

## सी.एस.आई.आर.-संरचनात्मक अभियांत्रिकी अनुसंधान केन्द्र CSIR-STRUCTURAL ENGINEERING RESEARCH CENTRE

(वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद Council of Scientific and Industrial Research)

सीएसआईआर परिसर CSIR Campus, सीएसआईआर सड़क,तरमणि Taramani, चेन्नै Chennai-600 113.

No. 50(36)/2021-2022/CW/EW/SE

दि. Dated: 11.08.2023

### निविदा आमंत्रण सूचना NOTICE INVITING e-TENDER (TWO BID SYSTEM)

1) ऑनलाइन ITEM RATE E-TENDERS को CPWD, रेलवे, MES, पोस्ट और टेलीग्राफ विभाग, PSU, CSIR और अर्ध सरकारी संगठनों के उपयुक्त वर्ग के ठेकेदारों से निम्नलिखित कार्यों के लिए आमंत्रित किया गया है और जिनके पास है 40% की सीमा पर निविदा (ECPT) में अनुमानित लागत (सिविल वर्क कम से कम तीन में काम करता है) में सिविल और इलेक्ट्रिकल काम करता है। ECPT से कम नहीं) और 80% (ECPT से कम नहीं का एक काम) (सभी राशियों को एक सुविधाजनक आंकड़े के लिए राउंड ऑफ) पिछले 7 (सात) वर्षों के दौरान पूरा हुआ जो इस नोटिस के लिए पिछले महीने के अंतिम दिन समाप्त हुआ है जिसके लिए निविदाएं आमंत्रित हैं।

वियुत कार्यों के संबंध में, जिनके लिए सिविल ठेकेदार के पास वियुत कार्यों का अनुभव नहीं है, उन्हें एक सहमति पत्र और एसोसिएट ठेकेदार से अनुभव प्रमाण पत्र संलग्न करना होगा, जो उनके द्वारा शासित संगठनों में उनके द्वारा निष्पादित वियुत कार्यों में पिछला अनुभव हो। 40% की सीमा पर टेंडर (ECPT) के लिए अनुमानित लागत (तीन काम ECPT से कम नहीं), 60% (ECPT से कम नहीं दो कार्य) और 80% (ECPT से कम नहीं का एक काम) ) (सभी सुविधाजनक राशियों के लिए राउंड ऑफ) पिछले 7 (सात) वर्षों के दौरान पूरा हुआ जो इस नोटिस के पहले महीने के अंतिम दिन समाप्त होता है, जिसके लिए निविदाओं को शपथ पत्र (एमओयू) के साथ उपयुक्त वर्ग के वैध वियुत लाइसेंस के साथ आमंत्रित किया जाता है। ई-टेंडर में अपलोड किया जाना चाहिए। इन शर्तों को पूरा करने के लिए निविदाकारों को प्रमाण प्रस्तुत करने की आवश्यकता होती है और सरकार के माध्यम से ई-निविदा दस्तावेज जमा करते समय आयकर पैन काई, जीएसटी पंजीकरण संख्या (जैसा कि अनिवार्य है) की एक प्रति प्रस्तुत करना आवश्यक है। ई-प्रोक्योरमेंट पोर्टल।

2) Online ITEM RATE E-TENDERS are invited on composite tender basis for the following works from the Contractors of appropriate class of CPWD, Railways, MES, Post & Telegraph Departments, PSUs, CSIR and Semi Government Organisations and/or from those who have carried out Civil and Electrical works on composite tender basis having experience in Civil works amounting to the Estimate Cost put to Tender (ECPT) at the range of 40% (Three works each of not less than ECPT), 60% (Two works each of not less than ECPT) and 80% (one work of not less than ECPT) (all amounts rounded off to a convenient figure) completed during last 7 (seven) years ending on the last day of the month previous to this notice for which the tenders are invited.

With regard to **Electrical works** for which the civil contractor does not have experience in Electrical works have to attach a consent letter and the experience certificate from the Associate contractor to be engaged by them who are having previous experience in **Electrical works executed by them in Government organisations** for the Estimate Cost put to Tender (ECPT) at the range of 40% (Three works each of not less than ECPT), 60% (Two works each of not less than ECPT) and 80% (one work of not less than ECPT) (all amounts rounded off to a convenient figure) completed during last 7 (seven) years ending on the last day of the month previous to this notice for which the tenders are invited with **valid Electrical Licence of appropriate class** along with **Affidavit (MOU)** should be uploaded in the e-tender. **The tenderers are required to produce proof of fulfilling these conditions** and also required to submit a copy of **Income Tax PAN Card, GST Registration Number** (as these are mandatory) while submitting e-tender documents through Govt. e-procurement portal.

क्र		अनुमानित रकम	ई.एम.डी.	पूरा करने
सं.	विवरण	Estimated Cost	रकम	की तिथि
S1.	Description of work.	(लाखों में)	EMD	Time of
No.		Approx. (₹)	Amount	Completion
			₹.	
1	Proposed Extension of Test Floor building on			
	the northern side of Fatigue and Fracture lab.,			
	(FFL), CSIR-SERC, CSIR Campus, Taramani,			
	Chennai – 600113.			18 (Eighteen)
	i) Civil work	1,52,22,020.00	3,04,441.00	Months
	ii) Electrical work	13,86,515.00	27,731.00	
	Total	1,66,08,535.00	3,32,172.00	

Date and time of publishing	:	12.08.2023	09.00 a.m.
Bid document download start date and time	:	12.08.2023	10.00 a.m.
Bid submission end date and time	:	23.08.2023	06.00 p.m.
Bid opening date and time	:	25.08.2023	11.00 a.m.

Note: e-tender I.D.No. 2023 CSIR 164200 1 dated : 11.08.2023.

Tenders without Earnest Money Deposit will be invalid. Failing which their offer shall be rejected.

#### Requested to Submit Technical Bid only, No price bid to be attached in pdf format along with Technical bid.

EMD should be submitted in the form of Demand Draft / Bankers Cheque or pay order of a scheduled bank or online payment in an acceptable form with receipt and should be handed over to Engineering Works & Services Section along with e-tender acknowledgement form, on or before opening date and time of the NIT. निविदाकेबारेमेंविवरणकेलिएनिम्नलिखितवेबसाइटरेखें।The web sites may be visited for details of NIT: etenders.gov.in /www.serc.res.in

> Sd/-Sr. Superintending Engineer (Civil)



CSIR-STRUCTURAL ENGINEERING RESEARCH CENTRE (Council of Scientific and Industrial Research) CSIR Campus, CSIR Road, Taramani, Chennai – 600 113.

#### ATTACHMENT FOR NOTICE INVITING e- TENDERS (TWO BID SYSTEM)

1. Online ITEM RATE E-TENDERS are invited on composite tender basis for the following works from the Contractors of appropriate class of CPWD, Railways, MES, Post & Telegraph Departments, PSUs, CSIR and Semi Government Organisations and/or from those who have carried out Civil and Electrical works on composite tender basis having experience in Civil works amounting to the Estimate Cost put to Tender (ECPT) at the range of 40% (Three works each of not less than ECPT), 60% (Two works each of not less than ECPT) and 80% (one work of not less than ECPT) (all amounts rounded off to a convenient figure) completed during last 7 (seven) years ending on the last day of the month previous to this notice for which the tenders are invited.

With regard to **Electrical works** for which the civil contractor does not have experience in Electrical works have to attach a consent letter and the experience certificate from the Associate contractor to be engaged by them who are having previous experience in **Electrical works executed by them in Government organisations** for the Estimate cost (for Electrical part) for the Estimate Cost put to Tender (ECPT) at the range of 40% (Three works each of not less than ECPT), 60% (Two works each of not less than ECPT) and 80% (one work of not less than ECPT) (all amounts rounded off to a convenient figure) completed during last 7 (seven) years ending on the last day of the month previous to this notice for which the tenders are invited with **valid Electrical Licence of appropriate class** along with Affidavit (MOU) should be uploaded in the e-tender. The tenderers are required to **produce proof of fulfilling these conditions** and also required to submit a copy of **Income Tax PAN Card, GST Registration Number** (as these are mandatory) while submitting e-tender documents through Govt. e-procurement portal.

2.				
क्र		अनुमानित रकम	ई.एम.डी.	पूरा करने
सं.	विवरण	Estimated Cost	रकम	की तिथि
S1.	Description of work.	(लाखों में)	EMD	Time of
No.		Approx. <b>(₹</b> )	Amount ₹.	Completion
1	Proposed Extension of Test Floor building on the northern side of Fatigue and Fracture lab., (FFL), CSIR-SERC, CSIR Campus, Taramani, Chennai – 600113. i) Civil work	1,52,22,020.00 13,86,515.00	3,04,441.00 27,731.00	18 (Eighteen) Months
	ii) Electrical work Total	1,66,08,535.00	3,32,172.00	

3. Time for carrying out the work will be 18 (Eighteen) months, and the date of commencement shall be reckoned from the tenth day of issue of award letter.

- 4. A copy of the tender bid submission acknowledgement should be submitted to Engineering Works & Services Section through a person or by post, before the date and time fixed for opening the tender. CSIR-SERC will not be responsible for postal delay in any manner. A copy of all documents, submitted online, should be kept (as hard copy) in own custody for reference. Tenders without Earnest Money Deposit will be invalid. Failing which their offer shall be rejected,
- 5. The tenderer is to indicate the name and telephone number of issuing agency of the Completion certificate to enable General Technical Evaluation Committee to verify the documents if necessary.
- 6. In case credentials submitted found to be false/ forged / incomplete / doubtful credential/the offer shall be rejected straightway and shall not be taken for evaluation / comparison purpose. No further clarification will be sought from the tenderers.
- 7. In case of discrepancy in English and Hindi version, English version prevails.
- 8. LIST OF DOCUMENTS /CREDENTIAL (.pdf format only) SCANNED AND UPLOADED IN e-TENDERING.
  - i) Cost of EMD in a approve mode as per tender documents.
  - ii) Certificate of work experience/performance certificate: List of similar works completed in last seven years including a) agency from whom executed,b) execution value of work and c) stipulated and actual time of completion.
  - iii) Certificate of Registration GST No as applicable.
  - iv) PAN registration/Income Tax return
  - v) Undertaking for having gone through the tender documents as per technical bid.
  - vi) With regard to Electrical works for which the civil contractor does not have experience in Electrical works have to attach a consent letter and the experience certificate from the Associate contractor to be engaged by them who are having previous experience in Electrical works executed by them in Government organisations for the Estimate cost (for Electrical part) put to Tender (ECPT) for the Estimate Cost put to Tender (ECPT) at the range of 40% (Three works each of not less than ECPT), 60% (Two works each of not less than ECPT) and 80% (one work of not less than ECPT) (all amounts rounded off to a convenient figure) completed during last 7 (seven) years ending on the last day of the month previous to this notice for which the tenders are invited with with Valid Electrical Licence of appropriate class along with Affidavit (MOU) and Consent letter from electrical contractor should be uploaded in the e-tender.
- 9. The Employer does not bind himself to accept the lowest or any tender and reserves to himself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rates quoted.
- 10. Canvassing in connection with the tender is prohibited and the tender submitted by the contractor who resort to canvassing are liable for rejection.

11. The tenderer shall not be permitted to tender for works in the concerned unit of CSIR in which a relative is posted in the grade between Controller of Administration and Junior Engineer, (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or subsequently employed by him and who relatives are as mentioned above.

Note: a person shall be deemed to be a relative of another if, and only if,

(a) they are members of a Hindu undivided family; or (b) they are husband and wife; or (c)the one is related to the other in the following manner: Father / Mother (including stepmother). Son (including step son), Son's Wife. Daughter (including Step Daughter), Father, Son's Son, Son's Son's Wife, Son's, Son's Daughter's Husband, Daughter's husband, Daughter's Son's wife, Daughter's daughter, Daughter's daughter's husband, Brother (including step brother), Brother's wife, Sister (including step sister), Sister's husband.

- 12. Tender submitted shall remain valid for 90 days from the date of opening for the purpose of acceptance and award of work; validity beyond 90 days from the date of opening shall be by mutual consent.
- 13. The tenderer shall quote rates both in Figures and Words. He shall also workout the amount for each item of work and write in both figures and words. On check if there are differences between the rates quoted by the tenderer in words and in figures or in the amount worked out by him the following procedure shall be followed.
  - i) When there is difference between the rates in figures and in words, the rates which correspond to the amounts worked out by the tenderer shall be taken as correct.
  - ii) When the amount of an item is not worked out by the tenderer or it does not correspond with rate written either in figures or in words, the rate quoted by the tenderer in words shall be taken as correct.
  - iii) When the rate quoted by the tenderer in figures and in words tallies but the amount is not worked out correctly the rate quoted by the tenderer shall be taken as correct and not the amount.
- 14. The Tenderer should see drawings and in case of doubt obtain required particulars, which may in any way influence his tender from the Engineer as no claim whatsoever will be entertained for any alleged ignorance thereof.
- **15.** Before tendering, the tenderer shall inspect the site to fully acquaint himself about the condition in regard to accessibility of site, nature and extent of ground, working condition of site and locality including stacking of materials, installations of tools and plants (T&P) etc., conditions affecting accommodations and movement of labour etc. required for the satisfactory execution of the work contract. No claim whatsoever on such account shall be entertained by the employer in any circumstances.
- 16. Earnest money will be forfeited if the contractor fails to commence the work as per letter of award.

- 17. Except writing rates and amount, the tenderer should not write any conditions or make any changes, additions, alterations and modifications in the printed form of tenders. Tenderers who are desirous to offer rebate, the same should be brought separately in the covering letter and submitted along with the tender.
  - 18. Some of the provisions of General Conditions of Contract are given below. Interpretation however shall be as given in the General Conditions of Contract.
  - a) **<u>DEFECTS LIABILITY PERIOD</u>**: Twelve months from the date of completion as certified by the Employer.

क्र सं. Sl. No.	विवरण Description of work.	Minimum of Estimated Cost (₹). Approx.
1	Proposed Extension of Test Floor building on the northern side of Fatigue and Fracture lab., (FFL), CSIR-SERC, CSIR Campus, Taramani, Chennai – 600113.	
	i) Civil work ii) Electrical work	8,45,668.00 77,029.00
	Total	9,22,697.00

### b) MINIMUM VALUE OF WORK FOR THE INTERMEDIATE CERTIFICATE:

Intermediate certificate for lesser amount can be admitted for payment at the discretion of the Engineer-in-charge.

- c) <u>SECURITY DEPOSIT</u>: A sum @ 5% of the gross amount of the bill shall be deducted from each running bill of the contractor, This is in addition to the **Performance Guarantee** that the contractor shall be required to deposit an amount equal to **3%** of the tendered and accepted value of the work (without limit) as in the form of BC/DD/ PO, Bank Guarantee or Fixed Deposit Receipt of a Scheduled bank, with in the prescribed period of ten days for commencement of the work as per award letter issued to him.
- d) <u>COMPENSATION</u>: Contractor shall pay as compensation an amount equal to one percent or such smaller amount as the Employer (whose decision in writing shall be final) may decide on the cost of the whole work as shown in the agreement, for every week that the work remains uncommenced or unfinished or due quantity of work remains incomplete after the proper dates. Compensation to be paid shall not exceed ten percent of the estimated cost of the work as shown in the agreement.
- 19. Computerised Measurement books should be submitted by the contractor along with the bills claimed for making payment.

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#### CSIR-STRUCTURAL ENGINEERING RESEARCH CENTRE (Council of Scientific and Industrial Research) CSIR Campus, Taramani, Chennai – 600 113.

## ABSTRACT OF COST

S1.	Description	Estimated Cost (₹).
No.		Approx.
1.	Proposed Extension of Test Floor building on the northern side of Fatigue and Fracture lab., (FFL), CSIR-SERC, CSIR Campus, Taramani, Chennai – 600113.	1,66,08,535/-

(Rupees One Crore Sixty six lakhs eight thousand Five hundred and thirty five only).

## <u>NOTE</u>

- i. IT at 2 % of taxable value will be recovered from the bill.
- ii. Labour Welfare Cess at 2% of bill value will be recovered from the bills and remitted to the concerned authorities by the department.
- iii. The rate is inclusive of GST. TDS on CGST & SGST will be deducted at 1% each against the taxable value.
- iv. Water charges at 1% of bill value will be recovered from the bills for usage of water through pipe lines at site supplied by the department.
- v. Electricity charges will be recovered from the bill as per energy meter consumption actuals at site.
- vi. CPWD specifications will be applicable for the work. Where the specification in the schedule of quantities differ from the CPWD specification, the description given in the schedule of quantities Shall be applicable.
- vii. Contractors shall not execute any extra items unless approved by the Director. No payment for any extra items will be made if executed without prior approval.
- viii. The Contractor should examine the specifications and Tender their rates. The rates given in the schedule of quantities will be deemed to include the satisfactory completion of the work. He should also examine the site conditions, for excavation etc., before tendering for the work.
- ix. If there is any difference in rates for two similar items, the lowest will be applicable.
- x. For the purpose of lowest tenderer the grand total will only be considered as single contract.



## CSIR-STRUCTURAL ENGINEERING RESEARCH CENTRE (Council of Scientific and Industrial Research) CSIR Campus, CSIR Road, Taramani, Chennai – 600 113.

	APPENDIX				
Name of Works	Proposed Extension of Test Floor building on the northern side of Fatigue and Fracture lab., (FFL), CSIR-SERC, CSIR Campus, Taramani, Chennai – 600113.				
Defect liability period	12 (Twelve) months from the date of Virtual completion.				
Time of Completion	<b>18 (Eighteen) months</b> from the date of commencement of the work.				
Minimum value of work for interim Certificate	<ul> <li>a) Rs. 9,22,697/- (Rupees Nine lakh Twenty two thousand six hundred and ninety seven only)</li> <li>Intermediate certificate for lesser amount can be admitted for payment at the discretion of the Engineer-in-charge.</li> </ul>				
Liquidated damages for insufficient progress of work	1% of the total cost of the work per week but not exceeding 10% of the total cost of work.				
Liquidated damages for non-completion work in time.	1% of the total cost of the work per week but not exceeding 10% of the total cost of work.				
Security Deposit         Earnest Money       : ₹3,32,172.00 (Rupees Three lakhs thirty two thousand one hundred and seventy two only)         Subsequent retention       : A sum @ 5% of the gross amount of the bill shall be deducted from running bill of the contractor, This is in addition to the Performa Guarantee that the contractor shall be required to deposit an amount et to 3% of the tendered and accepted value of the work (without limit) a the form of BC/DD/ PO, Bank Guarantee or Fixed Deposit Receipt Scheduled bank, with in the prescribed period of ten days commencement of the work as per award letter issued to him.					
Period of submitting final bill by the contractor	One Month from the date of virtual completion.				
Materials to be issued	Nil				

### **TENDER ACCEPTANCE / UNDERTAKING LETTER**

(To be given on **Company Letter Head** /not to be filled in this form and upload the same. This is a sample format User may download the format and type the same in their letter head and upload the signed copy with company seal as per Tender Conditions)

Date: .....

To,

Tender Inviting Authority / Sr.S.E Civil, Engineering works and Services Section, CSIR-SERC, CSIR-Campus, Chennai-600113.

Sub: Acceptance of Terms & Conditions of Tender / Undertaking letter.

Details	of the	tender:	
Eilo no			

Tender ID	:-	
Name of Tender	r / Work: -	

Dear Sir,

1. I/ We have downloaded / obtained the tender document(s) for the above mentioned 'Tender/Work' from the web site(s) namely:

as per your advertisement, given in the website(s) <u>https://etenders.gov.in/eprocure/app</u> and <u>https://serc.res.in/tender</u>.

2. I / We hereby certify that I / we have read the entire terms and conditions of the tender documents from Page No. \_\_\_\_\_\_ to \_\_\_\_\_ (including all documents which is uploaded in the tender like annexure(s), schedule(s), drawings etc.,), which form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.

3. The corrigendum(s) issued from time to time by your department/ organisation too have also been taken into consideration, while submitting this acceptance letter.

4. I / We hereby unconditionally accept the tender conditions of above mentioned tender document(s) / corrigendum(s) in its totality / entirety.

5. I / We do hereby declare that our Firm has not been blacklisted / debarred by any Govt. Department / Public sector undertaking.

6. I / We enclosed the necessary registration certificate / PAN / GST / IT-returns / Copy of DD for EMD/ Previous work experience certificate as per tender document for Estimated value of 80% / 60% / 40% (works) respectively.

7. I / We certify that all information furnished by the our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/ organisation shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights.

Yours Faithfully,



## सी.एस.आई.आर.-संरचनात्मक अभियांत्रिकी अनुसंधान केन्द्र CSIR-STRUCTURAL ENGINEERING RESEARCH CENTRE (वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद Council of Scientific and Industrial Research) सीएसआईआर परिसर CSIR Campus, सीएसआईआर सड़क, तरमणि Taramani, चेन्नै Chennai-600 113.

### No.50(36)/2021-2022/CW/EW/SE

दि. Dated:11.08.2023

Check List for uploading tender documents

(to be uploaded duly filled-in along with scanned copy of documents)

<u>Sl.No:</u>	Description	<u>Check List</u> <u>Pls Tick (Yes or No)</u>
1	Copy of DD for Earnest money deposit	Enclosed : Yes/No
2	Enlistment / Registration Certificate of Appropriate Class	Enclosed : Yes/No
3	Work Experience / Performance Certificate during last seven years for Civil works	Enclosed : Yes/No
(a)	<b>One</b> similar works of value more than or equivalent to 80% of estimated cost, during last seven years	Enclosed : Yes/No
(b)	<b>Two</b> similar works of value more than or equivalent to <b>60%</b> of estimated cost, during last seven years	Enclosed : Yes/No
(c)	Three similar works of value more than or equivalent to 40% of estimated cost, during last seven years	Enclosed : Yes/No
4	PAN CARD	Enclosed : Yes/No
5	Certificate of GST Registration	Enclosed : Yes/No
6	Income tax returns for 3 years	Enclosed : Yes/No
7	Tender Acceptence / Undertaking letter	Enclosed : Yes/No
8	Valid Electrical License and Electrical Experience certificate from associated electrical contractor wherever necessary.	Enclosed : Yes/No

Name and address of the contractor

# <u>CONSENT LETTER FROM</u> ASSOCIATED ELECTRICAL CONTRACTOR

(To be attached in Separate envelope)

1.I		hereby	give	my/		
		our				
consent to work as associated electrical contractor from the commencement of the below me composite work to till completion of the work.						
"Nameofthework:						

File No:

 $\rm I$  / We will be responsible for necessary action to hand over the installation and for rectification of defects and repair during the maintenance period. I/We execute the work as per CSIR - SERC specification and additional conditions of the contract.

I/We will also engage suitable Engineer and qualified staff for the work as per condition of the contract. I/We further certify that the particulars shown in certificate for associated electrical agency and pertaining to me / us are correct.

Date:

Signature of associated Electrical contractor with seal.

### COUNTERSIGNED

Date:

Signature of MAIN COTRACTOR with seal.

### Proforma -I

(Non Judicial Stamp Paper of Rs.100)

# Memorandum of understanding

This			0	( )			theat
Between							
office at Which expression shall unless repugnant to th				ss repugnant to the			
subject	subject or context include its administrators, successors and assigns.						

### And

			(Associate	Electrical	contractor)	having	
its registered	office	at			. re	epresented	
by				Which	expressi	on shall	
unless repugn	ant to th	ne subject or cont	ext include its adr	ninistrators, s	uccessors and	d assign.	

Whereas, the CSIR - SERC, have issued tender papers to quote for					
the	following	work	to	M/s	
		(Main coi	ntractor)		
Name of w	/ork:				
Whereas,	Whereas, This Memorandum of Understanding has been entered into to execute the work				
under Package of (Name of the package).					
Whereas,	both the parties ha	ave gone throug	gh and unde	erstood the various conditions &	
clauses of the tender and willingly agree to abide by them.					
This MOU	shall be valid till th	e duration of	completion	of above work and shall be	
extended i	f so required by the	CSIR-SERC.			

In witness whereof we have put our hand and seal on dated .....

For	(Main	Contractor)
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For ......(Associate Contractor)

Name of Work :- .....

# ADDITIONAL CONDITIONS (Electrical)

Sl.no	Description
1	<ul> <li>The work shall be generally carried out in accordance with tender specifications and the following specifications / rules:</li> <li>a). CPWD General Specifications for Electrical work Part I Internal - 2013, as amended up to date.</li> <li>b). CPWD General Specifications for Electrical work Part II External – 1994+ as amended up to date.</li> <li>c). Additional Technical Specifications for this work.</li> <li>d). The Indian Electricity Act, 2003.</li> </ul>
	<ul><li>e). National Electrical Code.</li><li>f). Indian Electricity Rules 1956 amended up to date.</li></ul>
2	All hardware items such as screws, thimbles, GI wire etc., which are essentially required for completing an item as per specifications will be deemed to be included in the item even when the same have not been specifically mentioned.
3	The contractor has to make his own arrangements for stores and watch and ward and no extra claim on this account will be entertained.
4	The contractor has to make his own arrangements at his own cost for all the general and special T & P required on this work.
5	All the debris due to the electrical works shall be removed from the site by the contractor as soon as the work is completed.
6	All tendered rates shall be inclusive of all taxes & levies (except Service Tax) payable under respective statutes, Sales tax / VAT, (except Service Tax), purchase tax or any other tax on material in respect of the contract shall be payable by the Contractor & Government will not entertain any claim whatsoever in respect of the same.
7	The work contract tax including surcharge as applicable shall be recovered from every bill paid to the contractor
8	The materials used in the work shall be of approved make as per Annexure - A.
9	After completion of work completion certificate and completion plan shall be submitted as required under clause 2.30 of general specification part-I(Internal).
10	The Contractor should purchase the materials to be used in the work directly from the authorized dealer / manufacturer and the Contractor should preserve the proof of the same. i.e. delivery challan / pro forma invoice / bill etc. till the completion of work and has to produce the same in case the Engineer-in-Charge demands for, to check the genuinely of the materials.
11	Warranty for trouble free performance of the fittings for a minimum period of one year from the date of completion of the work shall be given on completion of the work.
12	All conduits, switch boxes., etc below the false ceiling shall be recessed in existing plastered walls including plastering and finishing to the original condition.
13	The work shall be carried out along with and in co-ordination with civil modification works.

Sl.no	Description	Make	
1	FSU/SFU	HPL/C&S/HAVELLS/L&T/ GE/Siemens	
2	MCB/RCCB/ELCB.	Legrand/Schneider/ Siemens/GE/ABB.	
3	MCCB.	Legrand/Schneider/ Siemens/GE/ABB.	
4	Under ground cable	Havells/Finolex/Polycab.	
5	HRC Fuses	GE / SIEMENS /L&T/C&S.	
6	Wiring cables	Finolex/RR/Gloster/Polycab/Havells/Torrent	
7	Distribution board (MCB)	Legrand/Schneider/ Siemens/GE/ABB/Hager	
8	Industrial sockets	Legrand/Schneider/ Siemens/GE/ABB/Hager	
9	Commercial Sockets & Switches	Oswal/GM/Anchor Roma/Litaski/MK/Legrand	
10	Modular Sockets & Switches	Anchor-Roma/ MK / GM/Norwood/	
	should be benetis & switches	Siemens/Legrand/Litaski/CrabTree.	
11	Telephone sockets	Anchor-Roma/ MK / GM/Norwood/	
II Iei	receptione sources	Siemens/Legrand/Litaski/CrabTree.	
12	Telephone wires	AT & T / Delton/Finolex/D-Link.	
13	Light fitting /street Lights	Philips/Osram/CG/GE/Bajaj/Havells	
15	PVC conduit pipes. (2MM Thick Min)	Avon-plast / Vasavi/Modi/ SRK-Gold/Sun.	
16	Metering Instruments	AE/IMP/RISHAB/CADEL/Schinder/L&T	
17	Ceiling fan	Orient/CG/Usha/Havells	
18	Exhaust fans	CG/Bajaj/Ventura/Almonard.	
19	Current Transformers	Kappa/AE/BCH/L&T/ABB/Siemens/GE/MECO	
20	Glands	Prabhat / Comet/Elfin.	
21	Sockets	Dowells / Lotus/Elfin.	
22	End Termination Kits/ Cable Joining Kits	Raychem/Mahindra/M-Seal.	
23	Starters-DOL/Star-Delta. Automatic.	BCH/Siemens/ABB/L&T.	
24	Terminal Connectors	Elmex/Hensel/Johnson.	
25	DWC	Rex/Gemini	
26	Cable Tray	Legrand/MK/OBO	
27	Cable Management system	Legrand/OBO/LK/MK	
28	Engine	Cummins/Kriloskar/Caterpillar/cooper	
29	Alternator	Stamford/Kirloskar Green/Leroy Somer	
30	AMF Panel	Same as the OEM for DG Set	
31	Manufaturer of Acoustic enclosure	Same as the OEM for DG Set	
32	Anti Vibration Mountings	As per recommendation of manufacturers	
	Batteries	As per recommendation of manufacturers	

# LIST OF MAKES OF COMPONENTS

Note : Makes specified in the Bill of Quantities stands final.

ANNEXURE - "A"



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### ADDITIONAL CONDITIONS FOR CEMENT

- 1. The contractor shall procure 33 grade (confirming to relevant IS 269) or 43 grade (Confirming to IS:8112) 53 grade (IS2269) ordinary Portland cement, as required in the work, from reputed manufacturers of cement, having a production-capacity of one million tones per annum or more, such as ACC, L & T, J.P. Rewa, Vikram, Shri Cement, Birla Jute and Cement Corporation of India Etc., as approved by Engineer-in-charge. Supply of cement shall be taken in 50 kg.Bags bearing manufacturer's name and ISI making, samples of cement arranged by the contractor shall be taken by the Engineer-in-charge and got tested in accordance with provisions of relevant BIS codes. In case test results indicate that the cement arranged by the contractor does not confirm to the relevant BIS codes, the same shall stand rejected and shall be removed from the site by the Contractor at his own cost within a week's time of written order from the Engineer-in-charge to do so.
- The cement shall be brought at site in bulk supply of approximately 50 tonnes or as decided by the Engineer-in-charge.
- 3. The cement godown of the capacity to stores a minimum of 2000 bags of cement shall be constructed by the contractor at site of work for which no extra payment shall be made. Double lock provisions shall be made to the door of the cement godown. The keys of one lock shall remain with the Engineer-in-charge or his authorized representative and the key of the other lock shall remain with the contractor. The contractor shall be responsible for the watch and ward and safety of the cement godown by the Engineer-in-charge at any time.
  - The contractor shall supply free of charge the cement required for testing. The cost of tests shall be borne by the contractor.
  - The actual issue and consumption of cement on work shall be regulated and proper accounts maintained as provided in Clause 6 of the contract. The theoretical consumption of cement shall be governed by the conditions laid therein.
- Cement brought to site and cement remaining unused after completion of work shall not be removed from site without written permission of the Engineer-in-charge.

ANNEXURE - "B"



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#### ADDITIONAL CONDITIONS FOR STEEL

The contractor shall procure steel reinforcement bars confirming to relevant BIS codes from main producers as approved by the Ministry of Steel. The contractor shall have to obtain and furnish test certificates to the Engineer-in-charge in respect of all supplies of steel brought by him to the site of work. Samples shall also be taken and got tested by the Engineer-in-charge as per provisions in this regard in relevant BIS codes. In case the test results indicate that the steel arranged by the contractor does not confirm to BIS codes, the same shall stand rejected and shall be removed from the site of work by the contractor at his cost within a week's time from written orders from the Engineer-in-charge to do so.

- 2 The steel reinforcement shall be brought to the site in bulk supply of 10 tonnes or more as decided by the Engineer-in-charge.
- 3. The steel reinforcement shall be stored by the contractor at site of work in such a way as to prevent distortion and corrosion and nothing extra shall be paid on this account. Bars of different sizes and lengths shall be stored separately to facilitate easy counting and checking.
- For checking nominal mass, tensile strength, bend test, re-bend test etc., specimen
  of sufficient length shall be cut from each size of the bar at random at frequency
  not less than that specified below;

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

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



### CSIR-STRUCTURAL ENGINEERING RESEARCH CENTRE (Council of Scientific and Industrial Research) CSIR Campus, CSIR Road, Taramani, Chennai – 600 113.

# CONTENTS SHEET

Nome of	Proposed Extension of Test Floor building on the northern side of Fatigue
	and Fracture lab., (FFL), CSIR-SERC, CSIR Campus, Taramani,
work	Chennai – 600113.

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3.	Appendix	1 Page
4.	Conditions of contract for works	37 Pages
5.	Tender Acceptance / Undertaking letter	1 Page
6.	Check list for uploading tender documents	1 Page
7.	General Specifications for Electrical works	20 Pages
8.	Additional Conditions (Electrical)	1 Page
9.	List of Approved makes for materials	1 Page
10.	Consent letter from associated electrical contractor	1 Page
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14.	List of Mandatory test on Building materials	4 Pages
15.	Specifications for cement concrete in RCC work	5 Pages
12.	Schedule of Quantities (Civil - 11 Pages / Electrical – 13 Pages)	25 Pages
13.	Drawing	3 Pages

The Tenderer has confirmed that he has received all the above documents and that he has quoted the rates after satisfying the requirements as covered in the terms and conditions of the tender document.

Signature of the Tenderer :

Name and Address

Date

Note: Tenderers are requested to inspect the site before quoting.

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