Test on material samples (if required) shall be carried out at places approved by BHEL & at the expense of Contractor.
- iii. **SITE TESTING OF MATERIALS** - For the tests carried out by the contractor at site, the contractor shall install testing equipment at site and shall ensure and certify the calibration of the equipment so installed and shall maintain the same in working order throughout the period of construction. The contractor shall also provide the necessary trained staff for carrying out such tests and using such equipment. List of equipment's with range shall be submitted by the bidder.

CLAUSE 29

RESPONSIBILITY FOR CORRECTNESS & QUALITY OF WORK

- i) The Contractor shall be fully responsible for correctness & quality of his work to the entire satisfaction of BHEL. The work shall be executed in accordance with the directions, instructions, drawings and specification. If during the progress of work or supply of material, BHEL notifies in writing to the contractor that the contractor has constructed unsound or imperfect, or has supplied any material inferior in quality to that specified, the contractor on receiving details of such defects or deficiency, shall at his own expenses, within such time as may be reasonably necessary for the purpose, alter, reconstruct or remove such work or part of work supply fresh materials as per standard specification and in case the contractor shall fail to do so, BHEL may on giving the contractor thirty days' notice in writing of his intention to do so, proceed to alter, reconstruct or remove such work or part of work at the contractor's cost provided that nothing in this clause shall be deemed to deprive BHEL or affect any rights which he may otherwise have in respect of such defect or deficiencies and provided that such replacement shall be carried out by BHEL within a reasonable time and at a reasonable price and as far as possible, to the same specification and under competitive conditions. If the completed work or any portion taken over is found to be defective or fails to fulfil the requirement of the contract, the engineer shall forthwith give the contractor notice setting forth particulars of defects or failure and the contractor shall make the defects good, or alter the same to make it comply with the requirements of contract. If the



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contractor fails to do so, within a reasonable time, BHEL may reject and replace at the cost of the contractor, the whole or any portion of the work, as the case may be, which is defective or fails to fulfil the requirement of the contract. In case of such replacement by BHEL, contractor shall be liable to pay to BHEL the extra cost, if any of such replacement delivered and / or erected as provided for in the original contract. Such extra cost and the damages being the ascertained difference between the prices paid by BHEL, under the provision above mentioned for such replacement and the contract price for the work so replaced and also to repay any sum paid by BHEL to the contractor in respect of such defective work.

- ii) If in the opinion of the contractor any work is insufficiently specified or required modifications, the Contractor shall refer the same in writing to the Engineer and obtain his instruction / approval in writing before proceeding with the work. If contractor fails to refer such instance, any excuse for faulty erection, for poor workmanship or delay in completion shall not be entertained.

CLAUSE 30

DEFECT LIABILITY PERIOD/WARRANTY

- i) **The warranty period/Defect Liability Period for the work executed shall be for a period as mentioned in relevant clause of Special Terms & Conditions from the completion of total work envisaged under the scope.**
- ii) In case of any deficiencies in the erection/ workmanship, which is detected before the expiry of the warranty period, the contractor on notification by BHEL shall rectify or remedy the defects at his own cost and provisions of this clause shall apply to the portions of the plant so replaced or renewed until the expiration of 6 months from the date of such replacement or renewal or the expiration of the original warranty period whichever is later. The repairs of the defective work shall be done by the contractor within a reasonable time to be decided mutually with the BHEL. If any defects be not remedied within a reasonable time, BHEL may proceed to do the work after giving 30 days' notice to the contractor at the reasonable price and debit the cost to the contractor, but without prejudice to any other rights which BHEL may have against the contractor in respect of such defects. The new warranty after repairs shall be for 6 months from the date of commissioning or original warranty whichever is later.
- iii) During warranty period the contractor shall be liable to repair, rectify or replace any defects that may develop in the works executed by them or their sub contractors arising from faulty workmanship. The contractor's obligation against the above clause shall be limited at contractor's option to replace or repair at contractors works or at site. All charges to remedy the defects shall be borne by the contractor.
- iv) The acceptance of the work by the engineer shall in no way relieve the contractor of his obligation under this clause.
- v) For Faithful performance during warranty period security money as mentioned under Security Deposit & return of Security Deposit Clauses under GTC shall be retain upto the expiry of Warranty period plus 3 months claim period.

CLAUSE 31

PENALTY FOR DELAY

The total work under scope is to be completed within the contractual completion time. Required shutdown, site availability, clearances, approval, drawings free issue materials and other inputs in the scope of BHEL shall be made available to the contractor in time by BHEL. Delay in completion that may take place beyond contractual schedule OR any extension thereof for the reasons attributable to the contractor, shall be subjected to imposition of penalty as mentioned below subject to a maximum ceiling of 10% of the total contract value. GST on penalty shall be charged extra.



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If originally stipulated contract period is upto 6 months - @ 1% of the total contract value per week of delay or part thereof.

If originally stipulated contract period is more than 6 months but less than or equal to 2 years - @ 0.5% of the total contract value per week of delay or part thereof.

If originally stipulated contract period is more than 2 years - @ 0.25% of the total contract value per week of delay or part thereof.

Total contract value for this purpose, shall be the final executed value exclusive of ORC (Over run compensation), Extra works executed on Manday rate basis, Supplementary/Additional items and PVC.

CLAUSE 32

**STATUTORY COMPLIANCES TO
BE ENSURED BY THE CONTRACTOR**

- a)** Statutory Compliances are necessary. ***Non Compliances of statutory provisions may lead to cancellation of tender/blacklisting of contractor.*** The Contractor shall comply with all local, state and central laws, statutory rules, Regulations, etc, such as: the payment of wages Act, the Minimum Wages Act, The Workmen's Compensation Act, The Employer's Liability Act, The Industrial Disputes Act, The Employees Provident Fund Act, Employees State Insurance Scheme, The Contract labour (Regulations and Abolition) Act, 1970, Factory Act 1948, Maternity Benefit Act 1961, Equal Emolument Act 1976, M.P. ShramKalyanNidhiAdhiniyam 1982, Payment of Bonus Act 1963, Inter State Migrant Act and other Acts, Rules and Regulations for labour as may be enacted by the Government during the tender of the Contract and having force or jurisdiction at site. The contractor will be required to seek registration, if required, as per local laws. The contractor shall give to the local governing body, police and other concerned project site authorities all such notice (s) as may be required under law.
- b)** The Contractor, in the event of the Contract engaging 20 or more workmen, shall obtain independent license under the Contract Labour (Regulations and Abolition) Act, 1970 from the concerned authorities based on the certificate (Form V) issued by the Principal employer / customer.
- c)** The contractor shall produce the following Registers and forms before commencement of work, verification by the Executing Officer of the company. These are mandatory.
- | | | |
|-------------|--|-------------------------|
| Form XIII - | Register of workmen employed by contractor | (Rule 75). |
| Form XIV - | Employment card issued by contractor | (Rule 76). |
| Form XVI - | Muster Roll (Rule 78 (1) (a) (i)). | |
| Form XVII - | Register of Wages (Rule 78 (1) (a) (i)). | |
| Form XVII - | Register of wages - cum Muster Roll (in case of weekly payment). | |
| Form XIX - | Wage slip (Rule 78 (b)). | |
| Form XX - | Register of deduction for damages or loss | (Rule 78 (1) (a) (ii)). |
| Form XXI - | Register for fines (Rule 78 (1) (a) (ii)). | |
| Form XXII - | Register of advances (Rule 78 (1) (a) (ii)). | |



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Form XXIII- Register of overtime (Rule 78 (1) (a) (iii)).

Form XXIV- Register to be sent by the contractor to licensing Officer (Rule 82) (1).

The contractor shall maintain the above neatly, completely and legibly for inspection by various statutory authorities and the company officials even at short notice.

- d)** The contractor shall pay all taxes, fees, license charges which may be him or otherwise as deemed fit.
- e)** The contractor shall make all arrangements and shall also meet all expenses in connection with his workmen's qualification / re-qualification test(s) etc at site.
- f)** The contractor shall pay all taxes, fees, license charges which may be him or otherwise as deemed fit.
- g)** The contractor shall make all arrangements and shall also meet all expenses in connection with his workmen's qualification / re-qualification test(s) etc at site.
- h)** All safety rules and codes are applicable to work shall be followed without any exception.
- i)** The contractor shall arrange to provide guards and prominently display caution notices, in unsafe and hazardous area.
- j)** The contractor shall be responsible for the provision of health and sanitary arrangements as described in the contract labour Regulations and Abolition Act, 1970.
- k)** The contractor shall be responsible for safety precautions as may be required for safe and satisfactory execution of the contract.
- l)** All safety rules and codes applied by BHEL shall be observed by the contractor and his workmen without exception. The contractor shall be responsible for the safety of the equipment/material and work to be performed by him and shall maintain all lights, fencing guards, signs etc. or other protections necessary for the purpose. Contractor shall also take such additional precautions as may be indicated from time to time by the Engineer, with a few to prevent pilferage, accidents, fire hazards etc. Suitable number of clerical staff watches and ward staff & storekeepers to take care of equipment, material, construction tools and tackles shall be posted at site by the contractor till the completion of the work. The contractor shall arrange for such safety devices as are necessary for this type of work and carryout the requisite site test of handling equipment, lifting tools, tackles etc. as per usual standards and practices.
- m)** The contractor shall make his own arrangement for proper accommodation including adequate medical facilities for the personnel employed by him.
- n)** The contractor will be directly responsible for payment of wages to his workmen. A payroll sheet giving details of all payments made to the workmen duly signed by the contractor's representative be furnished to BHEL for record purpose.
- o)** No idle labour charges will be admissible in the event of any stoppage of work resulting in the contractor's workmen being rendered idle due to any reason at any time.
- p)** The contractor shall furnish fortnightly labour deployment report indicating the classification and number of workmen engaged, date-wise and category-wise. Besides, the contractor shall also furnish progress reports on work at regular intervals as required by the Engineer. The contractor should maintain an Attendance Register against each work order in respect of the contract labourers deployed by him in that department. The contractor shall record the daily attendance of the workers. The register shall bear the



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daily signature of contract workers & contractor. The register shall at all the times of work, be available at the place of work/deptt. Attendance register shall be maintained in the format of Form No XVI as per CL (R&A) Central rules 1971 and available on CLC web page. If during any inspection, the attendance register is not found at the place of work, the contract is liable to be short closed/ terminated.

- q)** The contractor should maintain a Wage Register against each work order in respect of the contract labourers deployed by him in that department. Wage Register shall be maintained in the format of Form No. XVII/XVIII as per CL (R&A) Central Rules 1971 and available on CLC web page. The Wage Register shall be based on the Attendance Register as mentioned above. The Contractor shall issue Wage Slip to each contract worker, every month on the last day of the wage month. Wage slip shall be as per the CLC format available at CLC Web page. The Contractor shall pay wages not later than 7th of the succeeding month. The Wage Register shall bear the PF and ESI nos. of the workers."
- r)** The Contractor shall file the electronic return of PF/ ESI and submit proof of payment of both the employer's and employees' contributions every month. (PF has to be remitted by 15th and ESI by 21st of the succeeding month.) Contractor shall submit the challan along with copy of a self-certified list of contract workers (bearing their names and PF/ESI no. and deductions made) for whom the contribution has been submitted by him for the said period. Such list shall be displayed in the notice board of the department.
- s)** In the first month of the execution of work order the contractor shall provide uniform, shoes & helmet to his workers and provide an undertaking on this regard to the department and the first bill shall be processed only on the production of the undertaking. In case of non-compliance beyond second month the contractor shall be issued notice of termination of contract.
- t)** The contractor has to ensure that the people deployed by them restrict their movement in the area earmarked for the project. For movement in area other than earmarked for project prior permission of BHEL Engineer is required. The contractor shall abide by all the rules and regulations of the BHEL Bhopal.
- u)** Contractors shall submit following Certificate for each contract separately.
- v)** "It is certified that PF Challans of the amount..... Pertains to my workers whose names are appearing in the wage sheet of the month..... And these workers are engaged in (Type of work) against work order no.....in..... (Name of department).
- w)** Contractor shall be responsible for making payment of wages before expiry of 7 days from the last day of wage period and to ensure disbursement of wages in the presence of the authorized representative of contract operating division who shall record under his signature at the end of entries in the register of wages in the following form. "Certified that the amount shown in column no..... has been paid to workers concerned in my presence on date..... at time..."

Signature of contractor
- x)** Contractor shall distribute wage slip to his employee one day before the last day of the month.
- y)** The Contractor shall deploy all skilled, semi-skilled and unskilled workers and should hold valid certificates wherever necessary. The contractor shall deploy only experienced



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supervisory staff to carry out the construction & erection work and control his workmen. BHEL reserves the right to insist on removal of any employee of contractor. In the event of increasing or decreasing the category of workers, supervisors the contractor shall obtain the prior approval of BHEL's site-in-charge.

- z)** Contractor shall obtain complete bio-data of the labour, employment certificate and Antecedent verification in the prescribed form for each labour and supervisor engaged by him and shall submit the same to the Personnel Department / IR section through the contract executing officers before commencement of the work.
- aa)** Non – compliance of any provisions under the act/ rule/instructions/guidelines shall make the contractor liable for penal action including termination of contract.
- bb)** In case of medical emergencies faced by contract worker at work, medical facilities in the interest of the well-being of the worker shall be provided by BHEL. The decision of the doctors attending the emergency shall be final and binding. The cost incurred shall be deducted from the bills of the contractor. The Contractor shall complete the ESI formalities and BHEL shall submit claim of reimbursement of medical expenses to ESI. The amount reimbursed by ESI shall be paid back to the contractor
- cc)** In the event of any accident in respect of which compensation may become payable under the workmen's compensation act VIII of 1923 whether by the contractor or by the company as principle employer, it shall be lawful for the company to retain out of monies due and payable to the contractor such sum or sums of money as may, in the opinion of the company shall be final in regard to all matter arising in this clause.
- dd)** No work shall be done on Sundays or on other declared holidays of the company without the written permission of the company officer in-charge of the work. The contractor shall comply with the provisions of the Factories Act Rules framed there under if the same are applicable.
- ee)** The contractor shall keep his work place clean and safe to avoid injuries to men and damage to finished products / equipment's.
- ff)** 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 an accident intimate in writing to the company official in-charge of the work.
- gg)** The contractor shall indemnify the company against all losses or damages sustained by the company resulting directly or indirectly from his failure to give intimation in the manner aforesaid including the penalties or dues if any and become payable by the company, as a consequence of failure, the company to give notice under the workmen's compensation act or otherwise confirm to the provisions of the said act in regard to such accident.
- hh)** The contractor shall ensure adherence to all statutory requirements applicable to BHARAT HEAVY ELECTRICALS LIMITED, Bhopal.
- ii)** The contractor shall ensure abidance by all the labour laws especially including contract labour (R & A) Act, payment of wages Act, workmen's compensation act, minimum wages Act ESI Act and Provident Fund Act as amended from time to time



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- jj)** The contractor should engage only those labourers who shall be more than 18(eighteen) years of age.
- kk)** The contractor shall provide the required safety equipment labours engaged by him.
- ll)** Contractor shall issue "Employment Card" as per statute to all the labour and supervisors covered under the job work contract.
- mm)** The contractor shall be responsible to settle any grievances of the labour deployed by him.
- nn) Wage and Wage sheet:** - Non receipt of payment from BHEL or any other unsettled issue with BHEL or any other entity shall not be a pre-condition for payment of wages. Complaints of short payments and non-payments of wages shall be viewed seriously and may result in cancellation of tender and penal action including blacklisting. Entry with pencil or blank spaces in wage sheet shall not be acceptable. If a contractor has two or more contracts, the name of a worker shall appear in only one wage sheet for a given period. Contractor shall make efforts to provide PF & ESI No of their workers on the wage sheet itself.
- oo) PF & ESI:** - Contractors shall provide annual statement of PF to their workers to enable them to know their PF balance status. In case of change of contractor, the previous contractor shall immediately facilitate in filling of Form No 13 for smooth transfer of PF to the new Account. In case of termination of service of contract labour, Form No. 19 should be immediately filled by the contractor for settlement of PF dues. Before generating ESI No. for a contract labourer, the contractor should ensure that the labourer does not have an existing ESI nos. causing non continuity of insurance and thus denying benefits under the Act to the workers.
- pp) Bonus:-**For contracts terminating before 30th Nov., contractors should pay the bonus before the final bill is cleared.
- qq) Leave:-**In case of workers who have worked for 240 or more days in the preceding year, annual leave with wages @one day for every 20days worked and 07 Casual leave is to be provided. For all works contract labourers eight days paid holidays are to be provided in a year.
- rr) Overtime:-**Maximum overtime permissible is 50 hours in a quarter. In case of overtime, contractor should ensure that payment is made at double the rate of normal wage. In case of working on Sunday, contractor should ensure that a weekly holiday is given to the worker.
- ss) Contribution to welfare fund:-** Contractor should ensure that half yearly contribution to M.P. Labour Welfare Fund is deposited [@30/- {by contractor} per person and @ Rs. 10/- {by worker} per person] . Many welfare facilities like student scholarship, distribution of notebooks at subsidised rates, monetary help for daughter's marriage widow pension, vocational training etc. flow from this fund.
- tt) Inspections:** - During inspection (by PF/ESI or Labour authorities), contractors should make themselves available for inspection of their records and cooperate with authorities and BHEL. Contractors should provide correct and complete information of their workers to all the authorities. They should keep all the registers and forms updated.
- uu)** Uniform & shoes are to be provided necessarily to the contract labourers and this has to be ensured by the contractor. In case of non-compliance, bills will not be cleared/contractor shall be issued notice of Termination of Contract. Contractors should also ensure that their workers wear helmets and use necessary PPEs while at work.
- vv) Supervision:** - Contractor is required to supervise the work of his workers at workplace. If he is unable to do so, then he may deploy sufficient no. of supervisor who can supervise on his behalf. Contractor should provide at least one identified supervisor per shift for



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supervision of contract labour's work. All issues regarding discipline at the works like work allocation, early exit, snacks distribution etc. are responsibility of contractor's supervisor.

ww) Contractor should get the police verification done in respect of his labourers. The contractor has to undertake personal liability for the conduct and character of his labourers. Contractor should provide C & A (character and antecedents) certificates from the Thana or else receipt of list files with Thana for Verification of C & A. This shall be required before the first bill is cleared.

xx) Wages shall be paid through bank account for all contracts of 06 months or more duration.

yy) Contractor shall neither try to influence, chase or interfere into the working of BHEL officials nor engage BHEL employee or any other third person for the same. In case such incident does occur, it may lead to disqualification/debarring from the contract. Any contractor shall be debarred from consideration if any of his relations is working in the product/functional group in which the contract is being issued.

zz) The contractor should follow the prevailing industrial / labour laws as amended from time to time and shall also take all safety measures required during the execution of this order.

aaa) The contractor shall engage sufficient staff to maintain the required rate of progress and quality of workmanship. If unskilled workers are required to be engaged, the same shall be engaged, as far as possible, from local areas in which the work is being executed. Claim for idle labour/machinery due to non-supply of any material by BHEL or for any other reasons will not be entertained. During the continuance of this contract, the contractor shall have due regard to all local festival, religious events and other customs, in all his dealings with the local labour for the time being employed on or in connection with the work.

CLAUSE 33

MATERIALS TO BE SUPPLIED BY THE BHEL

- i. Materials to be supplied by the BHEL are shown in Schedule 'B' which also stipulates quantum, place of issue in respect thereof. The contractor shall be bound to procure them from the Engineer-in-Charge.
- ii. As soon as the work is awarded, the contractor shall finalise the programme for the completion of work and shall give his estimates of materials required on the basis of drawings/or schedule of quantities of the work. The Contractor shall give in reasonable notice of writing his requirement to the Engineer-in-Charge which shall be issued to him keeping in view the progress of work as assessed by the Engineer-in-Charge, in accordance with the agreed phased programme of work indicating monthly requirements of various materials. At the time of Submission of bills the Contractor shall properly account for the materials issued to him to the satisfaction of the Engineer-in-Charge, certify that balance of materials supplied is available at site.
- iii. If cement is to be supplied by the BHEL, every cement godown shall be provided with two locks on each door. The key of one lock at each door shall remain with the Engineer-in-charge or his representatives.
- iv. **The contractor has to deposit empty cement bags to the departmental stores before submission of final bills.**

CLAUSE 34



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MATERIAL HANDLING AND STORAGE

- i. The contractor shall make all arrangements to Load, unload, handle, transport and store all materials at site in proper manner (as approved by BHEL engineer) so as to avoid contamination and deterioration. The contractor shall make own arrangement for T & Ps including cranes. For storage, open space shall be given by BHEL and contractor shall make its own covered shed. The places at site where materials are to be stored shall be subject to the approval of the Engineer-in-charge. The store should have proper illumination, record keeping and locking arrangements for safe custody of the materials. The store should be made before arrival of the materials at site. Adequate arrangement be made for material handling & storage taking due care against damages.

CLAUSE 35

MATERIAL ISSUE, CONSUMPTION & RECONCILIATION

It shall be the responsibility of the contractor to get the free issue materials (cement, reinforcement steel, structural steel or any other material etc.) issued from BHEL's Store after proper documentation work. Loading transportation to work site, unloading and proper storage of material shall be done by the contractor at their own expense. Return of surplus material to store and return of scrap material to scrap yard shall be the responsibility of the contractor at their own expense. Proper method of accounting of steel, Tor steel, cement & scrap material be followed as per BHEL Procedure. The books of such accounting be offered for auditing by BHEL at pre-decided regular interval. The material Reconciliation statement should necessarily be enclosed with each running account Bills as well as Final Bill. Due to non-submission of material reconciliation statement with invoice the bill processing may get delayed for which the Total responsibility lies with the contractor.

CLAUSE 36

MATERIALS TO BE PROVIDED BY THE CONTRACTOR

1. The contractor shall, at his own expense, provide all materials, required for the works other than those which are stipulated to be supplied by the BHEL.
 - 1.1. All such materials to be provided by the Contractor shall be in conformity with the specifications laid down or referred to in the contract. The contractor shall, if requested by the Engineer-in-Charge furnish proof, to the satisfaction of the Engineer-in-Charge that the materials so comply.
 - 1.2. The contractor is expected to ensure all the payments towards applicable royalties paid to concerned authorities for different materials and also must submit the proof of payment as and when asked by the department.
 - 1.3. The contractor shall, at his own expense and without delay, supply to the Engineer-in-Charge samples of materials to be used in the work and shall get these approved in advance. Any material brought to site in contravention of this condition shall be rejected forthwith and no payments shall be made.
 - 1.4. The Engineer-in-Charge shall within seven days of supply of samples or within such further period as he may require intimate to the Contractor in writing whether samples are approved by him or not. If samples are not approved, the Contractor shall forthwith arrange to supply to the Engineer-in-Charge for his approval, fresh samples complying with the specifications laid down in the contract.



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- 1.5. The Engineer-in-Charge shall have full powers to require the removal of any or all of the materials brought to Site by the Contractor from the premises which in his opinion are not in accordance with the specifications and in case of default, the Engineer-in-Charge shall be at liberty to employ at the expense of the contractor, other persons to remove the same without being answerable or accountable for any loss or damage that may happen or arise to such materials. The Engineer-in-Charge shall also have full powers to procure other proper materials to be substituted for rejected material and in the event of the Contractor refusing to comply, he may cause the same to be supplied by other means. All costs which may attend such removal and/or substitution shall be borne by the Contractor.
- 1.6. The Engineer-in-charge shall be entitled to have tests carried out as specified, in the Contract for any materials supplied by the Contractor other than those for which, as stated above, satisfactory proof has already been furnished, at the cost of the Contractor and the Contractor shall provide at his expense all facilities which Engineer-in-charge may require for the purpose. If no tests are specified in the Contract and such tests are required by the Engineer-in-charge, the Contractor shall provide all facilities required for the purpose and the charges for these tests shall be borne by the Contractor only if the tests disclose that the said materials are not in accordance with the provision of the Contract. The cost of materials consumed in tests shall be born by the Contractor in all cases except when otherwise provided.
- 1.7. In case of use of material not conforming to the specification in the work carried out by Contractor, the department shall have the right to rejected it out rightly or accepted with suitable deduction. In case of acceptance with deduction the amount to be deducted shall be decided by the department/QDRC (Quality Deficiency Review Committee) & the same shall be the binding on the contractor.

CLAUSE 37

**CONTRACTOR TO INDEMNIFY GOVT.
AGAINST PATENT RIGHTS**

In the event of any claim or demand being made or action being brought against BHEL for infringement or alleged infringement of letter, patent in respect of any machine plant, work or thing used or supplied by the contractor under this contract or in respect of any method of using or working by BHEL of such machines, plant, work or thing, the contractor will indemnify BHEL against such claim or demand and all costs and expenses arising from or incurred by reason of such claim or demand. In case the equipment in such suit or proceedings is held to constitute infringement and the use of the equipment or part is prohibited, the contractor shall at his own expenses either procure for BHEL the right to continue using the equipment, modified it so as it becomes non-infringing or remove the equipment and refund BHEL price plus the transportation and installation cost thereof.

CLAUSE 38

TO ENSURE SAFETY AT SITE

- i) If the contractor fails to take appropriate safety precautions or to provide necessary safety devices and equipment's or to carry out instructions issued by the authorized BHEL officials, BHEL shall have the right to take corrective steps at the risk and cost of the contractors.
- ii) The contractor shall ensure that no damage is caused to any person/any existence work/property of BHEL /other parties working at site. If any such damage is caused, it shall be the responsibility of the contractor to make good the losses and compensate the



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affected parties at his own cost. The contractor shall indemnify BHEL for any such eventuality.

- iii) The contractor shall take all reasonable care to protect the materials and the work till such time the plant/equipment has been taken over by BHEL/its customer. It will be the responsibility of the contractor to ensure safe lifting of the equipment to avoid damages/accidents.
- iv) In case of a fatal or disabling injury accident to any person due to lapses by the contractor. BHEL shall have the right to impose appropriate financial penalty on the contractor and recover the same from payments due to the contractor for suitably compensating the victim or his/her dependents. Before imposing the penalty, appropriate enquiry shall be held by BHEL.
- v) In case of any damage to propriety due to the lapses by the contractor, BHEL shall have the right to recover the cost of such damages from the contractor after holding an appropriate enquiry.
- vi) In case of any delay in the completion of a job due to mishaps attributable to lapses by the contractor, BHEL shall have the right to recover cost of such delay from the payments due to the contractor after notifying the contractor suitably.
- vii) If the contractor fails to improve the standards of safety in its operation to the satisfaction of BHEL after being given reasonable opportunity to do so. BHEL shall have the right to terminate the contract and get the job completed at the risk and cost of the sub-contractors.

CLAUSE 39

STRIKES AND LOCKOUTS

- a) The contractor will be solely responsible for all disputes and other issues connected with his workmen. In the event of contractor's workmen resorting to strike or the contractor resorting to lockout and, if the strike or lockout so declared is not settled within a period of one month, BHEL shall have the right to get the work executed employing its own men or through other agencies or both. The cost incurred by BHEL in this regard shall be recovered from the contractor.
- b) For any purpose whatsoever, the employees of the contractor shall not be deemed to be in the employment of BHEL.

CLAUSE 40

SETTLEMENT OF DISPUTES

- i) Except as otherwise specifically provided in the contract all disputes concerning questions of fact arising under the contract shall be decided by the engineer subject to a written appeal by the contractor to the engineer, whose decision shall be final to the parties hereto.
- ii) Any disputes or differences including those considered as such by only one of the parties arising out of or in connection with the contract shall be to the extent possible settled amicably between the parties.
- iii) If amicable settlement cannot be reached then all disputed issues shall be settled by arbitration as provided in relevant clause.

CLAUSE 41

Signature of Contractor

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Signature of BHEL official



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ARBITRATION

- i. All disputes between the parties to the Contract arising out of or in relation to the Contract, other than those for which the decision of the Engineer in the Contract or any other person is expressed to be final and conclusive, shall after written notice by either party to the contract to the other party, be referred to sole arbitration of the General Manager or his nominee. The Arbitration shall be conducted in accordance with the provisions of the Indian Arbitration and Reconciliation Act, 1996.
- ii. The parties to the Contract understand and agree that there will be no objection that the General Manager or the person nominated as arbitrator had earlier in his official capacity directly or indirectly dealt with the matters to which the Contract relates or that in the course of his official duties had expressed views on all or any of the matters in dispute or difference. The award of the arbitrator shall be final and binding on the parties to this contract.
- iii. Work under the contract shall be continued by the contractor during the arbitration proceedings, unless the matter is such that the work cannot possibly be continued until the dispute or differences are settled by the arbitration and save as those which are otherwise expressly provided in the contract.
- iv. The arbitration proceedings shall be held at Bhopal. The jurisdiction of courts for these proceeding shall be at Bhopal.

CLAUSE 42

TOOLS, TACKLES & EQUIPMENTS

- i) **It shall not be obligatory on the part of BHEL to supply any tools and tackles.** Depending upon availability, possibility, BHEL tools & equipment may be made available to the contractor on payment of hire charges as mentioned in Annexure C of Price Schedule. In case BHEL is unable to issue such equipment due to non-availability, it is the responsibility of the contractor to arrange such equipment from outside & hire & other charges shall be borne by the contractor.
- ii) All the properties/equipment/components of BHEL loaned with or without deposit, to the contractor shall remain the properties of BHEL. The contractor shall use such properties for the purpose of execution of this contract. All contractors shall return them in good conditions as and when required by BHEL. In case of non-return, loss, damaged, repairs, etc., cost thereof, as may be fixed by the Engineer, will be recovered from the contractor.
- iii) **ROYALTY** – Royalty for equipment's supplied shall be borne by the contractor and nothing extra on this account shall be paid to him by BHEL.
- iv) The contractor shall arrange at his own expenses all tools, plants & equipments (T & P) required for execution of the work except the item listed in Schedule "C" which will be given to him on hire by BHEL at the rates shown in that Schedule. All tools & Tackles, handling facilities, plant & machinery and consumables required for satisfactory execution of the job will have to be arranged by the contractor free of cost. All measuring instruments, tools and tackles should be tested periodically and the contractor shall also produce necessary certificate and proof of having tested & calibrated from certified agencies. Only instruments calibrated within last one year from the date of use shall be used at site. List of tools, tackles & equipment's of reputed manufacturers with proper Test /Calibration Certificates to be arranged by the contractor at his own cost is given below but not limited to this **(only for guidance)** :



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(A) Electrical Tools / Instruments

- i) Cable jacks & spindle, cable rollers, supporting stand for cable drums, electrician's tools kit, jointing / termination kit(s) fitter tool kit, etc.
- ii) General tools e.g. screw drivers, testers, pliers, spanners, test lamp, feeler gauges, hydraulic and manual crimping tool kit etc.
- iii) Safety hand lamps, fuses, bulbs, switches and cables, test lamp, field telephone and buzzer sets, walkie – talkie set etc.

(B) Mechanical Tools, Instruments (as per requirements).

- i) Welding Machines, generator sets with cables etc. Gas cutting sets, gas-brazing sets, heating torch, soldering irons, regulators, hoses, etc.
- ii) Hand trolleys, mobile equipment's, Tractor, Transport vehicles, hydraulic and screw jack, pipe and torque wrenches, wooden sleepers, manila ropes, chain pulley block, slings and D'shackles, eye bolts, lifting tackles and equipment's.
- iii) Hand grinding machines, bench grinder, and bench vice, pipe vice, Base Mounted Drill Machines, Grinding wheels, Hand Drill Machine.
- iv) Grinding Machine for fabrication works, drill machines, drill bits, taps and die set, reamers, hammers, files, punches, scrapers, screw drive sets, pliers, hacksaw and blades, chisels, Allen key sets, spanners, measuring tapes and Scales.
- v) Spirit level, straight edge, dial gauge, precision level gauge, etc.
- vi) Other test equipment's as required for testing and commissioning of the project shall have to be arranged by the contractor.

(C) Civil Engineering Equipment

Earth moving equipment -Excavators (various sizes), Bulldozers

Equipment for hoisting & lifting –

- 1. Tower
- 2. Builder's hoist
- 3. Hydra

Equipment for concrete Work -

- 1. Concrete batching plant
- 2. Concrete pump
- 3. Concrete transit mixer
- 4. Concrete mixer (diesel)
- 5. Concrete mixer (electrical)
- 6. Needle vibrator (electrical)
- 7. Needle vibrator (petrol)
- 8. Table vibrator (elect. /petrol)

Equipment for building work

- 1. Block making machine
- 2. Bar bending machine



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3. Bar cutting machine
4. Wood thickness planer
5. Drilling machine.
6. Circular saw machine
7. Welding generators
8. Welding transformer
9. Cube testing machines
10. M.S. pipes
11. Steel shuttering
12. Steel scaffolding
13. Grinding/polishing machines

Equipment for road work-

1. Road rollers
2. Bitumen pavers
3. Hot mix plant
4. Spreaders
5. Earth rammers
6. Vibratory road rollers

Equipment for transportation-

1. Tippers
2. Trucks

Pneumatic equipment

1. Air compressor (diesel)

De-watering equipment -

1. Pump (diesel)
2. Pump (Electrical)

Power equipment

1. Diesel generators

(Any other plant/equipment)

CLAUSE 43

DISMANTLED MATERIAL COMPANY/ CORPORATION PROPERTY

The contractor shall treat all materials obtained during dismantling of a structure, excavation of the site for a work, etc. as Company's/Corporation property and such materials shall be disposed off to the best advantage of Company's/Corporation according to the instructions in writing issued by the Engineer-in-Charge.

CLAUSE 44



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FACILITIES TO BE PROVIDED BY BHEL

Construction Office & Store: Depending upon the availability and requirement, the space for construction of office and stores shall be provided free of cost to the contractor. Before finally leaving site, all shed etc. have to be dismantled/ removed and the site left shall be clean and tidy. The land allocated shall be vacated and handed over to the owner.

Establishment of Site Office – Contractor shall make its own office at site. He will be required to maintain good office at site with necessary infrastructure and staff. The contractor should have a mobile phone, Computer System with Printer & UPS.

Electricity: The contractor shall submit to the Engineer within 30 days from the signing of Contract Agreement his electrical power requirement. The contractor shall be provided with supply of electricity at one point in the project site free of charge for the purpose of contract execution except for fabrication work which shall be charged as per Annexure C of Price Schedule. The contractor shall make his own further distribution arrangement. All temporary wiring must comply with local regulations and will be subject to Engineer inspection and approval before connection to supply. The arrangement of the Luminary shall be the responsibility of the contractor. The proper illumination at work site is the responsibility of Contractor.

Water: Supply of water will be made available free of charge for the construction purposes & drinking purposes at an agreed single point in the site. Any further distribution will be responsibility of the contractor. Further distribution to other points at work site or to his office shall be the responsibility of the contractor. The contractor will make their own arrangement for storage of water of inadequate capacity for curing of pre-cast concrete structures, construction & general curing. Due to scarcity of water all over Bhopal the contractor shall comply with all measures as suggested by Engineer-in-charge to avoid wastage of water.

Residential Accommodation: Upon award of work the contractor shall apply for allotment of residential accommodation for their personnel who is going to be posted at site for execution of the work. Subject to availability with BHEL & as permitted under rule, the residential accommodation may be made available on chargeable basis including electricity charges, water charges & other Charges etc. The Contractor shall abide by the rules, regulations of quarter allotment, cancellation, and possession/vacation. In case BHEL is unable to provide this facility, the contractor has to make their own arrangement at their own expense.

CLAUSE 45

CONSUMABLES

The contractor shall arrange & provide all consumable items of best quality in adequate number / quantity as per specifications required for day-to-day working for satisfactory completion of the work at his own cost. The material so supplied shall be of best quality according to the specification.

- i. Soldering and brazing alloy, flux, various types of welding electrodes, filter materials etc.
- ii. Industrial and welding gases like oxygen, acetylene, compressed air, water, etc.
- iii. Kerosene, rust removing liquid, cleaning cloths, chemical liquid for pickling, CTC, xylol, thinner, cotton wastes, jointing compounds, M-seal, Teflon tapes, engineers blue, adhesive tapes etc.
- iv. Clamps, GI Wires, bolts, nuts and washers as required.
And all other consumable materials mentioned in tender specification in respective section and necessary for completion of work.



BHARAT HEAVY ELECTRICALS LIMITED: BHOPAL TOWNSHIP CIVIL MAINTENANCE DIVISION

GENERAL TERMS & CONDITIONS

NIT NO. TA/TCL/40/19-20

SAFETY MEASURES

- The following are a few safety measures suggested while carrying the work. However all the items of work should be carried out in safe working manner taking all precautions.
- Proper and necessary precautions shall have to be taken wherever the work involves breaking of reinforced cement concrete slab and dismantling of brick work. These items of work will have to be carried in the presence of the Engineer-in-charge.
- Proper and necessary scaffolding is to be erected wherever dismantling of brick work is carried out at height more than 1.80 M
- Reinforced cement concrete slab should be dismantled parallel to the main reinforcement, each piece not exceeding 300mm wide. Under no circumstances the supporting wall shall be cut or removed until the supporting slab is demolished.
- The contractor shall keep supply all safety equipment like safety boots, goggles, helmets and safety belts, to all the workers.
- The contractor shall keep a supervisor always at work site.
- Power shut down shall be taken before commencement of the work wherever power cables are running.
- Proper and necessary scaffolding and ladders are to be used for carrying out all types of works.
- The contractor shall provide safety nets to the work force during the execution of work at height of more than 3 meters and as directed by the engineer in charge.
- The contractor shall take all necessary safety precautions and arrange for appropriate appliance to its authorized officials to prevent loss of human lives, injuries to personnel engaged and damage to property.
- The Contractor shall provide to the work force and ensure the use of the following personnel Protective Equipment as found necessary and as directed by the authorized BHEL Officials.
 - I. Safety Helmets conforming to IS: 2925: 1984
 - II. Safety belts conforming to IS: 3521: 1999
 - III. Safety shoes conforming to IS: 1989:PART 2:1986
 - IV. Eye, and face protection devices conforming to IS: 8520:1977.
 - V. Hand and body protection devices conforming to IS: 6994 - 1973 and IS 8519: 1977, IS: 8807-1978.

SAFETY IN CIVIL ENGINEERING WORKS

- While working at heights, a safe foot holds and hands holds should be provided.
- No loose material should be allowed to remain in the vicinity of persons working at heights due to which they may inadvertently loose their balance and fall down.



BHARAT HEAVY ELECTRICALS LIMITED: BHOPAL

TOWNSHIP CIVIL MAINTENANCE DIVISION

GENERAL TERMS & CONDITIONS

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- Wherever, it is reasonable practical, workers should be made to use safety belts.
- Ladders, crawling ladders and crawling boards are to be provided if a person has pass across or work on or from any material liable to fracture under his weight and cause him to fall more than 1.98 metres.
- In considering whether a material is likely to fracture beneath a person's weight, regard must be had to any additional weight he may be carrying or supporting.
- Ladders crawling boards etc., to be securely supported and if necessary secured to prevent slipping.
- Guard rails, coverings or other suitable means may be used to prevent person stepping on to fragile material, while working or passing near it if such material is likely to fracture under his weight and cause him to fall more than 1.98 metres.
- While working on sloping roofs, suitable, crawling, boards or crawling ladders should be used. These crawling ladders should be properly supported and securely enhanced to the sloping surface or the roof ridge.
- Suitable and sufficient means are to be provided to prevent fall of articles from a sloping roof.

DEMOLITION:

- ✓ Safe access should be provided to every place at which any person has to work. Scaffolds should be provided for all work.
- ✓ Shoring or either steps are to be taken to prevent accidental collapse of the building or part of the building being dismantled.
- ✓ Similar precautions are to be taken against collapse of any adjacent building, if this would involve danger.
- ✓ No steel work or iron work is to be cut or released unless precautions are taken to avoid danger from sudden twist, spring or collapse.
- ✓ No framing is to be removed unless all practicable steps are taken to avoid collapse of the structure.
- ✓ Demolition work is to be placed under the supervision of a competent person experienced in demolition work.

EXCAVATIONS:

- ❖ Barriers are to be provided round excavations, shafts, pits and opening into which persons can fall a vertical distance of 1.98 metres. These barriers are to be as close as practicable to the edge of the excavations and are to be erected as soon as practicable after excavating begins. They are to be maintained in position except when necessarily removed for the access of persons or materials.
- ❖ Adequate and suitable timbering should be used to prevent danger from falls or dislodgement of sides of excavations etc., or materials adjacent to it. Timbering is to be done as early as practicable in the course of work.



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- ❖ No person should be allowed to work in any excavation. Shaft or tunnels after explosives have been used in or near it, in a manner likely to affect stability, until a thorough examination has been made by a responsible person.
- ❖ No person should be allowed to work in any excavation, Shaft or tunnels after an unexpected fall of work rock, earth or to her material or after substantial damager to timber or other supports, unless the part concerned is thoroughly examined by a responsible person declared safe.
- ❖ No material should be placed near the edge of the excavation so as to endanger persons below. No load should be placed or removed near the edge of an excavation etc., where it is likely to cause the collapse of the side of the excavation and so endanger to any person.
- ❖ If excavation is likely to affect the security of another structure (permanent or temporary) steps must be taken to safeguard persons employed from possible collapse of that structure.
- ❖ Means of reaching a place of safety is to be provided, when there may be danger from rising water or irruption of water or materials.
- ❖ Means to prevent over running are to be taken when vehicle is used to tip material into pit or excavation or over the edge of embankment or earth work.

LADDERS:

- Ladders to be used should be of good construction, of a suitable and sound material of adequate strength.
- Ladders with missing or defective rungs should not be used.
- Wooden stiles or sides and wooden rungs should have grain running length wise.
- Rungs should be properly fixed to the sides.
- Ladders standing on a base are to be equally and properly supported on each stile or side.
- Ladder standing on a base to be securely fixed near its upper resting place, if such fixing is impractical the ladder must be fixed at or near its lower end. If this is also impracticable a person, must be stationed at the feet of the ladder to prevent it from slipping.
- Ladder should not be placed on loose bricks or loose packing.
- Except when there is an adequate handled, ladder must rise to a height of a least 3 feet6 inches (1.00 Mtr.) above the landing place or above the heights rung reached by the feet of persons using the ladder.
- Space at each rung to be sufficient to provide adequate foot held.
- Openings in landing places through which ladders pass should be as small as practicable.
- Folding steps ladders should have level and firm footing and should not stand on loose bricks or other loose packing.



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SCAFFOLDS:

- Materials used for scaffolds should be of sound and adequate strength.
- The timber used should be suitable quality, good condition, bark complete stripped off, and without paint or other treatment which would prevent defects from being easily seen.
- Timber and material with projecting nails should not be used.
- Metal parts should be of suitable quality, in good condition, free from corrosion or other patent defects likely to affect strength.
- Defective parts or materials should not be used and no defective ropes or bonds should be used.
- Standards or upright should be vertical or slightly inclined towards the building or other structure, where practicable and to be sufficiently close to ensure stability.
- Displacement or sinking of standards or uprights to be prevented either by provision of base plates or either adequate means.
- Ladders used as uprights to be adequate strength secured to prevent slipping and so placed that the two stiles of sides of each ladder are evenly supported.
- Ladders are to be horizontal, as nearly as possible and should be secured to standards or uprights by efficient means.

WORKING PLATFORMS:

- ✚ All working platforms should be closely boarded, planked or plated.
- ✚ Boards should be of sufficient thickness having regard to the distance between putlogs other supports.
- ✚ All boards should be at least 51 mm thick and 210 mm wide.
- ✚ Boards should rest securely and evenly on their supports. Each board should have at least three supports unless the thickness and the distance between the supports are such as to present on due or unequal staging when, supported on the two pipes.
- ✚ No board should project beyond for more than four times its thickness, unless secured to prevent tipping.
- ✚ No board should project to an extent which makes it unsafe having regard to its thickness and strength and the weight likely to be on it.
- ✚ The platforms should be of adequate width to give sufficient working space.
- ✚ The platforms should extend at least 600 mm. beyond, the end of wall or working face if work is being done at that end of the wall of face.
- ✚ The platforms should have guard rails to a height of between 920 mm and 1150 mm. above the platform or any raised part of it.



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- ✚ The platforms should have toe-boards high enough to prevent falls of persons, tools and materials, with a minimum height of 15.5 mm. space between the toe-boards and the lowest guard rail should not exceed 760 mm. guard rails and toe-boards should be on the inside of uprights unless there is some other means of preventing their outward movement.
- ✚ Guard rails and toe-boards should always remain in position except when removal is necessary for the access of persons or materials, or other necessary purposes of the work.

SAFETY NETS AND BELTS:

- If all or any of the above requirements is not practicable, resources may be taken to use suitable safety belts or nets to prevent persons falling from heights of 1.98 metres and above.
- Safety belts when used should be attached continuously to suitable and fixed anchorages.
- Safety nets should be maintained in all positions necessary to protect persons at work, except in so far as they have to be temporarily removed for the passage of materials or for any other purposes.

LIFTING TACKLES/CRANES:

Lifting roof trusses should be undertaken after discussing the procedure with BHEL taking all necessary care to prevent accidents.



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ANNEXURE – “A”

CONTRACT

(To be issued in appropriate valid non –judicial stamp paper issued from State of Madhya Pradesh)

THIS AGREEMENT MADE THIS..... DAY OF 20.... Between BHARAT HEAVY ELECTRICALS LIMITED, Bhopal (A Government of India Enterprise) a Company incorporated under the Companies Act 1956, having its registered office at BHEL House, Siri Fort, New Delhi – 110 049 (hereinafter called BHEL) of the ONE PART

AND

.....
..... (here-in-after called the `Contractor') of the SECOND PART.

WHEREAS M/s state that they have acquired and possess extensive experience in the field of and whereas in response to an Invitation to Tender No..... dated issued by BHEL for the execution of the Contractor submitted their offer dated..... And whereas BHEL has accepted the offer of the Contractor on terms and conditions specified in the Letter of Intent No..... dated..... Read with the reference cited therein.

THIS AGREEMENT WITNESSESS AND it is hereby agreed by and between the parties as follows:

That the Contractor shall execute the work of and more particularly described in Tender specification (hereinafter called the said works) in accordance with and subject to terms and conditions contained in these presents, Instructions to Tenderers, General Conditions of Contract, Special Conditions, annexures, Letter of Intent dated and such other instructions, drawings, specifications given to him from time to time by BHEL.

The Contractor is required to furnish to BHEL Security Deposit in the forms of cash/approved securities / Bank Guarantee valid upto for a sum of Rs..... (Rupees) towards satisfactory performance and completion of the Contract.

The Contractor has furnished a Guarantee bearing No..... Dated for a sum of Rs..... (Rupees.....) executed by Bank in favour of BHEL towards Security Deposit valid up to..... (The Contractor has furnished to BHEL an initial Security Deposit of Rs.....

Signature of Contractor

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Signature of BHEL official



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in cash /Approved Securities/BG for Rs..... And has agreed for recovery of the balance security deposit by BHEL..... @ 10% of the value of work done from each running bill till the entire security deposit is recovered).

The contractor hereby agrees to extend the validity of the Bank Guarantee for such further period or periods as may be required by BHEL and if the contractor fails to obtain such extension (s) from the Bank, the contractor shall pay forthwith or accept recovery of Rs..... from the bills in one instalment and the Contractor further agrees that failure to extend the validity of the Bank Guarantee or failure to pay the aforesaid amount in the manner specified above shall constitute breach of contract. In addition to above BHEL shall be entitled to take such action as deemed fit and proper for recovering the said sum of Rs.....

That in consideration of the payments to be made to the contractor by BHEL in accordance with this Agreement the Contractor hereby convenience and undertakes with BHEL that they shall execute, construct, complete the works in conformity, in all respects, with the terms and conditions specified in this Agreement and the documents governing the same.

That the Contractor shall be deemed to have carefully examined this Agreement and the documents governing the same and also to have satisfied himself as to the nature and character of the works to be executed by him.

That the Contractor shall carry out and complete the execution of the said works to the entire satisfaction of the Engineer or such other officer authorised by BHEL, within agreed time schedule, the time of completion being the essence of the Contract.

That BHEL shall, after proper scrutiny of the bills submitted by the Contractor; pay to him during the progress of the said works such sum as determined by BHEL in accordance with this Agreement.

That this Agreement shall be deemed to have come into force from the date on which the letter of intent has been issued to the Contractor.

That whenever under this contract or otherwise, any sum of money shall be recoverable from a payable by the Contractor, the same may be deducted in the manner as set out in the General Conditions of Contract or other conditions governing this Agreement.

That all charges on account of Octroi, Terminal and other Taxes including sales tax or other duties on material obtained for execution of the said works shall be borne and paid by the Contractor.

That BHEL shall be entitled to deduct from the Contractor's running bills or otherwise Income Tax under Section 194(C) of the Income Tax Act, 1961.

That BHEL shall be further entitled to recover from the running bills of the contractor or otherwise such sum as may be determined by BHEL from time to time in respect of consumables supplied by BHEL, hire charges for tools and plants issued (where applicable) and any other dues owed by the contractor.



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That it is hereby agreed by and between the parties that non-exercise, forbearance or omission of any of the powers conferred on BHEL and/or any of its authorities will not in any manner constitute waiver of the conditions here to contained in these presents and the liability of the Contractor with respect to compensation payable to BHEL or Contractor's obligations shall remain unaffected.

It is clearly understood by the between the parties that in the event of any conflict between the Letter of Intent and other documents governing this Agreement, the provisions in the letter of intent shall prevail.

The following documents:-

- (a) Invitation to Tender No..... and the documents specified therein
- (b) Contractor's Offer No..... date.....
- (c) Letter of Intent No..... date
- (d)

shall also form part of & shall govern this Agreement.

IN WITNESS HEREOF, the parties hereto have respectively set their signature in the presence of:

(CONTRACTOR)

to be signed by a person holding a valid Power of Attorney

For and on behalf of

Bharat Heavy Electricals Ltd, Bhopal

WITNESS: -

1.

2.



**BHARAT HEAVY ELECTRICALS LIMITED: BHOPAL
TOWNSHIP CIVIL MAINTENANCE DIVISION**

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ANNEXURE – “B”

MODEL FORM OF BANK GUARANTEE (FOR SECURITY DEPOSIT)

(To be issued in appropriate valid non-judicial stamp paper of appropriate value)

In consideration of the Bharat Heavy Electricals Limited, having its registered Office at BHEL House, Siri Fort, New Delhi (hereinafter called BHEL), having agreed to exempt (hereinafter called “the said Contractor (s)”) from the demand, under the terms and conditions of the Agreement dated made between BHEL and for (hereinafter called “the said Agreement”) of Security (name of work) deposit for the due fulfilment by the said contractor(s) of the terms and conditions contained in the said Agreement, on production of a bank guarantee for Rs..... (Rupees Only) We at the (indicate the name of the Bank)

(hereinafter referred to as “the bank”) request of contractor(s) do hereby undertake to pay to BHEL and amount not exceeding Rs..... against any loss or damage caused to or suffered or would be caused to or suffered by BHEL, by reason of any breach by the said contractor(s), of any of the terms or conditions contained in the said Agreement.

We, do hereby undertake to pay the amounts due and payable

(indicate the name of the Bank) under this guarantee without any demur, merely on a demand from BHEL, stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by BHEL by reason of breach by the said Contractor(s) of any of the terms or conditions contained in the said Agreement or by reason of the contractor(s)’s failure to perform the said Agreement. Any such demand made on the bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs.....

3. We, undertake to pay to BHEL any money so demanded

(indicate the name of the Bank)

notwithstanding any dispute or disputes raised by the Contractor(s) / supplier(s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under these presents being absolute and unequivocal.

The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the contractor(s) / supplier(s) shall have no claim against us for making such payment.

We further agree that the guarantee herein contained

(indicate the name of the Bank) shall remain in full force and effect during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of BHEL under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till BHEL certifies that the terms and conditions of the said Agreement have been fully and

Signature of Contractor

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Signature of BHEL official



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properly carried out by the said Contractor(s) and accordingly discharges this guarantee. Unless a demand or claim under this guarantee is made on us in writing on or before we shall be discharged from all liability under this guarantee thereafter.

We further agree with BHEL that BHEL shall have the fullest

(indicate the name of the Bank) liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the BHEL against the said Contractor(s) and to forbear or enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contractor(s) or for any forbearance, act or omission on the part of BHEL or any indulgence by BHEL to the said Contractor(s) or by any such matter or thing whatsoever which under the Law relating to sureties would, but for this provision, have effect of so relieving us.

This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s) / Supplier(s).

We, lastly undertake not to revoke this guarantee during its

(indicate the name of the Bank) currency except with the previous consent of BHEL in writing.

Dated Day..... of 201

For

(indicate the name of the Bank)

Witness:

1.

2.

Note : The above format is drawn upon the model form jointly evolved by the Reserve Bank of India, the Indian Banker's Association and the Ministry of Finance, Government of India as circulated by Indian Banker's Association, Bombay vide their letter No. LA/14-61/7808 dated 1/5/1980 as such no deviations are acceptable.

To be issued in appropriate valid non-judicial stamp paper prevalent in the state where the same is executed which is to be certified by the Notary Public or any other competent officer of that state.

Signature of Contractor

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Signature of BHEL official



**BHARAT HEAVY ELECTRICALS LIMITED: BHOPAL
TOWNSHIP CIVIL MAINTENANCE DIVISION**

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ANNEXURE "C"

LIST OF CONSORTIUM BANKS

1. State Bank of India
2. ABN Amro Bank N.V.
3. Bank of Baroda
4. Canara Bank
5. Citi Bank N.A.
6. Corporation Bank
7. Deutsche Bank
8. HDFC Bank Ltd.
9. The Hong Kong and Shanghai Banking Corporation Ltd.
10. ICICI Bank Ltd.
11. IDBI Ltd.
12. Punjab National Bank
13. Standard Chartered Bank
14. State Bank of Travancore
15. State Bank of Hyderabad
16. Syndicate Bank



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ANNEXURE "D"

(TO BE ISSUED IN NON-JUDICIAL STAMP PAPER OF Rs. 10/- issued from State of Madhya Pradesh)

INDEMNITY BOND

WHEREAS THE (Name of the contractor) M/s. _____, having its registered office at, _____ has taken the contract for tender NO..... & Contractor's Offer No.....but the sub-contractors have also to obtain licence under the contract Labour (Regulation & Certificate under Form-V of the said rules.

So on the request of (Name of the contractor) M/s.....M/s Bharat Heavy Electricals Limited, Bhopal has agreed to issue certificate in Form-V in respect of the sub-contractor mentioned below. M/s, therefore, undertake to fully indemnify the M/s Bharat Heavy Electricals Limited, Bhopal from any financial implication whatsoever that may arise due to the grant of certificate in respect of sub-contractors of (name of the contractor in Form-V under contract Labour (Regulation & Abolition) Act. 1970 and its rules.

- 1.
- 2.
- 3.

Contractor

Signature of Contractor

66

Signature of BHEL official

TECHNICAL BID

NIT No. TA/TCL/**40/19-20**

FOR

**CONSTRUCTION OF RCC OVERHEAD
WATER STORAGE TANKS (2 NOS.) OF
450 KL CAPACITY EACH IN BHEL
TOWNSHIP, BHOPAL.**

SECTION – IV

SPECIAL TERMS & CONDITIONS



**TOWNSHIP CIVIL MAINTENANCE DIVISION
BHARAT HEAVY ELECTRICALS LIMITED**

**(A Government of India Undertaking)
BHOPAL – 462 022 (M.P)**

SPECIAL TERMS & CONDITIONS

NIT NO. TA/TCL/40/19-20

NAME OF WORK:- CONSTRUCTION OF RCC OVERHEAD WATER STORAGE TANKS (2 NOS.) OF 450 KL CAPACITY EACH IN BHEL TOWNSHIP, BHOPAL..

(Note: The Special terms and conditions given here supersede the relevant terms & conditions given in General Terms and Conditions).

1.0 INTRODUCTION

- 1.1** This section of the tender defines the scope of the contractor's work other than as specified in the Technical Specifications. The requirement and conditions mentioned in this section are in addition to what are stated in "Instructions to Tenderers", "General terms and conditions" & "Technical Specifications".

Brief Description of Project site: - The project site is located inside BHEL Bhopal Township. BHEL, Bhopal is located approximately 8 km from Bhopal Railway Station. Nearest Airport is Raja Bhoj Airport located at a distance of 20 km from BHEL Bhopal.

- 1.2** The bidders are advised to take into account all factors and any fluctuations in the market rates etc having effect on prices. No delay will be accepted and no claim will be entertained on this account after acceptance of the tender or during the currency of the contract. It is advisable that the bidders visit the site prior to bid submission for proper assessment of site and its working condition.

2.0 SCOPE OF WORK -

- 2.1 For detail scope of work refer Annexure-I & II of Price Schedule.**

Note:-The above scope & dimension are tentative & may undergo some changes based on BHEL final requirement. Based on BHEL requirement, the work of similar nature may be executed at places other than specified above inside BHEL Township.

- 2.2** The scope shall include all associated & enabling works including the cost of all materials, tools & tackles and labours except for items provided by BHEL free of charge or on chargeable basis as mentioned in the Schedule.
- 2.3** The contractor would be required to deploy adequate resources (men, machines and materials) in time for meeting the time schedule. If BHEL, at any stage, feels that resources deployed by the contractor needed augmentation, the same shall have to be done by the contractor.
- 2.4** Hence, bidders are advised to acquaint themselves about the site conditions fully & understand the requirement of the tender and quote accordingly. No, extra claim or compensation shall be entertained on account of lack of knowledge about the site conditions.
- 2.5** In case of unsatisfactory performance by the contractor, BHEL reserve the right to short close the contract at any stage and get the balance work executed through other agency at contractor's risk & cost by giving a written notice to the contractor without invalidating the other provisions of the contract.

3.0 COMPLETION SCHEDULE:

- 3.1** On intimation by BHEL through Fax or E-Mail for issue of LOI, the contractor has to make initial mobilisation of his materials, resources and work force so as to commence the work within 20 days of issue of LOI or as stipulated in LOI, however contractor has to complete all agreement formalities within 15 days from the issue of LOI. Further mobilisation of fresh resources and augmentation of existing

resources shall be done in consultation with BHEL in all the areas as covered in scope of work.

- 3.2** The total contract duration is **8 (Eight)** months from the date of commencement as stipulated in LOI/Work Order.
- 3.3** Periodic review shall be undertaken to monitor the progress of work.
- 3.4** **BHEL reserves the right to take remedial action as deemed fit including engaging other agency for completion of part or full of the contract awarded at contractor's risk & cost in case progress of work found to be unsatisfactory during intermittent review of progress. For invoking this clause BHEL shall issue a notice in writing to the contractor for expediting the progress of work suggesting measures to be taken up by the contractor. In case of failure on the part of contractor with respect to compliance of suggested measures within time frame specified in the notice (in general it is 15 days) BHEL shall be free to undertake works (part/full) at contractor's risk & cost.**

4.0 PRICE SCHEDULE:

- 4.1** Please refer to the Price Schedule. Price bid should be submitted strictly as per the enclosed price schedule. Any deviation w.r.t. price schedule is not acceptable and the offer having deviation is liable to be rejected. **Rates quoted by the bidder against schedule items shall remain firm & no variation whatsoever shall be allowed.**
(Pl read instruction carefully given in the price schedule before filling up).
- 4.2** **The description of item contained in price schedule may not be elaborate. For more clarity about the scope, this should be always read in conjunction with the Technical Specifications.**

5.0 TAXES AND DUTIES:

- 5.1** Price quoted is inclusive of all taxes / Duties / Royalties applicable except GST.
- 5.2** GST (as applicable) shall be payable additionally to the contractor at actuals at the rate prevailing at the time of execution against submission of GST registration no and production of documentary proof of payment of GST to the concerned Govt. Deptt. (as applicable).
- 5.3** No claim shall be admissible on account of upward or downward revision in rate of existing taxes & duties (except GST as applicable) subsequent to bid submission. However, if any new taxes & duties are introduced subsequent to bid submission and during the currency of the contract including its extension if any for the reasons not attributable to the contractor, the same shall be reimbursed at actual against documentary evidence of remittance by the contractor. In case the contract period is extended for the reasons attributable to the contractor, no such reimbursement shall be made during extended period.
- 5.4** Income Tax & other deductible tax (if any) shall be deducted at source (TDS) as per prevailing rules and certificate to this effect shall be provided to the contractor.
- 5.5** The contractor shall ensure timely remittance of SGST, CGST, IGST & UTGST as applicable as per GST laws.
- 5.6** The contractor shall ensure compliance to filing of monthly GST sales return including BHELs supplies by 10th day of next calendar month in the online GST portal wherever applicable.
- 5.7** The contractor shall declare filing of timely returns and GST remittance/likely remittance /ITC adjustment along with invoice.
- 5.8** The contractor shall submit invoices compliant with GST invoice rules.
- 5.9** The contractor shall comply with all statutory provisions as may be applicable at the time of dispatch/sale. Any additional financial liability to BHEL on account of non-compliance by the contractor shall be borne by him and shall be adjusted/ recovered from the contractor. BHEL reserves the right to review the existing offers / contracts for any revision in terms which may arise due to change in any statutory provisions to ensure that the benefit accrues to BHEL.
- 5.10** The contractor shall ensure submission of TAX INVOICE to BHEL in time.
- 5.11** In respect of cases where the liability to discharge GST is on BHEL under reverse charge mechanism, the contractor shall ensure timely submission of invoices and

delivery of material / services to BHEL so that there is no mismatch on both activities. In case there is any additional financial liability on BHEL on account of default by the contractor in regard of submission or delivery of material / services, the same shall be passed on to him.

5.12 In respect of free issue material by BHEL, the contractor shall return the processed material within the time line as per the provisions of GST. In case of any additional tax liability on BHEL on account of non-compliance by the contractor, the additional financial implications on BHEL shall be passed on to the contractor.

5.13 The contractors shall provide the applicable SAC / HSN code, rate of tax under GST, applicable GST (i.e. IGST, CGST, SGST, UTGST) and GSTIN.

5.14 The contractor shall ensure and give an undertaking that in case tax credit is delayed/denied to BHEL due to non receipt/delayed receipt of service/goods and/or tax invoice or expiry of the timeline prescribed in tax laws for availing such ITC or any other reasons not attributable to BHEL, tax amount shall be recoverable from the contractor along with interest levied/leviable on BHEL.

5.15 The contractor shall give an undertaking that in case he delays in declaring such invoice in his return and GST credit availed by BHEL is denied or reversed subsequently as per GST law, GST amount paid by BHEL towards such ITC reversal as per GST law shall be recoverable from him along with interest levied/leviable from BHEL. Hence, payment of GST portion along with interest portion will be payable only after after the last date/chance for availing ITC.

5.16 The contractor shall give an under taking that any reduction in the rate of GST and/or benefits of ITC under the provisions of GST law shall be passed on to BHEL by way of commensurate reduction in price of goods/services.

This may be due to

Any reduction in the rate of GST or the benefits of ITC accrued to vendor/contractor. Availability of ITC for interstate supplies under GST which was not available in existing law (like CST) or ITC reversal under the existing law for stock transfer or on account of common credit etc.

Any element of taxes like Excise, service tax, VAT, CST, Entry Tax etc. embedded into price of goods or service under contract/work order/PO placed under the existing law.

The above shall be taken into account for working out the benefits to be passed on to BHEL.

A self-certified detailed declaration on anti-profiteering shall be submitted by bidder along with invoice in the prescribed format of Annexure-'Y'.

5.17 Penalty/LD shall be charged as per the NIT condition. GST applicable on the same shall be charged extra.

5.18 BOCW Cess (i.e.Labour Welfare Cess):

- The subcontractor of BHEL engaging building worker in connection with building or other construction work is required to apply and obtain registration under the relevant provisions of the BOCW Act from the concerned authorities.
- It shall be the responsibility of the sub-contractor to furnish a copy of such certificate of license/registration/permission to BHEL within a period of one month from the date of award of work.
- It shall be the sole responsibility of the sub-contractor as employer to ensure compliance of all the statutory obligations under the BOCW Act and the Cess Act and rules framed there under including that of payment/deposit of applicable Cess amount at the rate of one percent or the applicable rate as notified through Government gazette from time to time on the extent of work involving building or other construction workers engaged by the sub-contractor within a period of one month from the receipt of payment.
- It shall also be the responsibility of the sub-contractor to furnish the receipts/challans towards deposit of the Cess together with the number, name and other details of beneficiaries (building workers) engaged by the sub-contractor during the preceding month to BHEL.
- The sub-contractor of BHEL employing building workers in building or other construction work is required to comply with the provisions of the BOCW Act, the Cess Act and the rules made there under inter-alia including providing notice of poisoning or occupational notifiable diseases, reporting of accidents and dangerous occurrences and filing of returns to the concerned authorities as required under the BOCW Act and Cess Act promptly. A copy of all such notices, reporting and returns made by the sub-contractor

under the BOCW Act & the Cess Act are to be immediately made available to BHEL by the subcontractor.

- In case of non-compliance with the obligations as specified above, BHEL can deduct and withhold the applicable Cess amount from the running bills of the sub-contractor. BHEL shall release the withheld amount as and when the obligations as specified above are complied with by the sub-contractor and necessary proof to that effect is submitted to BHEL by the sub-contractor.
- In case of non-compliance i.e. the sub-contractor does not deposit the Cess with respect to the building or other construction work to the Labour Authorities, the amounts deducted by BHEL towards the Cess are required to be deposited with the Welfare Cess Board constituted under the BOCW Act as per the timelines (i.e. 30 days from the date of collection of the Cess amount) and the provisions of the Cess Act and the allied Rules.
- Non-compliance of the timelines as regards deposit of the cess amount deducted from the bills of the sub-contractor can attract penalty for BHEL under the provisions of the Cess Act and the allied Rules and therefore strict compliances of the provisions in relation thereto should be ensured by BHEL.
- In all cases where the sub-contractor receives any notice/ order under the BOCW Act and the Cess Act from the concerned authorities, the sub-contractor shall immediately inform BHEL.

6.0 TERMS OF PAYMENT:

- 6.1** Progressive payments against the sub items of each of the two RCC overhead tanks of price schedule shall be made up to 100 % of the percentage value assigned against the sub items as under, subject to the deductions towards security deposit, income tax with surcharge, any other tax or levies applicable and recoveries towards materials / services rendered on chargeable basis. For regulating progressive payments/deduction against Item No.1 of the Price Schedule, the total lump sum price (to be quoted by bidders) for complete work envisaged in the tender, shall be distributed as follows :-

S.N	Work Description	Percent Payment
A	Overhead Tank –Near Steel Tank, BHEL security Gate no. 5, Sector-A, Piplani (50% of Quoted Total Amount)	
1.0	RCC Work upto Plinth Level	15%
2.0	RCC Work upto Bottom of Tank	25%
3.0	RCC Work upto Top of Dome	25%
4.0	Connection of Inlet & Outlet Pipe along with scour & overflow pipes and specials, RCC Stair case with Railing, Balcony with Railing, MS/Aluminium ladder etc.	15%
5.0	Water Proofing & Hydraulic Testing	10%
6.0	Painting & Finishing	10%
S.No	Work Description	Percent Payment
B	Overhead Tank –Near Guest House, Berkheda (50% of Quoted Total Amount)	
1.0	RCC Work upto Plinth Level	15%
2.0	RCC Work upto Bottom of Tank	25%
3.0	RCC Work upto Top of Dome	25%
4.0	Connection of Inlet & Outlet Pipe along with scour & overflow pipes and specials, RCC Stair case with Railing, Balcony with Railing, MS/Aluminium ladder etc.	15%
5.0	Water Proofing & Hydraulic Testing	10%
6.0	Painting & Finishing	10%

- 6.2 Progressive payment shall be made on monthly basis subject to the deductions towards GST, TDS, income tax with surcharge, other applicable tax (if any) or levies applicable and recoveries towards materials/ services rendered on chargeable basis and penalty, if applicable.
- 6.3 All the payments due to the Contractor will be made through Electronic Fund Transfer (EFT). For EFT facility the successful bidder is required to submit the details duly endorsed by their bank in the prescribed proforma as enclosed at Annexure "A".
- 6.4 **Payment of running bills shall be made within 60 days from the date of submission of bills (by the contractor) duly verified by Site Engineer. Payment of Final bill shall be made as per clause No 14 of General Terms & Conditions.**
- 6.5 Any interim Payment made relating to work done or materials delivered vide running account bill may be modified or corrected by any subsequent interim payment or by the final payment. No certificate of the Engineer-in-charge supporting an interim payment shall of itself be conclusive evidence that any work or materials to which it relates is/ are in accordance with the contract.
- 6.6 **PAYMENT OF FINAL BILL :-**
- (1) It will be sole responsibility of the contractor to submit final bill in time, not exceeding three months from the date of completion of work. The bill submitted three months after the completion of work shall be treated as late bill.
- (2) The final bill shall be submitted by the contractor in the same manner as specified in interim bills within three months of physical completion of the work or within one month of the date of the final certificate of completion furnished by the Engineer-in-Charge whichever is earlier. No further claims shall be made by the contractor after submission of the final bill and these shall be deemed to have been waived and extinguished. Payments of those items of the bill in respect of which there is no dispute and of items in dispute, for quantities and rates as approved by Engineer-in-Charge, will, as far as possible be made within the period specified hereinunder, the period being reckoned from the date of receipt of the bill by the Engineer-in-Charge or his authorized Asstt. Engineer, complete with account of materials issued by the Department and dismantled materials.
- (a) If the Tendered value of work is up to Rs. 15 lac : 3 months.
- (b) If the Tendered value of work exceeds Rs. 15 lac : 6 months.

7.0 VARIATION IN CONTRACT PRICE:

The quantities shown on the drawings & documents may vary to any extent. BHEL reserve the right to add or delete items depending upon the final requirement. For such addition or deletion or quantity variation, the Contract value shall be adjusted based on the quoted unit price, which shall be valid for a variation of $\pm 10\%$ of the total contract value.

8.0 EVALUATION OF THE OFFER AND ISSUE OF WORKS ORDER

- 8.1 The bidder shall submit complete price of the package. No column should be left blank.
- 8.2 Evaluation of the offer will be strictly based on information submitted by the bidder. In view of this, the bidder is requested to go through the tender documents carefully and furnish all details clearly. Missing information may not be asked for by BHEL.
- 8.3 Prices quoted against different annexure of price schedule shall be combined to arrive at the total price of the package. **In case of any item not quoted, the highest quoted rate for that item amongst all bidders will be taken for the purpose of evaluation and the lowest quoted rate for that item amongst all bidders will be taken for award.**

- 8.4** Total price of the package shall be compared for the purpose of arriving at L-1.
- 8.5** In case Bharat Heavy Electrical Limited calls L1 for negotiations, such negotiations shall not amount to cancellation or withdrawal of the original offer, which shall be binding, on the bidder. All expenses for attending such negotiations are to be borne by the bidder.
- 8.6** Based on the techno-commercial evaluation and priced bids, the successful bidder shall be awarded the contract for the complete package.
- 8.7** No condition or deviations should be asked for in price bid.
- 8.8** If the work is indivisible in nature, it will be awarded on a single party. In case an MSE (Micro, small enterprise) quotes price within price band of L1 + 15% and accepts L1 price in a situation where L1 price is from some one other than an MSE, such an MSE may be awarded for full/complete awarding value. If the work is divisible in nature and if any contractor is covered under MSMED Act, he will be eligible to avail intended benefits of award of at least 20% of total awarding value subject to the condition that such an MSE quotes his price within band of L1 + 15% and accepts L1 price in a situation where L1 price is from some one other than an MSE. In case of more than one such MSEs, the work will be shared proportionately. If the work is divisible in nature and there is provision for splitting the work in designated ratio, it will be done as per the relevant clause pertaining to splitting of work available else where in the tender document.
- *Note:- The above Clause 8.8 pertaining to benefits under Public Procurement Policy for MSEs order 2012 shall not be applicable in this tender.**

9.0 DEFECT LIABILITY PERIOD/WARRANTY

- 9.1 The warranty period/Defect Liability Period for the work executed shall be for a period of 12 months from the completion of total work envisaged under the scope.**

10.0 Penalty against delay in completion of Contract Agreement formalities:

The contractor shall complete the contract agreement formalities such as deposition of SD (as applicable), submission of stamp paper, signing of contract agreement etc. in time as stipulated in LOI, failing which he shall be liable to pay penalty as indicated below in case the delay is attributable to him :-

- (i) In case of originally stipulated contract period \leq 6 months
Penalty per day delayed = $0.75 \times 1\%$ of original contract value/7
- (ii) In case of originally stipulated contract period $>$ 6 months but \leq 2 years
Penalty per day delayed = $0.75 \times 0.5\%$ of original contract value/7
- (iii) In case of originally stipulated contract period $>$ 2 years
Penalty per day delayed = $0.75 \times 0.25\%$ of original contract value/7

Note:-

1. The above said original contract value shall be exclusive of GST as well as cost of free issue material(s).
2. The total penalty amount shall, preferably, be deducted from the first R/A bill itself.
3. GST at applicable rate shall be levied extra in the worked out amount of above said penalty.

11.0 COMPENSATION IN CASE OF DEATH/PERMANENT INCAPACITATION

BHEL shall recover the amount of compensation paid to victim(s) by BHEL towards loss of life/permanent disability due to an accident which is attributable to the negligence of contractor, agency or firm or any of its employees as detailed below:

- (a) Victim : Any person who suffers permanent disablement or dies in an accident as defined below.
- (b) Accident : Any death or permanent disability resulting solely and directly from any unintended and unforeseen injurious occurrence caused during the manufacturing/operation and works incidental thereto at BHEL factories/offices and precincts thereof, project execution, erection and commissioning, services, repair and maintenance, trouble shooting, serving, overhaul, renovation and

retrofitting, trial operation, performance guarantee testing undertaken by the company or during any works/during working at BHEL Units/Offices/townships and premises/Project Sites.

- (c) Compensation in respect of each of the victims :
 - (i) In the event of death or permanent disability resulting from Loss of both limbs : Rs 10,00,000/- (Rs Ten Lakh)
 - (ii) IN the event of other permanent disability : Rs 7,00,000/- (Rs Seven Lakh)
- (d) Permanent Disablement : A disablement that is classified as a permanent total disablement under the proviso to Section 2(I) of the Employee's Compensation Act, 1923.

NOTE : This clause shall be applicable in a contract having contract value of Rs 5.00 Lakh or above.

ANNEXURE "A"

FORMAT FOR (EFT) ELECTRONIC FUND TRANSFER

You are requested to submit the information as per details given below at the earliest to enable processing of e-payment:

1. Name of the Supplier (Max 60 char)
2. Account No(Max 17 char)
3. Name of the bank, branch, city (Max 60, 40 and 20 characters respectively)
4. Branch Code (Max 5 char)
5. MICR Code (Max 30 char)
6. IFSC Code (Max. 30 char) [Every NEFT enabled bank / branch has a unique IFSC Code (Indian Financial Security Code)] This code may differ from RTGS IFSC code.

VENDORS / BIDDERS ARE SUPPOSED TO SUBMIT THE INFORMATION ON FIRM'S LETTER HEAD DULY ENDORSED AND STAMPED BY THEIR BANKERS.

In addition to above information please also furnish the following details to enable faster clearance of bills.

7. E-Mail Address (Max 40 char)
8. Details of TIN No. (Max 11 char)



भारत हेवी इलेक्ट्रिकल्स लिमिटेड, भोपाल

(भारत सरकार का उपक्रम)

Bharat Heavy Electricals Limited, Bhopal

(A Govt. of India undertaking)

उत्कृष्टता की ओर अग्रसर

"Marching Towards Business Excellence"

TO WHOM SO EVER IS CONCERNED.

Details for receiving Bank Account for NEFT/RTGS payment.

1. Name of Beneficiary : BHARAT HEAVY ELECTRICALS LTD.
2. Name of the Bank : State Bank of India
3. Bank of Branch Address : HET, Piplani, Bhopal (M.P.)-462021
4. Account No. : 30855948540
5. IFSC Code : SBIN0000519
6. MICR : 462002011
7. Title of Account : Current Account
8. PAN No. : AAACB4146P

Place: Bhopal

Date : 19-01-2016

Chetana
19/01/16
चेतन मेहर
CHETAN MEHAR
वरिष्ठ प्रबंधक (वित्त)
Sr. Manager (Finance)
बी.एच.ई.एल. भोपाल / BHEL, BHOPAL

We certify that the above bank details are correct as per our record.

Banker Signature & Seal
S.K. JAIN
SBN-2917

भोपाल : 462022, दूरभाष : 2500100 (7 लाईन्स), फैक्स : 0755 - 2500425, तार : भारतइलेक
Bhopal : 462022, Phone : 2500100 (7 Lines), Fax : 0755 - 2500425, Gram : BHARATELEC
WEB SITE ADDRESS : www.bhelbhopal.com

TECHNICAL BID

NIT No. TA/TCL/**40/19-20**

FOR

**CONSTRUCTION OF RCC OVERHEAD
WATER STORAGE TANKS (2 NOS.) OF 450
KL CAPACITY EACH IN BHEL TOWNSHIP,
BHOPAL.**

SECTION – V

TECHNICAL SPECIFICATIONS



**TOWNSHIP CIVIL MAINTENANCE DIVISION
BHARAT HEAVY ELECTRICALS LIMITED**

(A Government of India Undertaking)
BHOPAL – 462 022 (M.P)

TECHNICAL SPECIFICATIONS

NIT No. TA/TCL/40/19-20

Name of Work:- CONSTRUCTION OF RCC OVERHEAD WATER STORAGE TANKS (2 NOS.) OF 450 KL CAPACITY EACH IN BHEL TOWNSHIP, BHOPAL.

1.0 PROJECT DESCRIPTION:

R.C.C. OVERHEAD TANK:

- Construction, testing & commissioning of 450KL Overhead Water Storage Tanks (2 nos) as per specifications enclosed with the tender and as per 'Good for construction' drawings to be issued at the time of execution of work.
- Providing & fixing Float type water level indicator at suitable height.
- Providing & fixing M.S. Pipe railings to RCC staircase and Balcony/gallery.
- Providing & fixing M.S. Ladder from balcony to Top Dome & Aluminium ladder from Top Dome to inside of the tank.
- Providing & fixing DI Pipes of suitable diameter for inlet, outlet, overflow and scouring from tank to Ground Level including providing flanges with Blanking at the end for further joining of Pipe.
- Carrying out water leakage test of tank. If there is any leakage found after the test, the same shall be rectified to make the tank water tight.
- All concrete/masonry (outside) surfaces to be painted with two or more coats of Premium Acrylic smooth exterior paint along with two or more coats of primer as base coat. The make of paint & primer shall be as follows:-
Make of primer - 'Exterior wall primer' from Asian / 'Weather coat exterior primer' from Berger / 'ICI exterior acrylic primer' from AkzoNobel / 'Nerolac exterior primer' from Nerolac.

Make of paint - 'Apex' from Asian / 'Dulux premium exterior emulsion' from AkzoNobel/'Weather coat smooth' from Berger / 'Excel Anti - peel' from Nerolac.
- All concrete/masonry surface (inside of tank) to be painted with FOOD GRADE EPOXY STEARATE COATING conforming to CFTRI & Haffkins certification. The application of paint shall be as per the manufacturer's specifications and best engineering practices.
- All exposed structural steel members including M.S. pipes, inserts etc, wherever provided, shall be painted smooth with synthetic enamel paints of approved make, colour & shade including applying two coats of steel primer of approved make.
- Any other associated works not mentioned above explicitly but necessary for successful completion of the project shall be covered under scope of work.

The above scope may undergo some minor changes based on BHEL final requirement.

Note:-

- 1) Contractor may be required to protect the already executed work either done by him or other agency at his own expense for working in vicinity of such works, so as to prevent damage to the already executed work. This may require temporary barricading, covering or other measures as may be necessary for protecting the already executed works.***
- 2) The contractor must satisfy himself by personal study and examination of the drawings / specifications furnished and understand thoroughly the scope of proposed work in detail and all conditions affecting the work before entering into the contract. There shall not be, at any time, dispute / complaint or any misunderstanding with regard to scope of work and interpretation of specifications or any misunderstanding with regard to nature or omission of the work to be done nor shall any application for compensation in terms of time and money be accepted by company regarding the above.***
- 3) The contractor shall arrange enabling works (temporary in nature) such as construction of approach road to work site (if not available), cement godown, site office etc at his own expense.***

2.0 GENERAL:

- 2.1 The work of construction of R.C.C. Over Head tank involves specialized workmanship. Hence, requirements of higher standard than general concrete work is essential. The height of staging shall be reckoned from an assumed ground level nearest to the site.
- 2.2 The offer shall include provision for **1.2 meter wide R.C.C** balcony at bottom slab level, railing to balcony and at roof level, lightning arrestor, water level indicator, **1.20 meter wide R.C.C** stairs from ground level to tank floor with railing, ladders and all pipes and fitting (including puddle collars up to and including duck foot bends and from duck foot bend up to 2.0 meters outside the supporting structures i.e. R.C.C. column including C.I. valves etc. including their painting and architectural treatment protection and drainage work all complete as mentioned in drawings & specifications.
- 2.3 The Railing shall consist of M.S. Angle posts of size 50 × 50 × 6 mm, 1.2 metre height, 1.50 metre spacing, welded to 150 × 150 × 4 mm base plate. The whole assembly shall further be welded to M.S. anchor plate of size 200 × 200 × 4 mm size, which shall be embedded into concrete with suitable hold fast. This anchor plate shall be embedded while concreting is being done and not at a later date. It shall consists of 3 rows of medium class MS pipe of suitable dia.

Railing shall be provided from GL to top for RCC stairs, all round the gallery/balcony and all round the roof slab.

- 2.4 An aluminium ladder shall be provided from the manhole to the inside floor of the tank. The aluminium ladder 600 mm wide shall comprise of 2 nos of 100 × 44 × 3 mm rectangular tube (Aluminium) stringers and 80 × 38 × 3 mm rectangular tube foot rest (aluminium) at 400 mm c/c.
- 2.5 M.S. ladder, 600 mm wide, from gallery to the top of roof slab shall comprise of two stringers of size MS angles 50 × 50 × 6 mm each and foot rests of two M.S. bars of 18/20 mm dia each at 300 mm c/c. The railing parallel to stringers shall be of 20 mm G.I. pipe medium class, in three rows connected to stringers by 50 × 50 × 6 mm angle post at 1.5 metre c/c. This ladder shall start from the end of the entry cut out on gallery. All iron works railing shall be applied with 2 coats of approved quality and make synthetic enamel paint over two coats of steel primer.
- 2.6 To avoid any unauthorized person climbing on the overhead tank, the entry at the bottom of the stair case shall be closed with suitable arrangements consisting of one gate with locking arrangement of size 1.0 m × 2.0 mt over full width of stairs made of MS angle and plates with suitable MS angle iron posts for fixing the gate.
- 2.7 C.I Manhole covers and frames of approved quality and make with locking arrangement, weighing not less than 110 kg shall be provided.
- 2.8 Air vents (wherever necessary) of suitable dia swan neck type, with minimum required number as per drawing or as directed by Engineer-in- Charge shall be provided.
- 2.9 To avoid any accident at the time of cleaning or maintenance of the tank, the opening of the outlet and scour pipes shall be covered with suitably designed and painted CI grate with frame.

3.0 WORKMANSHIP:

- 3.1 The depth of excavation shall, generally be guided by the underground strata and the safe bearing capacity of the foundation soil and as directed by the Engineer-In-Charge. No dewatering shall be payable under any circumstances whether natural, artificial or manmade.
- 3.2 **FILLING FOUNDATION WITH BED CONCRETE : (Levelling course):** The foundation shall be laid over bed concrete (i.e. levelling course) of at least 100mm thick or more, with at least 1:3:6 concrete with graded stone aggregate 40 mm nominal size or the prescribed mix as per instruction of Engineer-In-Charge and as per relevant I.S. Code & drawings provided by BHEL.
- 3.3 **REINFORCED CONCRETE WORK :** The concrete mix and minimum Cement specified shall be rigidly followed. Where the concrete has not fully hardened, all laitance shall be removed by scrubbing the wet surface with wire or bristle brushes, care being taken to avoid dislodgement of particle of aggregate. The surface shall be thoroughly wetted and all free water removed. The surface shall then be coated with neat cement grout. The first layer of concrete to be placed on

this surface shall not exceed 15 cms in thickness, and shall be rammed against old work. Particular attention shall be paid to corners and close spots. Concrete shall be thoroughly compacted and fully worked around the reinforcement, around embedded fixtures and into corner of form work.

3.4 All the ductile iron duck foot bends, puddle collars, bell mouths and other specials, shall be of class K-12 suitable for push-on jointing conforming to IS 9523 (latest revision/amendment) and as per Indian Standard Specification. Pipes required for inlet, outlet, overflow and scour shall be of Ductile Iron double flanged with class K-9 conforming to IS 8329 (latest revision/amendment) and shall be supplied and fixed in position by the contractor from desired inside level of the tank to duck foot bend, one metre below G.L and further providing and fixing all double flanged DI pipes and DI specials from duck foot bend on-ward up to 2.0 M outside the supporting structure of the tank (i.e R.C.C. Column) shall also be supplied and fixed by the contractor including testing of the fittings and joints with cost of the materials and joints. All the fittings shall be as per I.S. Specifications.

3.5 The arrangements for inlet, outlet, overflow and scour pipes shall be such that all these pipes are independent of each other and each of these shall have bell mouths at their ends to be supplied by the contractor. The top of bell mouths of inlet and overflow pipes shall be F.T.L and top of bell mouths of outlet pipe shall be 15 cm above floor of the tank whereas the bell mouth of scour pipe shall be flushed with floor level. All these vertical double flanged (D.F.) pipes shall terminate with flanged duck foot bends with bottom fixed one meter below ground level. Further, D.F. pipe shall be provided up to 2.0 M away from the supporting structure of the tank. All these duck foot bends shall be fixed with heavy duty ISI marked CI sluice valves. The contract also includes providing and fixing of CI sluice valves, construction of valve chambers and providing C.I. Chamber covers (weight not less than 110 Kg). All the pipes and specials required for above shall be fixed during concreting. Specials which are to be embedded in concrete shall have collars at the centre of concrete thickness.

3.6 The dimensions of the pipes shall be as under:-

1. Inlet pipe size(DI Pipe) 200 mm dia or as per instruction of Engr-in-charge
2. Outlet Pipe(DI Pipe) 200 mm dia or as per instruction of Engr-in-charge
3. Overflow Pipe Size(DI Pipe) 150 mm dia or as per instruction of Engr-in-charge
4. Scour Pipe Size (DI Pipe) 150 mm dia or as per instruction of Engr-in- charge

Note: - The top of inlet/outlet, scour and overflow pipes shall have bell mouth.

Following valves and specials shall be supplied and fixed by the contractors:-

1. D.I. bell mouth suitable size for pipe.
2. D.I. Puddle Collar suitable size for Pipes.
3. D.I. duck foot bend of suitable size for inlet, scour and Overflow Pipes.

4. C.I. Double flanged sluice valve of suitable size
5. Inlet, Outlet and scour pipe with operating wheel.
6. Ductile Iron double flanged Distance piece pipe of suitable length and size to extend the pipes up to 2 meter beyond the outer supporting Column.

The scour pipe and the outlet pipe shall be inter- connected with a sluice valve in between.

- 3.7 The tank shall have to be tested for water tightness as per I.S. 3370 and it shall be the responsibility of the contractor to make it water tight.

For testing purposes, the contractor shall have to give a test of water tightness of the container of overhead tank to the entire satisfaction of the department. The responsibility of structural stability shall also rest solely with the contractor. The refund of earnest money and security deposit contemplated in the contract shall be done only after expiry of twelve months defect liability period reckoned from the date of satisfactory commissioning of tank.

- 3.8 Aluminium Lightning conductor shall be provided & Fixed with proper earthing arrangements as per relevant I.S. Specifications. The earthing plate shall be of copper.

- 3.9 Lightning conductor 1.5 meter long copper rod, 25 mm diameter with base and top cone having spikes complete as per specifications (one no.).

- 3.10 Supplying and fixing copper earth plate 600 × 600mm × 3mm size with copper nuts and bolts complete including digging pit of required size and filling it with 10 kgs of salt and 15 kgs of charcoal etc (For lightning conductor) – one no. including testing. Supplying and laying earth connection for earthing with 30 × 3 mm aluminium tape, jointing materials all complete where ever necessary.

- 3.11 Water level indicator shall comprise of copper float, guide, pulleys with a pointer on the enamel painted indicator plate which shall be calibrated to read the depth of water in the tank in meters.

- 3.12 No charges for plastering (if required) for proper finishing of the surface of structures shall be paid under any circumstances. Amount shall be deducted from the Lum Sum cost for improper finishing.

3.13 Construction Joints:

(a) Construction joints shall be treated in accordance with IS-456 (latest revision/amendment). The surface of already laid concrete shall be cleaned with water jet and cement slurry be applied. Cement mortar 10 mm thick of the same proportion as in concrete shall be applied and then fresh concrete of the lift shall be laid. The form work must overlay 100 mm on the already laid concrete.

(b) To provide and place in position suitable PVC water stop (Serrated with central bulb, 225 mm wide, 8 to 11 mm thick) conforming to IS-12200 for construction joint between two RCC members.

4. SPECIFICATION OF MATERIAL FOR CONSTRUCTION:

The material used for construction shall be governed by the provision of Part - IV of National Building Code of India and relevant - IS Codes of specifications with up-to-date amendment/revision.

4.1 BRICKS : The bricks shall be of good quality having crushing strength not less than 50 kg/cm² and water absorption shall not be more than 15%. Bricks shall conform to IS 1077 with up-to-date amendment/revision.

4.2 SAND:

Sand shall be as per IS 383 (latest revision/amendment). The preferable sand shall be Narmada river sand. The sand for plaster shall conform to IS 1542 (latest amendment/revision).

4.3 AGGREGATE:

It shall conform to IS 383 (latest revision/amendment)

4.4 STEEL FOR REINFORCEMENT:

Steel for reinforcement shall be issued by BHEL free of cost.

4.5 CEMENT :

Cement to be used in the work shall be issued by BHEL free of cost.

4.6 WATER:

Water for construction shall be as per IS 456 (latest revision/amendment)

4.7 CONCRETE:

The concrete shall be prepared as per mix design. All ingredients of concrete shall be weighed and mixed as per the mix design. Weigh batching may be converted into corresponding volume batching, if desired. All concrete shall be mixed by concrete mixer and compacted with concrete vibrator only. All tests shall be carried-out by contractor at his own cost. During concreting, sample test cube shall be prepared as per the frequency prescribed in IS 456 (latest revision/amendment). To assess the strength of cube immediately, accelerated cube testing may also be conducted as required by the Engineer-in-Charge. If the results of the tests do not conform to the required standard and if the Engineer-in-Charge considers that the structural test is necessary, the same shall be carried-out by the contractor at his own cost. If the result of this comes out to be un-satisfactory again, the contractor shall be bound to demolish and reconstruct that particular portion of work. The formwork shall be of steel or fresh ply to get smooth finish.

5.1 Design of concrete mix – It shall be done by the contractor at his own cost and the mix so designed shall be approved by Engineer-in-Charge within the limitations of parameters and other stipulations. Design mix shall be done as per standard code of practice as per IS.456 (latest revision/amendment).

5.2 Production of concrete -

5.2.1 Batching – Batching shall be done as per IS 456 (latest revision/amendment). The cement shall be mixed by weight and other constituents shall also be preferably mixed by weight.

5.2.2 Mixing – Concrete shall be mixed in a mechanical mixer as per IS 456 (latest revision/amendment). The mixer shall comply with IS 1791 (latest revision/amendment) and IS 12119 (latest revision/amendment). Mixing shall be continued till there is a uniform distribution of ingredients, the mass is uniform in colour and consistency but in no case the mixing shall be done for less than 2 minutes.

5.2.3 Form work – The form work shall conform to IS 456 (latest revision/amendment). The form work shall conform to the shape, lines and dimensions as shown in the drawings and in such a manner that construction shall remain sufficiently rigid during placing and compaction of concrete and shall be sufficiently tight to prevent loss of liquid from concrete. Design, detailing etc as per IS 14687 (latest revision/amendment) shall be referred.

5.2.3.1 The form work shall be cleaned off. All rubbish particularly chippings, shaving and saw dust shall be removed from the interior of the forms before concrete is placed and the form work in contact with the concrete shall be cleaned and thoroughly wetted or tested with approved compositions.

5.2.3.2 Stripping Time – In no circumstances, form work shall be struck off until the concrete reaches the strength of at least twice the stress to which the concrete may be subjected at the time of stripping.

5.2.3.3 In normal circumstances i.e. ambient temperature above 15°C, form work may be struck after expiry of the following periods as per IS 456 (latest revision/amendment).

Vertical form of walls, beams and columns 24 hours to 48 hours as may be decided by the Engineer-in-Charge.

Bottom of slabs upto 4.5m span - 7 days

Bottom of slabs over 4.5m span – 14 days

Bottom of beam upto 6m span – 14 days

Bottom of beam over 6m span – 21 days

The formwork may be left longer as it assists curing. The number of props, their sizes and position shall be such as to be able to safely carry the full dead load of the slab, beam or arch as the case may be together with any live load likely to occur during further constructions.

5.3 Assembly of Reinforcement – It shall be as per IS 456 (latest revision/amendment).

5.3.1 Reinforcement shall be bent and fixed in accordance with procedure specified in IS 2502 (latest revision/amendment). The high strength deformed steel bars shall not be rebent or straightened without the approval of Engineer-in-Charge. Bar bending schedule shall be prepared for all reinforcing work.

5.3.2 Placing of reinforcement shall be done as per clause No. 12.3 of IS 456 (latest revision/amendment). Spacers, cover blocks shall be of concrete of same strength.

5.3.3 Welded joints or mechanical connections in reinforcement shall be used but in all cases of important connections, tests shall be made to prove that the joints are of full strength of the bars connected. Welding of reinforcement shall be done in accordance with the recommendations of IS 2751 (latest revision/amendment) and IS 9417 (latest revision/amendment). It shall be done as per IS 456 (latest revision/amendment).

5.4 Transport

After mixing, concrete shall be transported to the form work as rapidly as possible by methods which prevent segregation or loss of any ingredients and maintaining the required workability. It shall be done as per of 456 (latest revision/amendment).

5.5 Placing and compacting

The concrete shall be placed and compacted before initial setting of concrete commences and shall not be subsequently disturbed. The method of placing shall be such that there is no segregation and concreting shall be carried out continuously up to construction joints, the position and arrangement of which shall be determined by the designer and construction joints shall comply with relevant IS 11817 (latest revision/amendment). When the work is resumed on surface which has hardened, such surface shall, firstly, be roughened. Thereafter, it shall be swept clean, roughly wetted and then covered with a 10 mm layer of mortar of same proportion which shall be freshly mixed and placed immediately before placing of concrete.

Where the concrete has not hardened, all loose material shall be removed by scrubbing the wet surface with wire or bristle brushes, care being taken to avoid dislodgement of particles of aggregate. The surface shall be thoroughly wetted and all free water removed. The surface shall then be coated with neat cement grout. The first layer of concrete to be placed on this surface shall not exceed 15cm in thickness and shall be rammed against old work, particular attention shall be paid to corners and close spots. Concrete shall be thoroughly compacted and fully worked around the reinforcement, around embedded fixtures and into corners of the formwork.

5.6 Mechanical Vibration – Concrete shall be compacted by mechanical vibrators and reduced water content shall be adopted. Over vibration and under vibration are harmful and shall be avoided and vibration of very wet mixes shall also be avoided. It shall also comply with IS 456 (latest revision/amendment). Whenever vibrator is to be applied externally, the design of form work and the disposition of vibrators shall receive special consideration to ensure efficient compaction and to avoid surface blemishes.

5.7 Curing – The concrete shall be covered with a layer of old gunny bags or canvas or similar absorbent material and kept constantly wet for at least 28 days from the date of placing of cement concrete. Curing shall be completed as per the provision of IS 456 (latest revision/amendment).

5.8 TESTS: -

All tests as specified in IS code and required for execution of work shall be carried out by the contractor at his own cost as per instructions of Engineer-in-charge. A few tests are given below:-

S.No	Lab Material	Test	Test Methods
1.	Coarse & fine sand	I-Gradation II-Deleterious Constituents III. Fineness modulus IV. Silt content V. Bulking	IS 2386 IS 2386 IS 2386 IS 2386 IS 2386
2.	Coarse aggregate	I. Los-Angles abrasive value II. Aggregate Impact value III. Chemical test	IS-2386 IS-2386 IS 2386
3.	Concrete	I. Slump test II. Compressive strength	IS 1199 IS 456-2000, IS 516 & IS 9103

5.9 Field Test

The contractor shall provide all equipments and make all arrangements for field tests to exercise proper quality control over works especially for tests as mentioned above.

5.9.1 Test for compressive strength of concrete

Test specimens shall be cubical in shape and shall be 15x15x15cm in size. The mould shall be of metal, preferably steel or cast iron and strong enough to prevent distortion. The base plate shall be of such dimension as to support the mould during filling without leakage and it shall be preferably attached to the mould by springs of screws.

5.9.2 The tapping bar shall be steel bar 16mm in diameter 0.6m long and bulled pointer at the lower end.

5.9.3 The test specimen shall be made as soon as practicable after mixing and in such a way as to produce full compaction of concrete with neither segregation nor excess laitance. The concrete shall be filled into the mould in layers approximately 6cm deep. In placing each scoop full of concrete, the scoop shall be moved around the top edge of the mould as the concrete sides from it in order to ensure symmetrical distribution of concrete within the mould. After each layer is compacted, the surface on concreting shall be finished in level with top of the mould, using trowel and covered with a glass or metal plate to prevent evaporation.

5.9.4 The mould shall be kept cured in same condition and place as that of part of structure for which test specimens have been taken

6.0 Acceptance criteria

The concrete can be accepted if it satisfies relevant clauses regarding compressive strength and quality of concrete as per I.S. 456 (latest revision/amendment).

7.0 Inspection & testing of concrete structure

7.1 In order to ensure that the construction complies with the design and all the structural requirements, relevant provisions of IS 456 (latest revision/amendment) shall be followed. During construction, the settlement or slump due to self weight shall be noticed by proper procedure.

7.1.1 Water Tightness Test

After the completion of structure, it shall be tested for water tightness. Initially the structure shall be filled gradually to ensure uniform settlement all over the area. The full supply shall reach in a period of not less than 72 hours. At the time of testing, verticality shall be checked by theodolite as per IS 3370 (latest revision/amendment) (Part I, general requirement)-code of practice for concrete structures for storage of liquids which specifies water tightness test at full supply level.

After seven day period of observation after filling with water, the external surface shall not show any sign of leakage and remain apparently dry.

7.2 The water for testing and pump for lifting water shall be arranged by the contractor at his own cost.

7.3 The contractor shall give the test for water tightness to the entire satisfaction of the department. The responsibility of structural stability shall solely rest with the contractor.

8.0 If, under unavoidable circumstances or for reasons beyond control of the department, any site of construction of different components is required to be changed/shifted, the contractor shall have to take up construction at alternate site or if design changes due to any reason, the contractor shall not make any claim on this account.

9.0. LIGHTNING CONDUCTOR:

The arrangement for lightning protective system for protection of all the structures shall be made as per IS: 2309 (latest amendment/revision). The protection system shall be designed, installed and tested as per this code and all the components of the

system shall also be provided as per specification mentioned in this code.

10.0. The contractor shall make container of the tank chlorine resistant as doses of chlorination are required to be given to water.

11.0 Providing Chequered precast concrete tiles 22 mm thick at ground floor level of the tank on 20 mm thick bed of cement mortar 1:4 (1 cement: 4 coarse sand)

Note: If difference is observed between the specifications mentioned above & CPWD Specifications of the relevant Items; the stringent most shall be followed. In General, for execution of all civil works envisaged under the scope & their measurements, latest CPWD specification and relevant Indian Standard Codes shall be followed unless otherwise stated against a particular item of work. If CPWD specification and/or Indian Standards do not provide details of specification of any item of work, the work shall be carried out as per the instructions of Engineer-in Charge with best Engineering Practices.