

#### INSTITUTE OF NANO SCIENCE AND TECHNOLOGY

(An Autonomous Research Institute of the Department of Science and Technology, Government of India)

Knowledge City, Sector-81, Mohali - 140306

Phone No. 0172 – 2297000

Website: www.inst.ac.in

# **NOTICE INVITING TENDER**

NIT No.:- 1/INST/2021-22

NAME OF WORK: "Construction of Boundary Wall and Chain Link Fencing along IISER Boundary, providing and fixing of Concertina Coil over existing external Wall of INST Campus at Sector-81, Mohali-140306."

# Certified that this NIT contains 1 to 82 Pages.

This NIT is approved for ₹ 42, 40,592/- (Rupees Forty Two Lakh Forty Thousand Five Hundred Ninety Two Only).

Consultant (Engg), INST

**Director, INST** 

# NAME OF WORK: - "Construction of Boundary Wall and Chain Link Fencing along IISER Boundary, providing and fixing of Concertina Coil over existing external Wall of INST Campus at Sector-81, Mohali-140306."

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# INSTITUTE OF NANO SCIENCE AND TECHNOLOGY

# Knowledge City, Sector-81, Mohali - 140306

Phone No. 0172 - 2297000

Website: www.inst.ac.in

# **NOTICE INVITING TENDER**

NIT No.:- 1/INST/2021-122

Name of work "Construction of Boundary Wall and Chain Link
Fencing along IISER Boundary, providing and
fixing of Concertina Coil over existing external Wall
of INST Campus at Sector-81, Mohali-140306."

ESTIMATED COST :- ₹ 42, 40,592/

EARNEST MONEY : - NIL (Declaration as per Form-F)

PERFORMANCE GUARANTEE : - 3% of Tendered Amount

VALUE OF SECURITY DEPOSIT : - 2.5% of Tendered Amount.

TIME ALLOWED : - 60 Days.

# CHECK LIST FOR CONTRACTORS FOR SUBMISSION OF TENDERS

Name of Work: "Construction of Boundary Wall and Chain Link
Fencing along IISER Boundary, providing and
fixing of Concertina Coil over existing external
Wall of INST Campus at Sector-81, Mohali140306."

Tenderer to ensure that:-

- (i) The tender/tenders containing conditions contrary to those specified in this document shall be liable to be summarily rejected
- (ii) The contractor shall quote his rates keeping in mind the specifications, terms and conditions, additional/particular and special conditions etc. And nothing shall be payable extra whatsoever, unless otherwise specified.

# INST Bank Details For on-line Transfer of EMD/ Performance Guarantee etc.

ACCOUNT NAME	DIRECTOR, INST MOHALI
BANK NAME	CANARA BANK
ADDRESS	SECTOR-34A, CHANDIGARH-160022
TYPE OF ACCOUNT	CURRENT ACCOUNT
ACCOUNT NO.	2452201001102
IFSC CODE	CNRB0002452
MICR CODE	160015003
SWIFT CODE	CNRBINBBFFC

# **Funds Transfer Details**

NAME OF TRANSFEROR	
NAME OF WORK FOR WHICH	
FUNDSTRANSFERRED	
TRANSACTION ID/NO. OF	
TRANSFER	
NAME O DE ANOLLOS	
NAME & BRANCH OF	
TRANSFERORBANK	
DATE OF AMOUNT	
TRANSFERRED	
AMOUNT TO ANOTED DED	
AMOUNT TRANSFERRED	
DUDDOOF	
PURPOSE	

# **GUIDELINES / PROCEDURE TO TENDERERS**

- 1. CPWD-6, Schedules A to F, special conditions/specifications and drawings only are to be downloaded by the intending bidders. The standard form "General Conditions of Contract Construction Works 2020" neither will be issued nor to be downloaded along with the Tender Documents but the same form part of the agreement to be drawn and signed by both parties after acceptance of tender.
- 2. The intending bidders will quote their rates in Schedule A.
- 3. Submission of Bids: The bidders who are desirous of participating in the tendering process shall submit their price bids in the standard formats prescribed in the Tender documents, to be downloaded from institute website: <a href="www.eprocure.gov.in">www.eprocure.gov.in</a>. The bidder should attach the copies of all the relevant certificates, documents etc., in support of their price bids. The bidder shall sign on all the statements, documents, certificates, to be submitted by him, owning responsibility for their correctness / authenticity.
- 4. Participation of Bidders at the time of opening of bids: Bidders have option to participate in person or through his representative with due authorization in tendering process at the time of opening of Bid at INST, Mohali at specified time and date i.e. on 03-05-2021 at 3:00PM at INST by the concerned officer / officers.
- Processing of Tender: The concerned officer/officers will evaluate and process the tenders as done in the conventional tenders and the successful bidder will be communicated accordingly.
- 6. Payment of performance Guarantee: The successful bidder shall submit irrevocable performance guarantee of 3 % (Three percent) of the tendered amount in addition to other deposits mentioned elsewhere in the contract for his proper performance of the contract. This guarantee shall be in the form of DD / Banker Cheque / pay order / FDR / guarantee bonds of any scheduled bank drawn in favour of Director, INST, Mohali
- 7. **Participation Financial Rules:** The system would be applicable for purchase of goods, outsourcing of services and execution of work as prescribed in GFRs.
- 8. To download **General Conditions of Contract Construction Works 2020**" followinglink may be followed: <a href="http://cpwd.gov.in">http://cpwd.gov.in</a>

# INSTRUCTIONS TO TENDERERS FOR SUBMISSION OF TENDER

- The tenderers should read all the instructions terms & conditions, contract clauses, nomenclature of items, specifications etc. contained in the tender documents very carefully, before quoting the rates. The tenderer should also read the general conditions of contract for CPWD Works 2019, which will form a part of the Agreement with upto date correction slips.
- 2. Tender should be signed and witnessed on **page-18** of tender documents indicating full address of witness and the names of signatories.
- 3. Any person who submits a tender shall fill up the usual printed form, stating at what rate he is willing to undertake each item of the work. Tenders, which propose any alteration in the work specified in the said form of invitation to tenders, or in the time allowed for carrying out the work, or which contain any other condition of any sort including conditional rebates, will be summarily rejected.
- 4. The contractor shall quote his rates keeping in mind the specifications terms & conditions and special conditions etc. and nothing shall be payable extra whatsoever unless otherwise specified.
- 5. In the event of the tender being submitted by a firm, it must be signed separately by each partner thereof or in the event of the absence of any partner, it must be signed on his behalf by a person holding a power of attorney authorizing him to do so. Such power of attorney should be produced with the tender and it must be disclosed that the firm is duly registered under the Indian Partnership Act, 1952.
- 6. GST, Labor Cess etc. as applicable shall be paid by the contractor himself. The department shall deduct from the R/A bills, the TDS as applicable. The contractor shall quote his rates considering all such Taxes.
- 7. The agencies shall get registered with GST and submit valid registration certificate at the time of tendering.
- 8. The tender, which is not duly signed by authorized signatory or is conditional shall be treated as non-responsive and shall be summarily rejected.

# **PRESS NOTICE**

The Director, INST, Knowledge City, Sector-81, Mohali-140306 invites Percentage Rate tender from approved and eligible contractor of appropriate composite /civil category of CPWD, and those of appropriate list of MES, Railways, U.T. Chandigarh Administration, Punjab PWD, dealing with building and roads for the following work:-

SI. No.	on Tin	Name of Work	Estimated cost put to tender (in Rs)	Ernest Money	Period of Completion	Last Date and Time of submission of bid, and other documents as specified in the press notice.	Date and Time of opening of Technical Bid
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
1	NIT No. 1/INST/2021-22	Construction of Boundary Wall and Chain Link Fencing along IISER Boundary, providing and fixing of Concertina Coil over existing external Wall of INST Campus at Sector-81, Mohali-140306."	₹. 42,40,592/-	NIL ( As per Affidavit)	60 (Sixtydays)	05/05/2021 Upto 2.00PM	05/05/2021 Upto 3.00PM

# **TENDER ID. 1/INST/2021-22**

Contractors who fulfil the following requirements shall be eligible to apply (This is not applicable for CPWD enlisted Contractors of appropriate class in Building category). Joint ventures/ Consortium and special purpose vehicles are not accepted.

(A)The bidder should have satisfactorily completed the works as mentioned below during the last 07 (seven) years ending last day of month previous to the one in which tenders are invited. For this purpose, cost of work shall mean gross value of the completed work including cost of material supplied by the Government/ client but excluding those supplied free of cost:

This should be certified by an officer not below the rank of Executive Engineer/ Project Manager or equivalent.

- (i) Three similar completed works each of value not less than 40 % of estimated cost put to tender OR
- (ii) Two similar completed works each of value not less than 60 % of estimated cost put to tender OR
- (iii) One similar completed work of value not less than 80 % of estimated cost put to tender Enlistment of the contractors should be valid on the last date of submission of tenders.

In case only the last date of submission of tender is extended, the enlistment of contractor stubbe valid on the original date of submission of tenders.

Tender documents shall be considered valid of only those contractors who will submit copies of the following documents along with tender:-

(i) (a) Registration of enlistment with CPWD in the appropriate class. (Only for CPWD Contractors.)

Or

(b) Appropriate list of MEs, BSNL and other state Govt. Department in which enlisted for building and road works.

Or

- (c) Experience certificate of similar work as mentioned above (only for other experienced contractors). Which should not be issued below the rank of Executive Engineer on or before **05-05-2021 3:30 PM** at INST by the concerned officer / officers.
- (ii) GST Registration certificate.
- (iii) Copy of PAN Card issued by Income Tax Department.

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(iv) Copy of applicable licenses /registration of Labor Licensewith EPFO, ESIC

Or

The proof of applying for obtaining Labour License /registration with EPFO, ESIC, as the case may be.

Bidders are required to **download the NIT** in PDF as uploaded by INST.

Certified copy of all the relevant documents as specified in press notice shall have to be submitted by the bidder at the submission of tender.

The bid submitted shall become invalid if: - .

- (i) The bidder is found ineligible.
- (ii) The bidder does not submit the documents related to GST registration as stipulated in the biddocuments.
- (iii) If any discrepancy is noticed between the documents as downloaded, at the time of submission of bid and hard copies, as submitted physically by the lowest tenderer in the office of tender opening authority.

The tender document consisting of specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen from the institute website: <a href="www.inst.ac.in">www.inst.ac.in</a> or CPPP website: <a href="www.eprocure.gov.in">www.eprocure.gov.in</a>.

Chief Finance & Administrative Officer'

# INSTITUE OF NANO SCIENCE AND TECHNOLOGY, MOHALI NOTICE INVITING TENDER

The Director, Institute of Nano Science and Technology, Knowledge City, Sector-81, Mohali- 140306 invites percentage rate Tender from approved and eligible contractor of CPWD Civil /Composite category, those of appropriate list of MES, Railways, U.T. Chandigarh Administration and Punjab PWD and other state Govt. departments dealing with buildings and roads upto 2.00 PM on 05/05/2021.

The enlistment of the contractors should be valid on the last date of submission of bids. In case the last date of submission of bid is extended, the enlistment of contractor should be valid on the original date of submission of bid.

- 1.1 The work is estimated to cost **Rs. 42, 40,592/-**. This estimate, however, is given merely as a rough guide.
- 1.2 Intending bidders is eligible to submit the bid provided he has definite proof from the appropriate authority, which shall be to the satisfaction of the competent authority, of having satisfactorily completed similar works magnitude specified below:-
  - (i) (a) Registration of enlistment with CPWD in the appropriate class. (Only for CPWD Contractors.)

Or

(b) Appropriate list of MEs, BSNL and other state Govt. Department in which enlisted forbuilding and road works.

Or

- (c) Experienced certificate of similar work as mentioned above. (Only for other experiencedcontractors). Which should not be issued below the rank of Executive Engineer or Administrative officer?
- (ii) Punjab GST Registration certificate.
- (iii) Copy of PAN Card issued by Income Tax Department.
- (iv) Scanned copy of applicable licenses /registration of Labor License with EPFO, ESIC

Oi

The proof of applying for obtaining Labor License /registration with EPFO, ESIC.

- 2. Agreement shall be drawn with the successful Tenderer/bidder on prescribed Form No. CPWD-7 with up to date correction slips which is available as a Govt. of India Publication 2019 edition, Tenderer shall quote his rates as per various terms and conditions of the said form which forms part of the agreement.
- 3. The time allowed for carrying out the work will be (60) Sixty days from the date of start as defined in schedule 'F' or from the first date of handing over of the site, whichever is Page 11 of 82

later, inaccordance with the phasing, if any, indicated in the bid documents.

- 4. (i) The site for the work is available.
  - (ii) The architectural and structural drawings, required if any, shall be made available in phased manner, as per extension the same as per approved programme of completion submitted by the contractor after award of work.
- 5. Tender documents consisting of plans, specifications, the schedule of quantities of the various classes of work to be done and the set of terms and conditions of contract to be complied with by the contractor whose tender may be accepted and other necessary documents have been uploaded at e-

procurement website

# www.eprocure.gov.in and www.inst.ac.in

Last date & time for receipt of Bids/Tenders: 05/05/2021.upto 02:00 PM

Opening of Tenders: 05/05/2021 at 03:00:00 PM

- After submission of the bid the contractor can re-submit revised bid any number of times butbefore last time and date of submission of bid as notified.
- While submitting the revised bid, contractor can revise the rate of one or more item(s) any number of times (he need not re-enter rate of all the items) but before last time and date of submission of bid as notified.
- 8. When bids are invited in three stage system and if it is desired to submit revised financial bid then it shall be mandatory to submit revised financial bid. If not submitted then the bid submitted earlier shall become invalid.
- 9. Bidder to give declaration for EMD as per proforma under Form-F of this NIT.

The following undertaking in this regard shall be also be deposited by the intending bidders: Copy of Enlistment Order and certificate of work experience and other documents asspecified in the press notice shall also be deposited along with the tender documents on specified time and date.

The bid documents submitted by intending bidders shall be opened only of those bidders, documents are found in order.

The bid submitted shall be opened at 03:00 PM on 05/05/2021.

- 10. The bid submitted shall become invalid if: -
  - (i) The bidder is found ineligible.

The bidder does not submit the documents related to GST registration as stipulated in the biddocuments.

(ii) If any discrepancy is noticed during scrutiny of the documents as submitted at the time of Page 12 of 82

submission of bid by the lowest bidder in the office of bid opening authority.

11. The contractor whose bid is accepted will be required to furnish performance guarantee of 3 % (Three Percent) of the bid amount within the period specified in Schedule F. This guarantee shall be in the form of cash (in case guarantee amount is less than ₹ 10000/-) or Deposit at Call receipt of any scheduled bank/Banker's Cheque of any scheduled bank/Demand Draft of any scheduled bank/ Pay order of any Scheduled Bank of any scheduled bank (in case guarantee amount is less than Rs. 1,00,000/-) or Government Securities or Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the prescribed form. In case the contractor fails to deposit the said

Performance guarantee within the period as indicated in Schedule 'F', including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor. The earnest money deposited along with bid shall be returned after receiving the aforesaid performance guarantee.

12. The description of the work is as follows:

# As per name of work and as per schedule of quantity with tendered documents.

Copies of other drawings and documents pertaining to the work will be open for Inspection by the tenderers at the office of the above-mentioned officer.

Intending Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their bids as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidders shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by a bidders implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.

13. The competent authority does not bind himself to accept the lowest or any other tender, and reserves to himself the authority to reject any or all of the tenders received without the assignment of a reason. All tenders, in which any of the prescribed conditions is not fulfilled or any condition including that of conditional rebate is put forth by the tenderers shall be summarily rejected.

- 14. Canvassing whether directly or indirectly, in connection with tenders is strictly prohibited and tenders submitted by the contractors who resort to canvassing will be liable to rejection.
- 15. The competent authority reserves to himself the right of accepting the whole or any part of the tender and the tenderers shall be bound to perform the same at the rate quoted.
- 16. The contractor shall not be permitted to tender for works in the INST, Mohali (responsible for awardand execution of contracts) in which his near relative is posted as Finance Officer or as an officer inany capacity between the grades of Superintending Engineer and Junior Engineer (Both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any Gazetted Officer in the Central Public Works Department or PWD, Delhi or in the Ministry of Urban Development. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Department.
- 17. No Engineer of Gazetted rank or other Gazetted officer employed in Engineer or Administrative duties in an Engineering Department of Govt. of India is allowed to work as a contractor, for a period of one year after his retirement from Govt. service, without the permission of the Govt. of India in writing. This contract is liable to be cancelled of either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Govt.of India as aforesaid before submission of the tender or engagement in the contractor's service.
- 18. The bid for the works shall remain open for acceptance for a period of Seventy-five (75) days from the date of opening of Technical bid (eligibility bid). In case the bidder withdraws his bid before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the bid which are not acceptable to the department, then the Government shall, without prejudice to any other right or remedy, beat liberty to suspend the bidder for a period of one year from bidding process in CPWD.
- 19. This notice inviting tender, shall from a part of the contract document. The successful Tenderer / Contractor, on acceptance of his tender by the Accepting Authority, shall within 7 days from the stipulated date of start of the work, sign the contract consisting of:
  - a. The notice inviting tender, all the documents including additional conditions, specifications and drawings, if any, forming the tender as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading to thereto.
  - b. Standard **PWD- form 7** or other Standard C.P.W.D. Form as applicable.

**Chief Finance & Administrative Officer,** 

# **CONDITION FOR SECURITY DEPOSIT & PERFORMANCE GUARANTEE**

1. The contractor shall submit an irrevocable Performance Guarantee of 3% (Three percent of the tendered amount) in addition to other deposits mentioned elsewhere in the contract for his proper performance of the contract agreement, (notwithstanding and /or without prejudice to any other provisions in the contract) within **10 days** of issue of letter of acceptance. This period can be further extended by the Engineer-in-charge upto a maximum period of **5 days** with late fee @ 0.1% per day of performance guarantee amount.

This guarantee shall be in the form of Govt. securities or fixed deposit receipts or guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the form annexed hereto. In case a fixed deposit receipt of any scheduled Bank is furnished by the contractor to the Govt. as part of the performance guarantee and the Bank is unable to make payment against the said fixed deposit receipts, the loss caused thereby shall fall on the contractor and the contractor shall forth with on demand furnish additional security to the Govt. to make good the deficit.

- 2. A letter of acceptance shall be issued informing the successful tenderer of the decision of the competent authority to accept his tender and to submit the performance guarantee within 10 daysin any of the prescribed form. On receipt of prescribed performance guarantee, necessary letter to commence the work shall be issued and site of work shall be handed over thereafter. In case offailure by the contractor to furnish the performance guarantee within the specified period. Government shall without prejudice to any other right or remedy available in law, be at liability to forfeit the earnest money absolutely.
- 3. The performance guarantee shall be initially valid upto the stipulated date of completion (i.e. 2 Months) plus 60 days beyond that. In case the time for completion of work gets enlarged, the contractor shall get the validity of performance guarantee extended to cover such enlarged time for completion of work. After recording of the completion certificate for the work by the competent authority, the performance guarantee shall be returned to the contractor, without any interest.
- 4. The Engineer-in charge shall not make a claim under the performance guarantee except for amounts to which the President of India is entitled under the contract (not withstanding and /or without prejudice to any other provisions in the contract agreement) in the event of :
  - a) Failure by the contractor to extend the validity of the performance guarantee as described herein above, in which event the Engineer –in charge may claim the full amount of the performance guarantee.
  - b) Failure by the contractor to pay President of India any amount due, either as agreed by the

contractor or determined under any of the clauses/ conditions of the agreement, within 30 daysof the service of notice to this effect by Engineer-in-charge.

In the event of the contract being determined or rescinded under provision of any of the clause/condition of the agreement, the performance guarantee shall stand forfeited in full and shall be absolutely at the disposal of the President of India.

5. The refund of Security Deposit to a contractor on completion of work will be regulated as per Clause 17 of agreement.

### 2. LETTER OF TRANSMITTAL

From:		

To,

The Director,
INST, Knowledge City,
Sector-81, Mohali-140306.

Subject: Construction of Boundary Wall and Chain Link Fencing along IISER
Boundary, providing and fixing of Concertina Coil over existing
external Wall of INST Campus at Sector-81, Mohali-140306."

Sir,

Having examined the details", given in press notice and bid document for the above work,

I/we hereby submit the relevant information.

- 1. I/We hereby certify that all the statement made and information supplied in the enclosedforms A to E and accompanying statement are true and correct.
- 2. I/We have furnished all information and details necessary for eligibility and have no further pertinent information to supply.
- 3. I/We submit the requisite certified solvency certificate and authorize the Director, INST, Mohali to approach the Bank issuing the solvency certificate to conform the correctness thereof or **Net worth certificate** and authorize the Executive Engineer, Chandigarh-I, CPWD to approach the **Chartered Accountant issuing**Net worth certificate to confirm the correctness thereof. I/We also authorize

Executive Engineer, Chandigarh-I, CPWD to approach individuals, employers, firms and corporation to verify our competence and general reputation.

4. I/We submit the following certificates in support of our suitability, technical knowledge and capability for having successfully completed the following works:

Name of work	Amoun	Certificate issued by
	t	

# Certificate

It is certified that the information given in the enclosed eligibility bid are correct. It is also certified that I/We shall be liable to be debarred, disqualified/ cancellation of enlistment in case anyinformation furnished by me/us found to be incorrect.

**Enclosures:** 

Date of submission Seal of bidder

Signature(s) of bidder (s)

### **14.** FORM 'A'

#### FINANCIAL INFORMATION

14.1 Financial Analysis-Details to be furnished duly supported by figures in balance sheet / profit & loss account for the last five years duly certified by the Chartered Accountant, as submitted by the applicant to the Income Tax Department (Copies to be attached).

(Fig in Lakhs Rs.)

SI.	Particulars	Financial Years								
No.	Turtionars	2015-16	2016- 17	2017-18	2018-19	2019-20				
i)	Gross Annual turn over on Construction works									
ii)	Profit / Loss (Standalone finance statement and consolidated financial statement both.									

- 14.2 Financial arrangements for carrying out the proposed work.
- **14.3 Solvency certificate** from Bankers of bidder in **form-"B" or Net worth** Certificate certified bythe Chartered Accountant in the prescribed **Form "B-1"**

Signature of bidder (s)

Signature of Chartered Accountant with Seal

# **15.** FORM 'B'

## FORM OF BANKERS" CERTIFICATE FROM A SCHEDULED BANK

	This	is	to	certify	that	to	the	best	of	our	knowledge	and	information	that
M/s.	Sh											havin	ng marg	inally
noted	add	lress	s, :	a custon	ner of	our	bank	are/is	resp	ectabl	e and can be	treat	ed as good fo	r any
engag	ement	upt	o a li	mitof Rs	S				)					
This c	ertifica	ite is	issu	ied witho	out an	y gua	arante	ee or re	spor	nsibilit	ty on the bank	c or an	y of the office	rs.
													(Signa	ature)
													For the	Bank
NOTE	:-													

- (1) Bankers certificates should be on letter head of the Bank, sealed in cover addressed to tendering authority.
- (2) In case of partnership firm, certificate should include names of all partners as recorded with the Bank.

#### FORM 'B -1'

## Form of Certificate of Net worth from Chartered Accountant

To,

The Director, Institute of Nano Science and Technology, Mohali.

"It is to certify that as per the audited balance sheet and profit and loss account during the financial year....., the Networth of M/s...... (Name & Registered address of the individual / firm / company), as on....... (the relevant date is Rs ................after considering all liabilities. It is further certified that the Networth of the company has not eroded by more than 30% in the last three year ending on (the relevant date)"

(Signature of the Chartered Accountant)

Name of the Chartered Accountant

Membership no of ICAI

Date & Seal

# **16.** FORM "C"

# DETAILS OF ELIGIBLE SIMILAR NATURE OF WORKS COMPLETED DURING THE LAST SEVEN YEARS ENDING LAST DAY OF MONTH PREVIOUS TO THE ONE IN WHICH TENDERS ARE INVITED

Ì	Name	of	the	Bidd	er	 	 	 	 	 

Sr.No.	Details	
1.	Name of work / project and location	
2.	Owner or sponsoring organization	
3.	Cost of work in Rupees	
4.	Date of commencement as per contract	
5.	Stipulated date of completion	
6.	Actual date of completion	
7.	*Litigation/ arbitration cases pending / in progress with details	
8.	Name and Address (Postal & E-mail) / telephone number of officers to whom reference may be made	
9.	Whether the work was done on back to back basisYes/No	

<sup>\*</sup> Indicates gross amount claimed and the amount awarded by the Arbitrator

SIGNATURE OF BIDDER(S)
WITH STAMP

# **17.** FORM 'D'

# PERFORMANCE REPORT OF WORKS REFERRED TO IN FORMS "C"

Name of work/project & location:										
2. Agreement no.										
3. Estimated cost:										
4.	(i) Tendered cost:									
	(ii) Completion cost:									
5. Date of start										
6. Date of completion										
	(i) Stipulated date of completion:									
	(ii) Actual date of completion:									
7.	(a) Whether case of levy of compensation f	or delay has been decided or not (Yes/No)								
	(b) If decided, amount of compensation levi	ed for delayed completion, if any								
8. Am	ount of reduced rate items, if any									
9. Peri	formance Report (1) Quality of work (2) Financial soundness (3) Technical Proficiency (4) Resourcefulness (5) General Behavior	Outstanding/Very Good/Good/Poor Outstanding /Very Good/Good/Poor Outstanding/Very Good/Good/Poor Outstanding/Very Good/Good/Poor Outstanding/Very Good/Good/Poor								
Dated:										
		Executive Engineer or Equivalent								

# **18.** FORM 'E'

# STRUCTURE & ORGANIZATION

1.	Name &	Address of the bidder						
2.	Telephone No. / Email id /Telex No./Fax No.							
3.	(Attach	atus of the bidder copies of original document the legal status).						
	a)	An Individual						
	b)	A proprietary firm						
	c)	A firm in partnership						
	d)	A limited company or Corporation						
4.	Particula	ars of registration with various Governme	ent bodies (attach	attested photo-copy).				
	ORGANIZ	ZATION/PLACE OF REGISTRATION		REGISTRATION No.				
	1.							
	2.							
	3.							
5.		and Titles of Directors & Office tion to be concerned with this work.	ers with					
6.	Designa	tion of individuals authorized to act for the	ne organization.					
7.	Has the bidder or any constituent partner in case of partnership firm, ever abandoned the awarded work before its completion? If so, give name of the project and reasons for abandonment.							
8.	Has the bidder, or any constituent partner in case of partnership firm/ limited company/ joint venture, ever been convicted by the court of law? If so, give details.							
9.	In which field of Civil Engineering Construction, the bidder has specialization and interest?							
10.	Any other information considered necessary but not included above.							

Signature of bidder(s) with stamp

# **19.** FORM 'F'

# **Proforma for Earnest Money Deposit Declaration**

"Cons	eas, I/we(name of agency)
(1)	If after the opening of tender, I /we withdraw or modify my/our bid during the period of validity of tender (including extended validity of tender) specified in the tender documents.  OR
(2) before	If, after the award of work, I/we fail to sign the contract, or to submit performance guarantee the deadline defined in the tender documents,
from da	I/We shall be suspended for one year and shall not be eligible to bid for CPWD tenders ate of issue of suspension order.
	(Sign and seal of the bidder)

# **20.** Form-G

# ON NON-JUDICIAL STAMP PAPER OF MINIMUM RS. 100

# (Guarantee offered by Bank to CPWD in connection with the execution ofcontracts)

Form of Bank Guarantee for Earnest Money Deposit/ Performance

# **Guarantee/ Security Deposit/ Mobilization Advance**

1.	Whereas the Executive Engineer
2.	We, (indicate the name of the bank) (hereinafter referred to as" the Bank"), hereby undertake to pay to the Government an amount not exceeding Rs. (Rupeesonly) on demand by the Government within 10 days of the demand.
3.	We,do hereby undertake to pay the amount due and payable under this guarantee without any demur, merely on a demand from the Government stating that the amount claimed is required to meet the recoveries due or likely to bedue from the said Contractor. 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(Rupeesonly)
4.	We, (indicate the name of the Bank), further undertake to pay the Government any money so demanded notwithstanding any dispute or disputes raised by the contractor in any suit or proceeding pending before any Court or Tribunal, our liability under this Bank Guarantee being absolute and unequivocal. The payment so made by us under this Bank Guarantee shall be a valid discharge of our liability for payment there under and the Contractor shall have no claim against us for making such payment.
5.	We, (indicate the name of the Bank), further agree that the Government shall have the fullest liberty without our consent and without affecting in any manner our obligation hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor from time to time or to postpone for anytime orfrom time to time any of the powers exercisable by the Government against the said contractor and to for bear 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 grantedto the said Contractor or for any forbearance, act of omission on the part of the Government or any indulgence by the Government to the said Contractor or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of sorelieving us.
6.	We,, further agree that the Government at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor at the first instance without proceeding against the Contractor and
	notwithstanding any security or other guarantee the Government may have in relation other Contractor's liabilities.
7.	This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor.
8.	We,,undertake not to revoke this guarantee except with the consent of the Government in writing.
9.	This Bank Guarantee shall be valid uptounless extended on demand by the Government.

Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs		
(Rupeesonl	, ,	
us within the date of expiry or extended date of expiry or guarantee shall stand discharged.	of this guarantee, all our liabilities under this	
Date		
Date		
Witnesses:		
1. Signature	Authorized signatory: Name and address	
	Designation Staff	
2. Signature	Staff code No.	

Name and address Bank seal

#### **INTEGRTY PACT**

To,	
Sub:	NIT No. 1/INST/2021-22 for the work ""Construction of Boundary Wall and Chain Link Fencing along IISER Boundary, providing and fixing of Concertina Coil over existing external Wall of INST Campus at Sector-81,

Mohali-140306."

Dear Sir,

It is here by declared that INST is committed to follow the principle of transparency, equity and competitiveness in public department.

The subject Notice Inviting of Tender (NIT) is an invitation to offer made on the condition that the Bidder will sign the integrity Agreement, which is an integral part of tender/bid documents, failing which the tender/bidder will stand disqualified from the tendering process and the bid of thebidder would be summarily rejected.

This declaration shall form part and parcel of the Integrity Agreement and signing of the same shall be deemed as acceptance and signing of the Integrity Agreement on behalf of the INST.

Yours faithfully

DIRECTOR, INST, KNOWLEDGE CITY, SECTOR-81,MOHALI-140306, **INTEGRITY PACT** 

To,

The Director, INST, KNOWLEDGE CITY,Mohali-140306

Sub:

Submission of Tender for the work "Construction of Boundary Wall and Chain Link Fencing and along IISER Boundary, providing and fixing of Concertina Coil over existing external Wall of INST Campus at Sector-81, Mohali-140306."

Dear Sir,

I/We acknowledge that INST is committed to follow the principles thereof as enumerated in the Integrity Agreement enclosed with the tender/bid document.

I/We agree that the Notice Inviting Tender (NIT) us an invitation to offer made on the condition that I/We will sign the enclosed integrity Agreement, which is an integral part of tender documents, failing which I/We will stand disqualified from the tendering process. I/We acknowledge that THE MAKING OF THE BID SHALL BE REGARDED AS AN UNCONDITIONAL AND ABSOLUTE ACCEPTRANCE of this condition of the NIT.

I/We confirm acceptance and compliance with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from themain contract, which will come into existence when tender/bid is finally accepted by INST. I/We acknowledge and accept the duration of the Integrity Agreement.

I/We acknowledge that in the event of my/our failure to sign and accept the Integrity Agreement, while submitting the tender/bid, INST shall have unqualified, absolute and unfettered right to disqualify the tender/bidder and reject the tender/bid in accordance with terms and conditions of the tender/bid.

Yours faithfully

(Duly authorized signatory of the Bidder)

# To be signed by the bidder and same signatory competent/authorized to sign the relevant contract of behalf of INST.

# **INTEGRITY AGREEMENT**

This Integrity Agreement is made at	on this	day of	20

### **BETWEEN**

Director, Institute of Nano Science and Technology, Knowledge City, Sector-81, Mohali-140306, Hereinafter referred as the 'Principal/Owner', which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

	AND	
	(Name and Address of the Individual/firm/Company)	)
Through	(Hereinafter to	
the		

(Details of duly authorized signatory)

"Bidder/Contractor" and which expression shall unless repugnant to the meaning or contexthereof include its successors and permitted assigns)

# **Preamble**

WHEREAS the Principal /Owner has floated the Tender (NIT No. 1/INST/2021-22) (hereinafter referred to as "Tender/Bid") and intends to award, under laid down organizational procedure, contract for the work "Construction of Boundary Wall and Chain Link Fencing along IISER Boundary, providing and fixing of Concertina Coil over existing external Wall of INST Campus at Sector-81, Mohali-140306." hereinafter referred to as the "Contact".

AND WHEREAS the Principal/Owner values full compliance with all relevant laws of the land, rules, regulations', economic use of resources and of fairness/transparency in its relation with its Bidder(s) and Contractor (s).

AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement (hereinafter referred to as "Integrity Pact" or "Pact"), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the parties.

NOW, therefore, in consideration of mutual covenants contained in this Pact, the parties hereby agree as follows and this Pact witness as under:

# **Article 1: Commitment of the Principal/Owner**

- 1) The Principal /Owner commits itself to take all measures necessary to prevent corruption andto observe the following principles:
- a) No employee of the Principal/Owner, personally or through any of his/her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is notlegally entitled to.
- b) The Principal/Owner will, during the Tender process treat all bidder(s) with equity and reason. The Principal/Owner will, in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) could obtain an advantage in relation to the Tender process or the Contract execution.
- c) The Principal/Owner shall endeavor to exclude from the Tender process any person, whose conduct in the past has been of biased nature.
- If the Principal/Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC)/Prevention of Corruption Act, 1988 (PCAct) or is in violation suspicion in this regard, the Principal/Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

## **Article 2: Commitment of the Bidder(s)/Contractor(s)**

- 1) It is required that each Bidder/Contractor (including their respective officers, employees and agents) adhere to the highest ethical standards and report to the Government/Department all suspected acts of fraud or corruption or Coercion or Collusion of which it has knowledge orbecomes aware, during the tendering process and throughout the negotiation or award of a contract.
- 2) The Bidder(s)/Contractor(s) commits himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the Tender process and during the Contract execution:
- a) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal/Owner's employees involved in the Tender process Page 31 of 82

- or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain exchange any advantage of any kind whatsoever during the Tender process or during the execution of the Contract.
- b) The Bidder(s)/Contractor(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process.
- c) The Bidder(S)/Contractor(s) will not commit any offence under the relevant IPC/PC Act. Further the Bidder(S)/Contract(s) will not use improperly, (for the propose of completion or personal gain), or pass on to others, any information or documents provided by the Principal/Owner as part of the business details, including information contained or transmitted electronically.
- d) The Bidder(s)/Contractor(s) of foreign original shall disclose the names and addresses of agents/representatives of India, if any. Similarly Bidder(s)/Contractor(s) of India Nationality shall disclose names and addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender on behalf of one manufacturer along with the first manufacturer in a subsequent/parallel tender forthe same item.
- 3) The Bidder (s)/Contractor (s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- 4) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice means a willful misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justify interest of other and/or to influence the procurement process to the detriment of the Government interest.
- 5) The Bidder (s)/Contractor (s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/her reputation or property to influence their participation in the tendering process).

# **Article 3: Consequences of Breach**

Without prejudice to any right that may be available to the Principal/Owner under law or the

Contract or its established policies and laid down procedures, the Principal/Owner shall have thefollowing rights in case of breach of this Integrity Pact by the Bidder(s)/Contractor(s) and the Bidder/Contractor accepts and undertakes to respect and uphold the Principal/Owner's absoluteright.

- 1) If the Bidder/Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2above or in any other form, such as to put his reliability or credibility in question, the Principal/Owner after giving 14 days' notice to the contractor shall have powers to disqualify the Bidder(s)/Contractor(s) from the Tender process or terminate/determine the Contract, if already executed or exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Principal/Owner. Such exclusion may be forever or for a limited period as decided by the Principal/Owner.
  - 2) Forfeiture of EMD/Performance Guarantee/Security Deposit: If the Principal/Owner has disqualified the Bidder(s) from the Tender process prior to the award of the Contract or terminated/determine the contract or has accrued the right to terminate/determine the contract according to Article 3(1), the Principal/Owner, may in its considered opinion forfeit the entire amount of Earnest Money Deposit, Performance Guarantee and Security Deposit of the Bidder/Contractor.
  - 3) **Criminal Liability:** If the Principal/Owner obtains knowledge of conduct of a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of Indian Penal code IPC/Prevention of Corruption Act, or if the Principal/Owner has substantive suspicion in this regard, the Principal/Owner will inform the same law enforcing agencies for further investigation.

## **Article 4: Transgression**

- 1) The Bidder declares that no previous transgressions occurred in the last 7 years with any other Company in any country confirming to the anticorruption approach or with Central Government or State Government or any other Central/State Public Sector Enterprises in India that could justify his exclusion from the tender process.
- 2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or action can be taken for banning of business dealing/holiday listing of the Bidder/Contractor as deemed fit by the Principal/Owner.
- 3) If the Bidder/Contractor can prove that he has restored/recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/Owner may, at its own direction, revoke the exclusion prematurely.

# Article 5: Equal Treatment of all Bidder(s)/Contractors/Subcontractors

- The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be responsible for any violation(s) of the principles laid down in this agreement/Pact by anyof its Sub-contractors/sub- vendors.
- 2) The Principal/Owner will enter into Pacts on identical terms as this one with all Bidder(s) and Contractors.
- 3) The Principal/Owner will disqualify Bidder(s), who do not submit, the duly signed Pact between the Principal/Owner and the bidder, along with the Tender or violate its provisions at any stage of the Tender process, from the Tender process.

# **Article 6- Duration of the Pact**

This Pact begins when both the parties have legally signed it. It expires for the Contractor/Vendor 12 Months after the completion of work under the contract or till the continuation of defect liability period, whichever is more and for all other bidder(s), till the Contract has been awarded. If any claim is made/lodged during the time, the same shall be binding and continue to be valid despite the lapse of this Pacts as specified above, unless it is discharge/determined by the Competent Authority, PWD.

# **Article 7- Other Provisions**

- 0) This Pact is subject to Indian Law, place of performance and jurisdiction is the HeadQuarters of the Division of the Principal/Owner, who has floated the Tender.
- 1) Changes and supplements need to be made in writing. Side agreements have not beenmade.
- 2) If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Pact must be signed by a representativeduly authorized by board resolution.
- 3) Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intensions.
- 4) It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreements / Pact, any action taken by the Owner/Principal in accordance with this Integrity Agreement/ Pact or interpretation thereof shall not be subject to arbitration.

# **Article 8- LEGAL AND PRIOR RIGHTS**

All rights and remedies of the parties hereto shall be in addition to all the other legal rights and remedies belonging to such parties under the Contract and/or law and the

same shall be deemed to be cumulative and not alternative to such legal rights and remedies aforesaid. For the sake of brevity, both the Parties agree that this Integrity Pact will have precedence over the Tender/Contract documents with regard any of the provisions covered under this Integrity Pact.

IN WITNESS WHEREOF the parties have signed and executed this Integrity Pact at the placeand date first above mentioned in the presence of following witnesses:
(For and on behalf of Principal/Owner)
(For and on behalf of Bidder/Contractor)
WITNESSES:
1.
(Signature, name and address)
2.
(Signature, name and address)
Place:
Date:

# INSTITUTE OF NANO SCIENCE ANDTECHNOLOGY, MOHALI

#### 1.0 PERCENTAGE RATE TENDER & CONTRACT FOR WORKS

Tender for the work of:- "Construction of Boundary Wall and Chain Link Fencing along IISER Boundary, providing and fixing of Concertina Coil over existing external Wall of INST Campus at Sector-81, Mohali-140306."

- (i) To be submitted by **02.00 PM on 05/05/2021** after download from **e-procurement website** or Institute website: <a href="https://www.inst.ac.in">www.inst.ac.in</a>.
- (ii) To be opened in the presence of tenderers who may be present at 03.00 PM on 05/05/2021 at INST, Knowledge City, Sector-81, Mohali-140306.

#### **TENDER**

I/We have read and examined the notice inviting tender, schedule, A, B, C, D, E & F. Specifications applicable, Drawings & Designs, General Rules and Directions, Conditions of Contract, clauses of contract, Special conditions, Schedule of Rate and other documents and Rules referred to in the conditions of contract and all other contents in the tender document for the work.

I/We hereby tender for the execution of the work specified for the President of India within the time specified in Schedule 'F', viz. schedule of quantities and in accordance in all respects with the specifications, designs, drawings and instructions in writing referred in Rule-1 of General Rules and Directions and in Clause 11 of the Conditions of Contract and with such materials as are provided for, by, and in respects of accordance with, such conditions so far as applicable.

We agree to keep the tender open for **Thirty (75)** days from the due date of its opening of submission thereof and not to make any modifications in its terms and conditions.

I/We undertake and confirm that eligible similar work(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I/we shall be debarred for tendering in CPWD in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-charge shall be free to forfeit the entire amount of Earnest Money Deposited/Performance Guarantee.

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

#### **ACCEPTANCE**

The above tender (as modified	by you as provided in the letters mentioned hereunder) is
Accepted by me for and on beh	alf of the Director, INST, Mohali for a sum of Rs
(Rupees	)
The letters referred to below sh	all form part of this Agreement:-
(i)	
(ii)	
(iii)	
	Designation
	Dated

# PROFORMA OF SCHEDULES A to F

# **SCHEDULE 'A'**

Schedule of Quantities attached on page No. 79-to 82

#### **SCHEDULE 'B'**

Schedule of materials to be issued to the contractor.

SI.	Description of Item	Quantity	Rates in Figure &Words at which the material will Be charged to theContractor	Place of Issue		
1	2	3	4	5		
	NIL					

#### **SCHEDULE 'C'**

Tools and Plants to be hired to the contractor

SI.No.	Description	Hire charges per day	Place of issue		
1	2	3	4		
NIL					

#### **SCHEDULE 'D'**

General Conditions, Additional Conditions, Special conditions, General Specifications and particular specifications attached on Page 39 to 52

#### SCHEDULE 'E'

Reference to General	General Conditions of contract Construction Works 2020 with
Conditions :-	amendment issued upto date till receipt of tender.
Name of Work:-	"Construction of Boundary Wall and Chain Link Fencing along IISER Boundary, providing and fixing of Concertina Coil over existing external Wall of INST Campus at Sector-81, Mohali-140306."
Estimate Cost::-	₹ 42,40,592/-
Earnest Money:-	NIL ( As per Affidavit From 9)
Performance guarantee:-	The contractor shall be required to deposit an amount equal to 3 % of the tendered value of work as performance guarantee in the form as mentioned in Para 9 of PWD-6 within 7 days of the issue of letter of acceptance. This period can be further extended by Engineer- in-charge upto a maximum of 15 days on written request of the contractor
Security Deposit:-	2.5% of tendered amount
Labour regulations to be complied by the contractor:	<ul> <li>(1). In terms of Clause 19 of the GCC, a valid labour license is obtained by the contractor before start of work in terms contract labour (Regulation &amp; abolition) Act-1970.</li> <li>(2). In terms of clause 19L of the GCC, ESI &amp; EPF contributionare to be paid by the contractor, for which contractor is to get registered himself with EPFO and ESIC. (3). Labour employed by</li> </ul>

the contractor has obtained smart card of ESI, which is essential for imparting medical facility to labour.

(4). Labour employed by the contractor has registered themselves with Building and other Construction Worker Act-1996 to get applicable benefits (5). Record prescribed in 'CPWD Contractor's Labour Regulations' laid down in GCC are maintained. These include registers for workmen employed by the contractor, Muster Roll, Register of Wages, Wages slip, Employment Card, Service Certificate, Register of Fines, Register of

Deductions for Damageof Loss, Register of overtime and Register of

SCHEDULE 'F':-

General Rules & Directions

**Chief Finance and Administrative Officer,** 

Officer Inviting

Tender:-

INST, Mohali

Advance.

**Definitions:-**

2(i) Engineer-In-Charge

Consultant (Engg), INST, Mohali

2(vii) Accepting Authority

2(x) Percentage on cost of material and labour to cover all overheads and profits Director, INST, Mohali.

15%

Delhi Schedules of Rate 2016 with upto date correction slips. 2(ix) Standard schedule of Rates

Institute of Nano Science and 2(xii) Department Technology, Mohali.

9(ii) Format of Contract CPWD Form 7 (2014) as modified & amended upto date. Clause-1:-i)Time allowed for Submission of Performance guarantee, programme Chart (and progress)and Applicable Labour 7 days licenses, registration with EPFO, ESIC and BOCW Welfare Board or proof of Applying thereof from the date of issue of letter of Acceptance. ii)Maximum allowable

3 Days

Not Clause-2A:-Whether Clause-2A Applicable

Clause-5:- Number of days from the date of issue of letter of acceptance for reckoning date ofstart

extension with late fee @0.1%per

Performance Guarantee Amount beyond the period

provided in (i)

shall be applicable

day of

above.

7 days.

# Clause-5.1:MILE STONE:

	TABLE OF MILE STONE (S)				
SI. No.	Physical Progress	Time Allowed (fromdate of start)	Amount to be with-held in case of non-achievement of milestone		
1.	1/8 <sup>th</sup>	1/4 <sup>th</sup>	5%		
2.	3/8 <sup>th</sup>	1/2	5%		
3.	3/4 <sup>th</sup>	3/4 <sup>th</sup>	5%		
4.	100%	Full Time	5%		

Time allowed for execution of works

60 (Sixty) Days

Authority to give fair and reasonable extension of time and

rescheduling of milestone

The Director, INST, Mohali.

Clause 6, 6A

Clause applicable (6 or 6A)

Clause-7:- Gross work to be

Done

together with net payment /
adjustment of advances for material
collecte if any, since the last
d, such

Clause-6A

Rs. 15.00 (Fifteen) Lakh

payment for being eligible tointerim payment

**Clause-7A**:-Whether Clause 7A shall be applicable:-

#### **Applicable**

(No Running Account Bill shall be paid for the work till the applicable labour licenses, registration with EPFO, ESIC and BOCW Welfare Board whatever, applicable are submitted by the contractor to the Engineer-in-Charge/ Consultant (Engg), INST.)

**Clause-10A:-** List of testing equipment to be Provided by the contractor.

Clause-10B (ii):- Whether clause 10B (ii) shall be

Applicable Clause- 10CA

As per list attached.- Annexure (A) Page- 48

No Applicable

Materials covered under this clause:	Nearest material (other than cement, reinforcement bars and structural steel) for which All India Wholesale Price Index to be followed:	Base Price of all the materials covered under  Clause 10 CA*
1. Cement OPC		6,400.00
1. Cement PPC		5,800.00
3.Reinforcement Bars TMT 500-12 MM Primary Manufacturer		54,500.00
Structural Steel Primary     Manufacturer MT		48,167.00
* Issued vide ADG ( Region Chd) 23(2)/10CA/ADG (R.Ch)/ EE (P)/ 146-H dated 01.01.2021 for the month of December,2020.		

		25 /	6 as Labour component for Gross	Talue of Work Golle
Clause 1	0 C		Not Applicable	•
			Not Applicabl	e
Clause 10	) CC		06 Months	
	CC to be applicable in			
	with stipulated period of exceeding the period	Atta	ched in the tender documents and C	CPWD
•	the nextcolumn	,	ones in the tensor decaments and t	
		Sne	ecification 2019 Vol I & II with correct	ctions upto the last date
	1:- Specifications to be		ubmission/ uploading of tender	sacro apro aro laor dato
followed f			<del>-</del>	
Execution	n of work.	Con	struction & modification work.	
Clause 4	0.			
Clause-1				
Type of w	/UIK			
122 X 1:	2.3 Deviation limit beyond w	hich c	ause	30%
	12.2 & 12.3 shall apply for			<b>30</b> / 0
	work.	J. Duile	····· <del>·</del>	
12.5 (i)	Deviation limit beyond w	vond which clause		30%
(.,	12.2 & 12.3 shall apply for			1
	Foundation work.	-		
	(Except earth work)			
	limit for items in earth			100%
	work subhead of DSR or	relate	d	
	Items			
				•
	Clause -16:-		Director, INST, Mohali	
	Competent Authority for		Director, INST, Mohali	
			Director, INST, Mohali	
	Competent Authority for deciding reduced rates Clause -18:- List of manda	•	As per list attached –	
	Competent Authority for deciding reduced rates  Clause -18:- List of manda machinery, tools, Plants to	be be		
	Competent Authority for deciding reduced rates  Clause -18:- List of manda machinery, tools, Plants to deployed by the contracto	be be	As per list attached –	
	Competent Authority for deciding reduced rates  Clause -18:- List of manda machinery, tools, Plants to	be be	As per list attached –	
	Competent Authority for deciding reduced rates  Clause -18:- List of manda machinery, tools, Plants to deployed by the contracto	be be	As per list attached –	

# Clause 25 :-

Constitution of Dispute Redressal Committee (DRC)	Competent Authority to appoint DRC.
	Director, INST, Mohali.
Constitution of Dispute Redressal Committee (DRC) (Office Order No. F.No. 15(3)/2019-INST Dated: 11.09.2020)  1. Prof. S. Anantha Ramakrishna: Chairman Director, CSIR-CSIO, Chandigarh  2. Dr. S.K.Sardana (Retd IDES), Member Judge: Member Chandigarh Disputes Redressal Commission, Chandigarh  3. Prof. Jagdeep Singh, Registrar, IISER, Mohali: Member  4. Shri Nand Lal Chauhan. Mohali, Retd SE, CPWD, Mohali: Member  5. Shri R.K. Gupta, Retd. EE, CPWD, Panchkula: Member  Note: The above constitution of Dispute Redressal Committee is subject to change, for which necessary notification shall be issued by the competent authority	
of the INST Mohali, if required.	

# Clause 36 (i)

Minimum qualifications & experience required for Principal Technical Representative.

# Requirement of Technical Staff Representative(s) and Recovery Rate

S. No.	Minimum Qualification of Technical Representative	Discipline	Designation (Principal Technical/ Technical representative)	Minimum experience	Number	Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of
1	Graduate Engineer		Site Engineer	2 years	1	
	Or Sind on Familia			5 years		Rs.15,000/-(Per month)
	Diploma Engineer			5 years		

<sup>&</sup>quot;Assistant Engineers retired from Government Services that are holding Diploma will be treated at par with Graduate Engineer".

#### Clause-42:-

- (i) (a) Schedule/statement fordetermining theoretical quantity of cement & bitumen on the basis of Delhi Schedule of Rates **DSR 2016** Printed by CPWD
- ii) Variations permissibleon theoretical quantities:
- (a) Cement

For works with estimated cost put to tender not more than Rs.5 lakh.

For works with estimated cost put to tender more than Rs.5 lakh.

- (b) Bitumen All Works
- (c) Steel Reinforcement and structural steel sections for each diameter, section and category
- (d) All other materials.

#### RECOVERY RATES FOR QUANTITIES BEYOND PERMISSIBLE VARIATION

S.No.	Description of Item	Rates in figures an recovery shall be Contra	made from the
		Excess beyond Permissible Variation	Less used beyond the permissible variation
1	2	3	4
1. 2.	To be arranged by contractor.  Cement Steel reinforcement	) NIL	Not allowed as the work will be rejected.

DIRECTOR, INST, SECTOR-81, MOHALI-140306 **BLANK** 

3% plus/minus.
2% plus/minus.
2.5% plus side only & nil on minus side. 2% plus/minus.
Nil

#### LIST OF EQUIPMENTS FOR SITE LABORATORY

Particulars	Item	Qty
(I) Weighing	Physical balance capacity 200 gms.	1 No.
Equipment	Dial type spring balance having knob capacity 10 kg	-
	reading to ½ kg.	2 Nos.
	Counter scale capacity 1 kg & 10 kg.	1 No./each
	Weighting platform capacity 100 kg.	1 No.
	Iron weights of 5 kg, 2 kg, 500 gm, 200 gm, 100 gm.	2 Nos./each
	Brass weights of 50 gm, 20 gm, 10 gm, 5 gm, 2 gm, 1 gm.	2 Nos./each
(II) Water Measuring	water bottles/canes 5 ltr, 2 ltr, 1 ltr, 1/2 ltr.	5 Nos./each
Equipment	Measuring cylinder capacity 10 ml, 500 ml, 250 ml, 100	
' '	ml.	2 Nos./each
	Beakers with capacity 500 ml, 200 ml, 50 ml.	2 Nos./each
(III) Laboratory Tools	Set of Box spanner ratchet.	2 Nos.
	2. Hammer 1 lb.	2 Nos.
	3. Rubber Hammer	2 Nos.
	4. Hacksaw with 6 blades.	1 No.
	5. Measuring tape 2 mtr.	2 Nos.
	6. Depth gauge 20 cm.	2 Nos.
	7. Vernier Caliper.	2 Nos.
	Micrometer screw 25 mm gauge.	2 Nos.
	5 50. 50. 50. <u>50. 50. 50. 50. 50. 50. 50. 50. 50. 50. </u>	
Miscellaneous item	1. Showels & Spade.	6 Nos./each
	2. Plastic or GI Buckets 15 ltr, 10 ltr & 5 ltr.	3 Nos./each
	3. Wheel Barrow.	3 Nos.

#### The laboratory shall have equipped with the following equipment also:

- a) Balances:-
- i) 7 kg 10 kg. Capacity, semi self-indicating type-accurate to 10 gm.
- ii) 500 gm capacity, semi self-indicating type-accurate to 1 gm.
- iii) Pan balance type 5 kg accurate to 10 gm.
- b) Equipment of slump test slump cone, steel plate, temping rod, steel scale, scoop.
- c) Dial gauges 25 mm tr4avel 0.01 mm / division leas t count 2 nos.
- d) Graduated measuring cylinders 200 ml capacity 3 nos.
- e) Enamel trays for efflorescence test for bricks:-
  - 300 mm x 250 mm x 40 mm = 2 Nos. Circular plates of 250 mm dia. = 4 Nos.
- f) Other instruments like steel tapes 30 m, Vernier calipers, a good quality plumb bob, spirit level minimum 30 cm long with 3 bubbles for horizontal vertical, wire gauge (circular type) disc, foot rule, long nylon thread, magnifying glass, screw driver 30 cms long, ballpin hammer 100 gms, plastic bags for taking samples etc.
- g) The equipment's not relevant for this work may be exempted by Engineer-in-Charge on the written request of the agency.

Note: In case any of the above equipment goes out of order or is damaged, it shall be replaced by a proper working equipment by the contractor within 24 hours.

#### **SALIENT HIGHLIGHTS OF THE TENDER**

NAME OF WORK: - ""Construction of Boundary Wall and Chain Link Fencing along IISER Boundary, providing and fixing of Concertina Coil over existing external Wall of INST Campus at Sector-81, Mohali-140306."

The contractor (s) shall make his own arrangement for electricity and water required for the execution of work and nothing extra shall be paid for the same. However, the Engineer-in-Charge shall recommend the application to the PSPCL for electric connection,if desired. Necessary payment shall be made by the contractor directly to the department concerned. Incase BSES fails to sanction the electric connection or delays the sanctionfor electric connection; the contractor shall make his own arrangement by providing diesel generators of adequate capacity at his own cost.

- 1. For water supply, contractor shall make his own arrangements including boring of tube well, if necessary and nothing extra shall be paid by the Department for arrangement of water or on its treatment as per IS: 456/2000, Para 5.4 or CPWD Specifications 2019 volume-I to II.
- 2. All the materials including cement and steel (T.M.T Bars) will be arran1ement by the contractor himself and nothing extra shall be paid for cartage of material to site of work.

#### 3. Quality Assurance

- 3.1 The contractor shall ensure quality control measures on different aspects of construction including materials, workmanship and correct construction methodologies to be adopted. He shall have to submit quality assurance programme within two weeks of the award of work. The quality assurance programme should include method statement for various items of work to be executed along with check lists to enforce quality control.
- 3.2 The contractor shall get the source of various raw materials namely aggregate, cement, sand, steel, water etc. to be used on the work, approved from the Engineer-in-Charge andtrial mixes for controlled concrete shall be done using the approved materials. The contractor shall stick to the approved source unless it is absolutely unavoidable. Any change shall be done with the prior approval of the Engineer-in-Charge for which testsetc. shall be done by the contractor at his own cost.
- 3.3 Samples including brand / quality of materials and fittings to be used in the work shall be got approved from the Engineer-in-Charge, well in advance of actual execution and shall be preserved till the completion of the work.
- 3.4 Similarly, the contractor shall submit brand/ make of various materials to be used for the approval of the Engineer-in-Charge along with samples and once approved, he shall stick to it. Any change will have to be got approved from Engineer-in-Charge in advance.
- 4.4 The contractor shall submit shop drawings of staging and shuttering arrangement, Stone cladding, aluminum work and other works including mock work as desired by Engineer-in-Charge for his before execution. The contractor shall also submit bar-bending schedule for approval of Engineer-in-Charge before execution.
- 4.5 The contractor shall arrange carrying out of all tests required under the agreementthrough the laboratory as approved by the Engineer-in-Charge and shall bear all chargesin connection therewith including fee for testing. However, no testing charges will bepayable by the contractor for the tests conducted in laboratories at site of work. In allcases, cost of samples and to and fro carriage shall be borne by the contractor.Contractor shall establish a laboratory at site of work at his own cost. The laboratory shallbe equipped, inter alia, with the equipment as details at page number 39 of this NIT. Allowing establishing the laboratory at site shall not absolve the contractor from fulfillingthe criteria of getting the test done in independent Lab. /CPWD Lab. The decision of the Engineer-in-charge of allowing any test in the site laboratory or any other laboratory shallbe final.

Extensive testing of the materials used for construction is a pre-requisite for attaining high quality

of the work. This shall also require specialized tests, physical, chemical, ultrasonic,x-ray and various other types of tests which cannot possibly be carried out in a site laboratory. These tests also require specialized personnel who regularly deal in such testing. Therefore the need arises for carrying out the tests in outside laboratories. These laboratories may be in the Government sector, Semi Government or private sector. All govt. Institutes, Indian Institutes of Technology, National Institutes of Technology Central and State Research Centers, Centrally and State funded laboratories.

Testing of building material shall be done as per the following priority.

a) PEC/ NITTER, Chandigarh or any other laboratory to be approved by INST, Mohali.

#### 4.6. SAMPLES FOR TESTING:-

- 4.6.1 The contractor shall provide samples of materials required for testing free of charge. The cost of tests shall be borne by the contractor.
  - All other expenditure required to be incurred for taking samples; conveyance,packing etc. shall be borne by the contractor himself.
- 4.6.2 However, if any load testing or special testing is to be done for concrete whose strength is doubtful, the cost of the same shall be borne by the contractor.
- 4.6.3 In case there is any discrepancy in frequency of testing as given in list of mandatory tests and that in individual sub-heads of work as per CPWD Specifications higher of the two frequencies of testing shall be followed and nothing extra shall be payable on this account.
- 4.6.4 The contractor has to establish field laboratory at site including all necessary equipment for field tests at his own cost.
- 4.7 Samples of materials required for testing shall be provided free of cost by the contractor. Testing charges, if any, shall be borne by the department in case the test results are satisfactory, except, where-ever specifically mentioned otherwise in the NIT. All other expenditure to be incurred for taking samples, conveyance, packing etc. shall be borne bythe contractor. If material fails in testing, the testing charges will be borne by the contractor.
  - The contractor shall get the water tested with regard to its suitability and conforming to the relevant IS Code. The contractor shall obtain written approval from the Engineer-in-Charge before he proceeds by using the same for execution of work. The water testing charges shall be borne by the contractor.
- 4.8 Unless otherwise specified in the schedule of quantities the rates for all items shall be considered as inclusive of pumping / balling out water, if necessary, for which no extra payment shall be made. These conditions shall be considered to include water from any source such as rain, flood, surface and sub-soil water etc. and shall apply to the executionin any season.
- 4.9 The contractor has to use specialized agency for specialized items of works such as water proofing treatment etc., the Contractor(s) shall submit for the approval of the Engineer–in–Charge, the names of such specialized agencies, of reputed along with their technical capability proposed to be engaged by him.
  - Approval of specialized agencies for each specialized work shall be obtained from the Engineer-in-charge in one month of award of work. Even if, the work is being executed by such specialized agencies; the work shall be deemed to be executed by the tenderer forall purposes and the responsibility of the quality of items of works executed etc. shall continue to be that of the tenderer only.
- 4.10 The agencies shall get registered with works contract cell of Sales Tax Department, Government of NCTD Delhi and submit valid registration certificate from works contract. Failure to do so may lead to rejection of tender.
- 4.11 HOUSING, WATER SUPPLY, DRAINAGE AND ELECTRICITIY The contractor has to make his own arrangements for electric connection, stores and field offices etc. including drainage arrangements. Contractor should visit the site and see in what manner he is ableto arrange the above. Arrangement of water for drinking purpose in addition to the water required for construction work is also to be made by the contractor. For electric connection, the contractor

shall make necessary connection as per requirement from NDPL/BSES/NDMC and the contractor shall be authorized to use the same for execution or work. The department shall provide necessary help for obtaining electric connection. The decision of the Engineer-in-charge shall be final and binding on the contractor.

Water for the work shall be arranged by the contractor

# OTHERWISE RECOVERY @ 1% OF THE GROSS VALUE OF WORK DONE SHALL be made from the bill.

4.12 Contractor should provide at site suitable space as per Direction of Engineer –in- charge with two tables and four chair along with one Amirah for Engineer -for effective quality of work and one separate room for testing of field tests.

#### 5.0 Safety Precautions

Contractor shall within two weeks of award of work, submit to the Engineer-in-Charge for his approval, list of measures for maintaining safety of manpower deployed for construction and avoidance of accidents.

#### 6.0 Scaffolding

For facia work, double steel scaffolding having two sets of vertical supports with steel staircase for inspection of works by Engineer-in-Charge shall be used. The supports shall be sound and strong, tied together with horizontal piece over which scaffolding planks/Challis shall be fixed. Supplying and stacking scaffolding as procured vide item no.85 in schedule of quantity, is the property of department.

#### 7.0 Sub-letting

Un- authorized sub- letting of work shall not be permitted.

#### 8.0 Sub-Specialized work

The Contractor shall engaged specialized agency for specialized items (i.e. water proofing treatment) of work. The Contractor(s) shall submit names for the approval of such specialized agency/firm from the Engineer-in-charge before starting the work.

The work shall be deemed to be executed by the tenderer for all purposes and the responsibility of the quality of these items of works executed etc. shall continue to bethat of the tenderer only.

#### **GENERAL CONDITIONS**

- 1. Except for the items, for which particular specifications are given or where it is specifically mentioned otherwise in the description of the items in the schedule of quantities, the work shall generally be carried out in accordance with the "CP WD Specifications 2019 Vol-I &II with upto date corrections slips for Civil Work, Wherever CPWD Specifications are silent, the latest IS Codes/ Specifications shall be followed.
- 2. The order of preference in case of any discrepancy as indicated in condition No. 8.1 under "Conditions of Contract" given in the standard CPW D Contract form may be read as the following:
  - i) Description of schedule of quantities.
  - ii) Particular Specification and special condition, if any.
  - iii) Drawings.
  - iv) CPWD Specifications 2009 with upto date correction slips.
  - v) Indian Standard Specifications of B.I.S.
  - vi) Manufacturer's specifications.
  - vii) Sound Engineering Practice
- 3. A reference made to any Indian Standard Specifications in these documents, shall implyto the latest version of that standard, including such revisions / amendments as issued by the bureau of Indian Standards upto last date of receipt of tenders. The Contractor shall keep at his own cost all such publications of relevant Indian Standard applicable to the work at site.
- 4. Unless otherwise specified in the schedule of quantities, the rates tendered by the contractor shall be all inclusive and shall apply to all lifts & all heights, floors including terrace, leads and depths and nothing extra shall be payable on this account.
- 5. The rates for all items of work shall, unless clearly specified otherwise, include cost of all labour, material, tools and plants and other inputs involved in the execution of the item.
- 6. The contractor(s) shall quote all-inclusive rates against the items in the schedule of quantities and nothing extra shall be payable for any of the conditions and specifications mentioned in the tender documents unless specifically specified otherwise.
- 7. Unless otherwise specified in the schedule of quantities the rates for all items shall be considered as inclusive of pumping / bailing out water, if necessary for which no extra payment shall be made.

- 8. The rate for all items, in which the use of cement is involved is inclusive of charges for curing.
- 9. The foundation trenches shall be kept free from water while works below ground level are in progress.
- The work shall be executed and measured as per metric dimensions given in the schedule of quantities, drawings etc. (FPS units wherever indicated are for guidelinesonly)
- 11. Payment for items of "RCC work", brick work and concrete work above different floor shall be made at the rates provided for these items. For operation of these rates, the floor level shall be considered as top of the main structural slab in that floor viz Top of RCC slab in main room and not top of any sunk or depressed floor for toilet slabs.
- 12. The rate of items of flooring is inclusive of providing sunk flooring in bath-rooms, kitchen, etc. and nothing extra on this account shall be payable.
- 13. Any legal or financial implications resulting out of disposal of earth shall be sole responsibility of the contractor. Nothing extra shall be paid on this account.
- 14. The work should be planned in a systematic manner so that chase cuttings in the walls, ceilings and floors are minimized. Wherever absolutely essential, the chase shall be cut using chase cutting machines. Chases will not be allowed to be cut using hammer / chisel. The electrical boxes should be fixed in walls simultaneously while raising the brick work. The contractor shall ensure proper co-ordination of various disciplines viz. sanitary & water supply, electrical, fire-fighting and any other services.
- 15. All the hidden items such as water supply lines, drainage pipes, conduits, sewers etc. are to be properly tested as per the design conditions before covering.
- 16. Before commencement of the work, the contractor shall correlate nomenclature of the item with all the relevant architectural and structural drawings to satisfy himself that the information available there from is complete and unambiguous. The figures and written dimensions of the drawing shall super seed the measurement by scale. The contractor submits for approval of Engineer-in-Charge his workshop drawings and samples of the work to be performed under the specified items of work before actually commencing the mass execution of the work under the item. Nothing extra shall be payable on thisaccount.
- 17. The discrepancy in the drawing issued, if any, shall be brought to the notice of the Engineer-in-Charge for immediate decision before execution of the work. The contractor, alone shall be responsible for any loss or damage occurring by the commencement of work on the basis of any enormous and incomplete information and no claim, whatsoever, shall be entrained on this account.

#### 18. Maintenance of Register of Tests

- (i) All the registers of tests carried out at construction site or in outside laboratories shall be maintained by the contractor which shall be issued to the contractor by Engineer-in-Charge in the same manner as being issued to CPWD field staff.
- (ii) All samples of materials including cement concrete cubes shall be taken jointly with contractor by JE and out of this at least 50% samples shall be taken in presence of AE in charge. If there is no JE, all samples of materials including cement concrete cubes shall be taken by AE jointly with contractor. All the necessary assistance shall be provided by the contractor. Cost of samples materials is to be borne by the contractor and he shall be responsible for safe custody of samples to be tested at site.
- (iii) All the tests if field lab setup at construction site shall be carried out by the Engineering staff deployed by the contractor which shall be 100% witnessed by JE and 50% of tests shall be witnessed by AE –in-Charge. At least 10% of the tests are to be witnessed by the Executive Engineer.
- (iv) All the entries in the registers will be made by the designated Engineering Staff of the contractor and same should be regularly reviewed by JE/AE/EE.
- (v) Contractor shall be responsible for safe custody of all the test registers.
- 19. Submission of copy of all test registers, Material at site register and hindrance register along with each alternate Running Account Bill and Final Bill shall be mandatory. These registers should be duly checked by AE (P) in division office and receipts of registers should also be acknowledged by Accounts Officer by signing the copies and register to confirm receipt in Division office.

If all the test registers and hindrance register is not submitted along with each alternate R/A Bill & Final Bill, it will be responsibility of EE & AAO that no payment is released to the contractor.

#### 20. Maintenance of Material at Site (MAS) Register-

- (i) All the MAS Registers including cement and Steel Registers shall be maintained by Contractor which shall be issued to the contractor by Engineer-in-Charge in the same manner as being issued to CPWD field staff.
- (ii) Each of the entry of receipt of material at site shall be 100% test checked by JE or byAE if there is no JE.
- (iii) Each MAS register shall be checked by JE at least twice a week and at least once a week by AE. If there is no JE then MAS registers will be checked by AE at least twice aweek.
- (iv) Cement Register shall be reviewed by EE at least once in a month.

#### 21. Recording of Hindrance & Maintenance of Hindrance Register -

- i) Whenever any hindrance whether on part department or on part of contractor, comes to the notice of the Assistant Engineer, he should at once make a note of such hindrance in the register kept at site, and immediately make a report to the Director,INST, Sector- 64, Phase-X, Mohali-160062 within a week.
- ii) The following points should be kept in mind while entering the hindrances in the Hindrance Register:
- a) The entry of date of start of hindrance and date of removal of hindrance should be made on the same day as the hindrance takes place or the cause of the hindrance is removed, respectively.
- b) The Director, INST, Sector-64, Phase-X, Mohali-160062 should work out the over lapping period, net if hindrance and weight age of each hindrance within 15 days of removal of thecause of hindrance. For work outside headquarters, this should be done as and when he visits the site.
- c) The items of work affected due to any hindrance should be clearly mentioned in the Hindrance Register by the Assistant Engineer, and the weight age should be allowed on this basis.
- d) Each hindrance should be entered in the hindrance Register, which should be authenticated by the Director, INST, Sector-64, Phase-X, Mohali-160062 and Contractor.
- e) The hindrance on part of contractor is also to be entered in the Hindrance Register.
- f) The hindrance should be recorded carefully in the Hindrance Register after considering its effect on completion of work.
- g) Review of hindrance register shall be compulsory in division office by EE and AAO at the time of payment of each Running Account Bill and final bill and certificate shall be recorded that all up to date hindrances on part of department and contractor have been recorded in the hindrance register.
- h) The net delay on part of department or contractor shall be worked out after considering all the hindrances recorded in the hindrance register.
- The Consultant (Engg) should reviews the hindrance Register whenever he visit site of work.
- 22. Computerized Measurement Books (CMB's) and Bills to be submitted by the contractor

- (1) In works of estimated cost put to tender of Rs. 15 lakh and above, approving authority, the conventional Measurement Books shall be replaced by a bound volume of computerized measurements to be furnished by the contractor, duly machine numbered for the pages, and with an MB number given by the Division Office. The pages of these Measurement Books shall be of A-4 size. All these Measurement Books belonging to a Division shall be serially numbered, and a record of these Computerized Measurement Books shall be maintained in a separate Register in Form CPWA 92.
- (2) The same format as in existing Measurement Books shall be used for the computerized Measurement Books. The measurements shall be carried forward from the previous recorded measurements as per the existing procedure.

#### 23. Mode of measurements

- (1) The measurements shall be recorded and entered in computerized format in the first instance by the contractor, and a hard copy shall be submitted to the Department. All entries shall be made exactly as per the existing procedure.
- (2) These measurements shall then be 100% checked by the Junior Engineer. If Junior Engineer is not available, the Assistant Engineer shall perform 100% check of the measurements. The contractor shall incorporate all such changes or corrections, as may bedone during these checks, to his draft computerized measurements, and submit to the department the corrected computerized measurements in the form of a book, duly hard bound in red colour on the lines of the conventional Measurement Books now in use, and with its pages machine numbered.
- (3) The Assistant Engineer and the Director, INST, Sector-64, Phase-X, Mohali-160062 shall test check these computerized measurements as per the existing instructions. This book shall be treated as a Computerized Measurement Book.
- (4) The Junior Engineer, Assistant Engineer and the Consultant (Engg), INST, Sector-64, Phase-X, Mohali-160062 shall record the necessary certificates for their checks and test checks as per the existing procedure in this Computerized Measurement Book.
- (5) The Computerized Measurement Book shall be allotted a serial number as per the Registerof Computerized Measurement Books.

#### 24. Cutting or over-writing in the computerized M.B. not allowed

- (1) The Computerized Measurement Book given by the contractor, duly bound, with its pages machine numbered, shall have no cutting or over-writing.
- (2) It is the responsibility of the Junior Engineer or the Assistant Engineer as the case may be to ensure that the checks and test checks done by them in the initial draft measurements are correctly incorporated in the Computerized Measurement Book before they record their certificates.
- (3) In case of any error, the Computerized Measurement Book shall be cancelled, and the

- contractor shall re-submit a fresh Computerized Measurement Book. This should be done before the corresponding computerized bill is submitted to the Division for payment.
- (4) The contractor shall submit as many copies of Computerized Measurement Books as may be required, and as are specified in the NIT/contract, for the purpose of reference and record in the various offices of the department.

## 25. Computerized Bill to be submitted by the contractor:

The contractor shall submit his bills in a computerized form in the same Format as the existing conventional bills, with all the pages machine numbered, and hardbound, and with all the entries made as per the existing procedure.

- (2) The contractor shall submit as many copies of the computerized bills as may be required for the purpose of reference and record in the various offices of the department.
- (3) The bill shall be carried forward from the previous running account bill as per the existing procedure.
- (4) These computerized bills shall be processed by the various offices for payment, as per theexisting procedure.

#### **ADDITIONAL CONDITIONS**

- The contractors are advised to get acquainted with the proposed work and its site, approach roads, working space, restrictions and also study the Soil Report, the Preliminary Architectural / structural Drawings, specifications and special conditions etc (available in the office of SOUTH BUILDING (M-422) PWD (NCT), New Delhi) carefully before tendering. No claim of any sort shall be entertained on account of any site conditions and ignorance of specifications and special conditions.
- 2. The tenderer shall see the approaches to the site. In case any approach from main road is required at site or existing approach is to be improved and maintained for cartage of materials by the contractor, the same shall be provided, improved and maintained by the contractor at his own cost. No payment shall be made on this account.
- 3. The work shall be carried out as per CPWD specifications Vol. I & II 2019 with up to date correction slips unless otherwise specified in the nomenclature of individual item or in the particular specifications and special conditions, where specifications are silent, the decision of Engineer-in-Charge shall be final and binding.
- 4. The rates quoted by the contractor shall be taken as net and nothing extra shall be paid on any account
  - i.e. royalty, cartage, sales tax and stacking of materials at required places etc.
- 5. The rates for different items of work shall apply for all heights and depths, leads and lifts unless otherwise specified in the agreement or specifications applicable to the agreement.
- 6. Any damage done by the contractor to any existing work during the course of execution of the workshall be made good by him at his own cost.
- 7. Articles manufactured by the reputed firms and approved by Engineer-in-Charge shall only be used. Only articles classified, as 'first quality' by the manufacturer shall be used unless otherwise specified. In case articles bearing ISI certification are not available in the market, quality of samples brought by the contractor shall be judged by standards laid down in the relevant CPWD specifications. For the itemsnot covered by CPWD specifications relevant BIS standards shall apply. The sample of materials to be brought to site for use in work shall be got approved from the Engineer-in-Charge before actual execution of work.
- 8. The quantities of each item shall not be exceeded beyond the agreement quantities without prior permission of Engineer-in-Charge.
- 9. Statutory deductions on account of VAT, income tax and surcharge etc. as applicable shall be made from the gross amount of the bill.
- 10. The contractor shall make his own arrangements for obtaining electric connection, if required and make necessary payments directly to the department concerned.
- 11. All types of mortars to be used in the work shall be mixed in the mechanical mixer and hand mixing shall not be permitted.
- 12. No payment shall be made to the contractor for any damage caused by rain, snow fall, floods or any other natural causes whatsoever during the execution of work. The damage caused to work shall Page 58 of 82

- have to be made good by the contractor at his own cost and no claim on this account shall be entertained.
- 13. Some restrictions may be imposed by the security staff etc. on the working and or movement of labour and materials, etc, the contractor shall be bound to follow all such restrictions / instructions and nothing shall be payable on this account.
- 14. The contractor shall take all precautions to avoid accidents by exhibiting necessary caution boards, red lights and all other such measures. He shall be responsible for all damages and accidents caused due to negligence on his part. No hindrance shall be caused to traffic during the execution of the work by storing materials on the road.
- 15. The contractor shall be fully responsible for the safe custody of the material issued or broughtby him to site for doing the work.
- The contractor will not have any claim in case of any delay by the Engineer-in-Charge in removal of trees or shifting, removing of telegraph, telephone or electric lines (overhead or underground), waterand sewer lines and other structure etc., if any which may come in the way of the work. However, suitable extension of time can be granted to cover such delay.
  - 17. The malba /garbage generated at site due to construction activities shall be removed from the site immediately & shall be disposed off by the contractor to the approved dumping site.
- 18. The **Labour Welfare Cess** @ 1% of gross work done shall be deducted.
- 19. The work shall be carried out in accordance with the Architectural drawings and structural drawings, tobe issued from time to time, by the Engineer-in-Charge. Before commencement of any item of work, the contractor shall correlate all the relevant architectural and structural drawings issued for the work and satisfy himself that the information available there from is complete and unambiguous. The discrepancy, if any, shall be brought to notice of Engineer-in- Charge before execution of the work. The contractor alone shall be responsible for any loss or damage occurring by the commencement of work on the basis of any erroneous and or incomplete information.
- 20. The contractor shall give due notices / request letter to Municipality, Police, Labour Department and /orother authorities that may be required under the law/ rules under force in the area and obtain all requisite licenses for temporary obstructions/ enclosures and pay all charges which may be leviable onaccount of his execution of the work under the agreement. Nothing extra shall be payable on this account.
- 21. The contractor shall leave such recesses, holes, openings etc. as may be required for the electric, air-conditioning and other related works. (for which inserts, sleeves, brackets, conduits, base plates, clamps etc. shall be supplied free of cost by the department / other agencies working there unless otherwise specifically mentioned) and the contractor shall fix the same at the time of casting of concrete, stone work & brick work, if required, and nothing extra shall be payable on this account.
- 22. Before start of work, the Contractor keeping in view that the space available is limited shall furnish

a construction yard layout, specifying areas for constructions, positioning of machinery, material yard, cement and other storage, steel fabrication yard, site laboratory, water tank, conveyer belt etc. and seek formal approval of the Engineer-in-Charge. The contractor shall not stack building material/ malbaon the Mohali Municipal Corporation (MMC) land or road or on the land owned by any other authority, as the case may be. In case, the Contractor is found stacking the building material/ malba as stated above, he shall be liable to pay the stacking charges as may be levied by MMC or any other local bodyor authority and also to face penal action as per the rules, regulations and bye-laws of the said body or authority. The Engineer-in-Charge shall be at liberty to recover the sums due but not paid to the concerned authorities on the above counts from any sums due to the contractor including amount of the Security Deposit or Retention Money in respect of this contract or any other contract.

#### 29. SETTING OUT:

- 29.1 The contractor shall establish, maintain and assume responsibility for grades, lines, levels and bench marks. He shall report any errors or inconsistencies regarding grades, lines, levels, dimensions to the Engineer-in-charge before commencing work. Commencement of work shall be regarded as the contractor's acceptance of such grades, lines, levels and dimensions and no claim shall be entertained at a later date for any errors found.
  - If at any time, any error in this respect shall appear during the progress of the work, the contractor shall, at his own expense rectify such error if so required to the satisfaction of the Engineer-in-charge.
- 29.2 The approval by the Engineer-in-charge of the setting out by the contractor shall not relieve the contractor of any of his responsibilities.
- 29.3 The contractor shall be entirely and exclusively responsible for the horizontal, vertical and other alignment, the level and correctness of every part of the work and shall rectify effectively and errors orimperfections therein. Such rectifications shall be carried out by the contractor at his own cost to the instructions and satisfaction of the Engineer-in-charge.
- 29.4 The rates quoted by the Contractor are deemed to be inclusive of site clearance, setting out work, profile, establishment of reference bench mark, spot levels, construction of all safety and protection devices, barriers, earth embankments, preparatory works, all testing of materials, working during monsoon, working at all depths, heights and locations etc.

#### **30.0 EXISTING SERVICES:**

- **30.1** Existing drains, pipes, cables, overhead wires, sewer lines, water lines and similar services encountered in the course of the execution of the work shall be protected against the damage by the contractor at his own expense. The contractor shall not store materials or otherwise occupy any part of the site in a manner likely to hinder the operation of such services.
  - **30.2** The contractor shall be responsible for the watch and ward of the building, safety of all fittings and fixtures including sanitary and water supply fittings and fixtures provided by him against pilferage and

breakage during the period of installation and thereafter till the work is physically handed over to the department.

#### 31.0 STORAGE AND ISSUE OF MATERIALS:

- 31.1 Materials required for the work whether procured by the contractor or supplied by the department shall be stored by the contractor only at places, in standard profiles and in the manner as approved by the Engineer-in-charges. Storage and safe custody of all materials shall be the sole responsibility of the contractor.
- 31.2 Special care shall be taken by the contractor at his expense to store H.T. steel wires/strands/bars under suitable sheds as approved by the Engineer-in-charge. The Engineer-in-charge or his authorized representatives shall always have an easy access to the store for inspection the H.T. steel and satisfy themselves regarding the condition thereof. Any modifications in storage arrangement suggested by them shall be strictly followed by the contractor. Suitable and effective protection of the H.T. steel against corrosion shall be fully ensured. The H.T. steel shall also be invariably wrapped in gunny clothes, tar papers or with other suitable materials as approved by the Engineer-in-charge at the cost of contractor.
- 31.3 Stock piling of the H.T. steel on the work site will not be allowed any time and specially before and during the monsoon. During monsoon days the H.T. steel shall necessarily be kept in air tight stores. Nothing extra shall be paid to the contractor on these accounts.
- 31.4 Steel reinforcement shall be stored in such a way as to avoid distortions and to prevent deterioration by corrosion.
- 31.5 The contractor shall construct suitable godown as per specifications of work for storing the materials safe against damage due to sun, rain dampness, fire, theft etc. He shall also employ necessary watch and ward establishment for the purpose.
- 31.6 The days to day receipt and issue accounts of different grade/brand of cement shall be maintained separately in the Standard Performa by the Junior Engineer in charge of work and which shall be duly signed by the contractor or his authorized representative.

#### 32.0 PREVENTION OF NUISANCE:

32.1 The contractor shall take all necessary precautions to prevent any nuisance or inconvenience to the owners, tenants or occupiers of adjacent properties and to the public in general and to prevent any damage to such building and any pollution of smoke, streams and water-ways. He shall make good at his cost and to the satisfaction of the Engineer-in-Charge, any damage to roads, paths, cross drainage works or public or private property whatsoever caused by the execution of the work or by traffic brought thereon by the contractor. All waste or superfluous materials shall be carried away by the contractor without any reservation entirely to the satisfaction of the Engineer-in-Charge.

#### 33.0 SECURITY & TRAFFIC ARRANGEMENTS:

- 33.1 Wherever the construction is taken up, the contractor shall provide at his own cost an all-weather motor able track/parking place if considered necessary by the Engineer-in-charge entirely to his satisfaction to facilitate the movement and parking of inspection vehicles.
- 33.2 No inflammable materials including P.O.L. shall generally be allowed to be stored at site. However, reasonable quantity may be permitted for storage subject to the compliance of all rules / instructions issued by the competent authorities and as per the direction of Engineer-in-Charge.
- 33.3 In the event of any restrictions (including temporary suspension of work) being imposed by the Security agency, PWD, Traffic or any other authority having jurisdiction in the area on the working or movement of labour /material, the contractor shall strictly follow such restrictions and nothing extra shall be payableto the contractor on this account. The loss of time on this account, if any, shall have to be made up by generating additional resources etc. General Security restrictions are given as under:
  - (i) The movement of trucks and vehicles shall be regulated in accordance with rules and regulations as approved by competent authority.
  - (ii) The contractor shall inform, in advance, the truck registration numbers, ownerships of the trucks, names and addresses of the drivers for necessary action by the Security agency.
  - (iii) Due to the site restrictions, there is no possibility for labour huts to be erected at site. However, a few huts may be allowed as per the discretion of the Engineer-in-charge.
  - (iv) Names and addresses of labourers/ staff etc. working at site shall be furnished for security verification.
  - (v) The labourers / staff should not be changed too frequently once the verification of the character and antecedents is done.
  - (vi) After verification of antecedents of workers, identification badges will be issued to them by the contractor under the seal of the Engineer-in-Charge or his representative. The cost of badges would be borne by the contractor.
  - (vii) As and when there will be security requirements, certain additional restriction (s) can be imposed as per the requirement of the situation.
  - (viii) No claim whatsoever will be entertained by the department on account of any restriction (including temporary suspension of work) imposed by the security agencies in execution ofwork.
- 33.4 The contractor shall place a private security agency on the site of work to regulate movement ofmaterials, personnel, vehicles and machinery. Nothing extra shall be paid on this account.

#### 34 MODE OF MEASUREMENTS (AS PER CPWD WORKS MANUAL 2012, CLAUSE No.7.12.2)

(i) The measurements shall be recorded and entered in computerized format in the first instance by the contractor, and a hard copy shall be submitted to the Department. All entries shall be made exactly asper the existing procedure.

- (ii) These measurements shall then be 100% checked by the Junior Engineer. If Junior Engineer is not available, the Assistant Engineer shall perform 100% check of the measurements. The contractor shall incorporate all such changes or corrections, as may be done during these checks, to his draft computerized measurements, and submit to the department the corrected computerized measurement in the form of a Book, duly hard bound in red colour on the lines of the conventional Measurement Books now in use, and with its pages machine numbered.
- (iii) The Assistant Engineer and the Consultant (Engg), INST, Sector-64, Phase-X, Mohali-160062 shall test check these computerized measurement as per the existing instructions. This book shall be treated as a Computerized Measurement Book.
- (iv) The Junior Engineer, Assistant Engineer and the Consultant (Engg), INST, Sector-64, Phase-X, Mohali-160062 shall record the necessary certificates for their checks and test checks as per the existing procedure in this Computerized Measurement Book.
- (v) The Computerized Measurement Book shall be allotted a serial number as per the Register of Computerized Measurement Books.
- (VI) The contractor shall submit two spare copies of such computerized MB's along with soft copy for the purpose of reference and record by the various officers of the department.
- 35. (i) Firstly contractor shall get ready one qtr. as a sample qtr. completed in all respect for approval of Engineer-in-charge. After approval of sample qtr. the agency should start other qtrs. for repairs.
  - (ii) At the onetime only one block will be allocated for repair only and after successful completion the next block can be taken up for repair.
  - (ii) Water Proofing/Specialized items should be executed only through specialized agency after approval of Engineer-in-Charge.
  - (iii) Prior approval of Engineer-in-Charge may be taken before cement plaster on all of the wall.
  - (iv) 600x600mm antiskid tile shall be used in place of ceramic tiles as approval of the Engineer-in-Charge.

#### SPECIAL CONDITIONS FOR PROCUREMENT OF CEMENT

- 1. The contractor shall procure cement 43 grade (conforming to IS: 8112) Ordinary Portland Cement as required in work from reputed manufacturers of cement having a production capacity not less than one million tons per annum, such as ACC, GRASIM, Gujarat Ambuja, Birla(Vikram) Ultratech. or from any other reputed cement manufacturer having a production capacity not less than one million tons per annum as approved by ADG for that sub region. The tenderers may also submit a list of names of cement manufacturers which they propose to use in the work. The tender accepting authority reserves rights to accept or reject name (s) of cement manufacturer(s) which the tenderer proposes to use in the work. No change in the tendered rates will be accepted if the tender accepting authority does not accept the list of cement manufacturers, given by the tenderer fully or partially. The supply of cement shall be taken in 50 kg. Bags bearing manufacturer's name and ISI marking. Samples of cement arrange by the contractors shall be taken by the Engineer-in-Charge and got tested in accordance with provisions of relevant BIS codes. In case of test results indicate that the cement arrange by the contractor does3 not conform to the relevant BIS Codes, the same shall stand rejected, and it 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.
- 2. The cement shall be brought at site in bulk supply of approximately 25 tones or as decided by the Engineer-in-charge. The cement godown of the capacity to store a minimum of 500 bags of cement shall be constructed by the contractor at site of work for which no extra payment shall be made.
- 3. Double lock provision shall be made to the door of cement godown. The keys of one lock shall remain with CPWD Engineer-in-charge or his authorized representative and the keys of the other lock shall remain with the contractor. The contractors shall be responsible for the watch and ward and safety of the cement godown. The contractor shall facilitate the inspection of the cement godown by the Engineer-in-Charge at any time.
- 4. The cement shall be got tested by the Engineer-in-Charge and shall be used on the workonly after satisfactory test results have been received. The contractor shall supply free of charge the cement required for testing including its transportation cost to testing laborites. The cost of tests shall be borne by the contractor / department in the manner indicated below:
  - (a) By the contractor, if the result shows that the cement does not conform to relevant BIS code.
  - (b) By the department, if the result shows that the cement conforms to relevant BIS codes.
- 5. The actual issue and consumption of cement on work shall be regulated and proper accounts maintained as provided in clause 10 of the contract. The theoretical consumption of cement shall be worked out as per procedure prescribed in clause 42 of the contract and shall be governed by conditions laid therein. In case of cement consumption is less than theoretical consumption including permissible variation, the work will not be accepted.
- 6. Cement brought to site and cement remaining unused after completion of work shall not be

removed form site without written permission of Engineer-in-Charge.

The damaged cement shall be removed from the site immediately by the contactor on receipt of a notice in writing form the Engineer-in-Charge. If he does not do so within three days of receipt of such notice, the Engineer-in-Charge shall get it removed at the cost of the contractor.

# PROFORMA FOR THE CEMENT REGISTER

PARTICULARS OF RECEIPT PARTICULARS OF ISSUE		REMARK											
Date of receipt	Quan tity Rece ived	Prog ressi ve Total	Date of issue d	quan tity issu ed	Item of work for which issued	Quantity returned at the end of the day	Total issued	Daily Balan ce in hand	Contra ctors initials	J.E's initial s	Asstt . Engg . Initial	A.E ., E.E initi als	Perio dical Chec k
1	2	3	4	5	6	7	8	9	10	11	12	13	14

#### SPECIAL CONDITION FOR PROCUREMENT OF STEEL

1. The contractor shall procure TMT bars of **Fe500-D grade** from primary producers such as SAIL, Tata Steel Ltd., RINL, Jindal Steel & Power Ltd and JSW Steel Ltd or any other producer as approved by CPWD who are using iron ore as the basic raw material / input and having crude steel capacity of 2.0 million tones per annum and above.

In case of non-availability of steel from primary producers the NIT approving authority may permit use of TMT reinforcement bars procured from steel producers having integrated steel plants (ISPs) using iron ore as the basic raw material for production of crude steel which is

further rolled into finished shapes in house having crude steel capacity of 0.5 million ton per annum and more. In case of non-availability of steel form primary producers as well asISPs then the NIT approving authority may also permit use of TMT reinforcement bars procured from secondary producers. In such case following conditions are stipulated

- a. The grade of the steel Fe500-D grade to be procured is to be specified as per BIS 1786-2008.
- b. The secondary producers must have valid BIS license to produce HSD bars conforming to IS 1786: 2008. In addition to BIS licence, the secondary producer must have valid license from either of the firms Tempcore, Thermex Evcon Turbo & Turbo Quench to produce TMT Bars.
- c. The TMT bars procured form primary producers and ISPs shall conform to manufacture's specifications.
- d. The TMT bars procured form secondary producers shall conform to the specifications as laid by Tempcore, Thermex, Evcon Turbo & Turbo Quench as the case may be.
- e. TMT bars procured either from primary producers, ISPs or secondary producers, the specifications shall meet the provisions of IS 1786: 2008 pertaining to Fe500-D grade of steel as specified in the tender.
- 2. The contractor shall have to obtain and furnish test certificates from the manufacturer to the Engineer-in-charge in respect of all supplies of steel brought by him to the site ofwork.
- 3. Sample shall also be taken and got tested by the Engineer-in-Charge as per the provisions in this regard in relevant BIS codes. In case the test results indicate that the steel arranged by the contractor does not conform to the specifications as defined under para (1) (d) & (1) (e) above, the same shall stand rejected, and it shall be removed from the site of work by the contractor at his cost within a week time or written orders from the Engineer-in-Charge to do so.
- **4.** The steel reinforcement bars shall be brought to the site in bulk supply of 10.0 tons or Page **66** of **74**

- more, or as decided by the Engineer-in-Charge.
- 5. The steel reinforcement bars shall be stored by the contractor at site of work in such a way as to prevent their 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.
- **6.** 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, and at frequency notless than that specified below.

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

- **7.** The contractor shall supply free of charge the steel required for testing including its transportation to testing laboratories. The cost of test shall be borne by the contractor/department in the manner indicated below.
- (a) By the contractor, if the result shows that the steel does not conform relevant BIS code.
- (b) By the department, if the result shows that the steel conforms to relevant BIS codes.
- 8. The actual issue and consumption of steel on work shall be regulated and proper accounts maintained as provided in clause 10 of the contract. The theoretical consumption of steel shall be worked out as per procedure prescribed in clause 42 of the contract and shall be governed by conditions laid therein. In case the consumption is less than theoretical consumption including permissible variations, the work will not be accepted.
- **9.** The steel brought to site and steel remaining unused shall not be removed form site without the written permission of the Engineer-in-Charge.

# **PARTICULAR SPECIFICATIONS**

# 1.1 Construction Joints:

The construction joints shall be provided only at locations shown in the structural drawings or as approved by Engineer-in-Charge. Reinforcement shall continue through construction joints.

The foreign matter and laitance shall be cleaned properly by compressed air before start of further work.

All construction joints in RCC raft, shall be injection grouted with cement slurry. Nothing extra shall be paid on this account.

# **LIST OF APPROVED MAKES FOR CIVIL WORKS**

1.	ORDINARY PORT LAND CEMENT	:-	ACC, GRASIM, GUJRAT AMBUJA, BIRLA(VIKRAM) ULTRA-TECH.
2.	REINFORCEMENT BARS	i.	TATA STEEL, SAIL, RINL, JINDAL STEEL & POWER LTD AND JSW STEEL LTD OR ANY OTHER PRODUCER AS APPROVED BY CPWD
3.	SYNTHETIC ENAMEL PAINTS	ă.	BURGER (LUXOL GOLD), ASIAN(APCOLITE), ICI DULUX (GLOSS), NEROLAC (FULL GLOSS HARD DRYING)
4.	CEMENT PAINT, ACRYLIC DISTEMPER, PRIMER		ICI INDIA LTD., BERGER PAINT LTD., GOOD LOSS NEROLAC PAINT, ASIAN PAINT LTD.,
5.	ADMIXTURE FOR CONCRETE		CICO, SIKA, PIDILITE, ASIAN,
6.	CHEQURERED TILES, TERRAZO TILES (PRECAST)	:-	NITCO, GEM, MODERN, HINDUSTAN
7.	WATER PROOFING COMPOUND	•••	CICO, BY STRUCTURAL WATER PROOFING CO. FOSROC BY FOSROC LTD., IMPERMO BY SNOCEM INDIA, CHESEAL PIDILITE, DR. FIXIT.
8.	PAVING TILES/PAVER BLOCK, CC KERB STONE	:	NITCO PREFAB, ULTRA KK MANHOLE, TERRAFIRMA, UNISTONE,DALAL TILES
9.	WHITE CEMENT	:	BIRLA WHITE, J.K. WHITE
10.	SANITARY WARES	:	PARRYWARE, HINDWARE, CERA, NEYCER, JOHNSON, PRAYAG
11.	GI PIPES/ M.S. PIPES	:	TATA, GST, JINDAL HISSAR
12.	GI FITTINGS	:	UNIK, , KS, RM
13.	STONEWARE PIPES & GULLY TRAP	:	PERFECT, BURN, PARRY WARE
14.	C.I. MANHOLES	:	B.C., R.I.F., NECO
15.	RCC PIPES	:	ISI MARK AS PER CPWD SPECIFICATION.
16.	WATER TANK	:	SINTEX, SHEETAL.
17.	STRUCTURA L STEEL INCLUDING DOOR, WINDOWS, GRILL OR OTHER PURPOSE.	:	SAIL, TATA, RINL, ISCO.
18.	MILD STEEL TUBES	:-	TATA, SAIL, ISCO.
19.	WELDING ELECTRODES	:-	ESAB, ADVANI-ORLIKON, WELD ALLOY
20.	VITRIFIED TILES ,CERAMIC GLAZED WALL TILES	:-	KAJARIA , ORIENT, SOMANY TILES.
21.	GLASS MOSAIC TILES	:-	SPARKLES GLASS, KHETAN TILES, MRIDUL
22.	EXTERIORPAINT	i.	APEX NEROLAC, LEWIS BURGER, ASIAN PAINTS.
23.	STAINLESS STEEL	:-	PRISM ENGINEERS, JINDAL, SAIL.
24.	ALUMINIUM	:-	JINDAL, HINDALCO
25.	PTMT FITTINGS	:-	PRAYAG, POLY TUFF.
26.	U PVC/C PVC PIPE FITTINGS	:-	PRAYAG, FINOLEX, SUPREME

<sup>\*</sup>If any other make is to be used, the same shall be got approved from the NIT approving authority.

#### **GENERAL CONDITIONS FOR PAINTING WORKS**

#### 1. The Theoretical co-efficient for material are as under :-

- (i) Oil bound distemper & Dry Distemper
  - a) One or more coats on old work 1.00 Kg/10 Sqm.
  - b) Two or more coats on old work 1.25 Kg/10 Sqm.
  - c) Two or more coats on new work 1.50 Kg/10 Sqm.

# (ii) Plastic emulsion paint.

- a) One or more coats on old work 0.73 litre /10 Sqm.
- b) Two or more coats on old work 0.97 litre /10 Sqm.
- c) Two or more coats on new work 1.21 litre/10 Sqm.

# (iii) Waterproofing cement paint :-

- a) One or more coats on old work 2.20 Kg/10 Sqm.
- b) Two or more coats on old work 3.84 Kg/10 Sqm.
- c) Three or more coats on new work 5.47 Kg/10 Sqm.

## (iv) Synthetic enamel paint :-

- a) One or more coats on old work 0.70 litre /10 Sqm.
- b) Two or more coats on old work 0.93 litre /10 Sqm.
- c) Two or more coats on new work 1.16 litre/10 Sqm

# (v) Cement primer - 0.70 litres/10 Sqm.

# (vi) **Thermo plastic paints** – Glass beads – 2.5 kg./10sqm. Paints - 52.5kg./10sqm.

- 2. Before starting the work a sample of required shade will have to be prepared as per direction of Engineer-in-charge and got approved.
- **3.** Wherever two or more coats on old work (by scrapping) mentioned it will be done by scrapping first and then putty shall be applied on the surface (payment of scrapping and putty shall be separately)
- **4.** Before starting the work , all existing furniture, fittings, carpet etc. shall be protected from damages, dust and dirt in all the circumstances. If any damages occurred, it will be made goodby the contractor free of cost, if contractor fails to do so, department will got it rectified and the cost will be recovered from the contractor.
- **5.** No T & P will be issued by the department.

#### 6. Oil bound washable distemper to be supplied in the following brands at site of work:-

- (a) Jensolin Acrylic washable distemper of Jenson and Nicholson, OR
- (b) Bison Acrylic washable distemper of Barger paints, OR
- (c) Nerolac washable oil bound distemper super white and other standard colours of Goodlass Nerolac Paints Ltd.
- 7. Cement primer water base to be supplied in the following brands at site of work :- Page 70 of 82

- (a) J & N cement primer of Jenson and Nicholson OR
- (b) B.P. cement primer ( Alkali Resistant) water thin able of Berger paints OR
- (c) Primolite cement primer of Goodlass Nerolac paints Ltd. at site of work.
- 8. Waterproofing cement paint to be supplied in the following brands at site of work:-
  - (a) Super snowcem of Klick Nixon of India shall be brought at site in required shadeOR
  - (b) Durocem of M/s Berger Paint Ltd. OR
  - (c) Gattucem of M/s Asian Paint.
- 9. Plastic emulsion paint to be supplied in the following brands at site of work:-
  - (a) ICI dulex shall be brought at site of work in required shade.
- 10. Synthetic enamel paint to be supplied in the following brands at site of work:
  - (a) Brolac Polyurethane enamel sparkling white or Jenson & Nicholson

OR

(b) Luxol Hi-gloss synthetic enamel snow white of Berger paints OR

- (c) Nerolac full gloss hard drying synthetic enamel ultra-white of GoodlassNerolac paints Ltd. at site of work.
- **11.** The material shall be purchased from the approved manufacture or their authorized dealer and cash memos/challans of these shall be produced along with the supply.
- **12.** 100% quantity of material shall be deposited before execution for one operation.
- 13. The oil bound washable distemper, cement primer, waterproofing cement paint, synthetic enamel paint, plastic emulsion paint shall be brought at site before starting the work and kept either with JE concerned or under double lock arrangement and then only the contractor willbe allowed to start the work. The keys of one lock shall remain with PWD Junior Engineer-in- charge and that of the other lock will be with authorized agents of the contractor at the site of work. Daily requirement shall be drawn with the knowledge of both the parties.
- **14.** Other sundries such as brushes, colour pigments, strainer tubes, putty, old dhoti, turpentine oil sand papers etc. and scaffolding will be arranged by the contractor himself. Nothing extra shall be paid on any account.
- **15.** Contractor should see the site and conditions and quote rates accordingly.
- **16.** No claim shall be entertained on account of escalation charges, if any, for the period of contract.
- **17.** The work may have to be executed in odd hours in early in the morning and later at night also. Nothing extra shall be paid on this account.
- 18. Sample of random can be collected and sent to the following laboratory for test: Sri Ram Test House, Delhi OR National Test House, Ghaziabad / Aligarh/Calcutta OR Any other laboratory so desired by Engineer-in-charge. All incidental charges in this account with test including transporting to testing fees shall also be borne by the contractor.
- 19. Execution of work shall have to be done as per program fixed by the Engineer-in-charge.
- 20. Contractor have to prepare the surface as described below and got approved from JE/AE

concerned in writing before giving the coat of dry distemper/OBD/Plastic Emulsion etc.

#### PREPARATION OF SURFACE:-

#### a) FOR WHITE WASHING:

- 1. Before new work is white washed, the surface shall be thoroughly brushed free from mortar droppings and foreign materials.
- 2. In case of old work, all loose particles and scales shall be scrapped off and holes in plaster as well as patches of less than 50 cm area shall be filled up with mortar of the same mix.

3.

#### b) FOR DRY DISTEMPER:

- 1. Before new work in distemper, the surface shall be thoroughly brushed freefrom mortar droppings and foreign materials and sand papered smooth.
- 2. In case of old work, all loose pieces and scales shall be removed by sand papering. The surface shall be cleaned of all grease dirt etc. Pitting in plaster shall be madegood with plaster of paris mixed with colour to be used. The surface shall than be rubbed down again with a fine grade sand paper and made smooth. A coat of the distemper shall be applied over the patches.

#### c) FOR OIL BOUND DISTEMPER:

- 1. For new work, the surface shall be thoroughly cleaned of dust, old white or colour wash by washing and scrubbing. It shall than be sand papered to give a smooth and even surface. Any unevenness shall be made good by applying putty, made of plaster of paris mixed with water on the entire surface including filling up the undulations and then sand papering the same after it is dry.
- 2. In case of old work, all loose pieces and scales shall be removed by sand papering. The surface shall be cleaned of all grease, dirt etc. Pitting in plaster shall be made good with plaster of Paris mixed with colour to be used. The surface shall than be rubbed down again with a fine grade sand paper and made smooth. A coat of the distemper shall be applied over the patches.

#### d) PAINTING WITH SYNTHETIC ENAMEL PAINT:

Where the existing paint is firm and sound it shall be cleaned of grease, smoke etc. and rubbed with sand paper to remove all loose particles dusted off. All patches and cracks shall then be treated with stopping and filler prepared with the specified paint. The surface shall again be rubbed and made smooth and uniform.

#### e) PLASTIC EMULSION PAINT:

The surface shall be thoroughly cleaned and dusted off. All rust, dirt, scales, smoke splashes, mortar dropping and grease shall be thoroughly removed before painting is started. The prepared surface shall have received the approval of the Engineer-in- charge after inspection, before painting in commenced.

21. The empty containers of all the materials shall be removed from the site only aftergetting approval of Engineer-in-charge.

#### ADDITIONAL CONDITIONS FOR DISMANTLING AND DEMOLITION

- 1. All materials obtained from dismantling or demolition shall be the property of the Govt. unless otherwise specified and shall be kept in safe custody until they are handed over to the Engineer-in-Charge.
- 2. The demolition shall always be well planned before hand and shall generally be done in reverse order of the one in which the structure was constructed. The operations shall be got approved from the Engineer-in-Charge before starting the work.
- 3. Necessary propping, shoring and or under pinning shall be provided to ensure the safetyof the adjoining work or property before dismantling and demolishing is taken up and the work shall be carried out in such a way that no damage is caused to the adjoining work or property. Wherever specified, temporary enclosures or partitions shall also be provided, as directed by the Engineer-in-Charge.
- 4. Necessary precautions shall be taken to keep down the dust nuisance to the minimum.
- 5. Dismantling shall be done in a systematic manner. All materials which are likely to be damaged by dropping from a height or by demolishing roofs, masonry etc. shall be carefully removed first. The dismantled articles shall be removed manually or otherwise, lowered to the ground (and not thrown) and then property stacked as directed by the Engineer-in-charge.
- 6. Where existing fixing is done by nails, screws, bolts, rivets, etc., dismantling shall be doneby taking out the fixing with proper tools and not by tearing or ripping off.
- 7. Any serviceable materials, obtained during dismantling or demolition, shall be separated out and stacked properly as directed by the Engineer-in-Charge within a lead of 50 meters. All unserviceable materials rubbish etc. shall be disposed off as directed by the Engineer-in-Charge.
- 8. The contractor shall maintain/Disconnect existing services, whether temporary or permanent, where required by the Engineer-in-Charge.
- 9. Dismantling and demolition shall be measured as per nomenclature of the agreement.
- 10. The decision of Engineer-in-Charge at site in respect of methods demolition to be followed by the agency shall be final & binding upon the contractor.
- 11. The Engineer-in-Charge shall have liberty to direct the contractor in regards to demolition of any part of the building at any time during his inspection of site.
- 12. The demolition & dismantling shall be carried out first by the contractor at the site. In this regards the order of Engineer-in-Charge shall be final and binding.

# FORM OF PERFORMANCE SECURITY/BANK GUARANTEE BOND

	In consideration of the Presi	•			,	
	offeredis accept agreed und		nditions of prepared	d agreemer	nt	
	Nodated			(horoi	nafter call	od
	"the said contractor(s)"} for t				naner can	eu
	agreed to production of ar (Rupees_	irrevocable Bank		3		_
4	contractor(s) for compliance in the said agreement,	of his obligations in	n accordance with t	the terms a	nd conditi	ons
1.	We(hereinafter referred to as "amount not exceeding Rs demand by the Government	the Bank") hereby /- (Rup	u undertake to pa	y to the Go	vernment	
2.	We	ank) pay the amoury on a demand from the recoveries due e on the Bank shall under this Guaranteicted to	nts due and payable the Government or likely to be due to be conclusive as rantee. However, an amount	le under this stating that from the safegards the our liability	s Guarant the amou id contrac amount d under t	tee unt ctor lue
3. \	We, the said bank further und notwithstanding any disput proceedingpending before a present being absolute and shall be a valid discharge of shall have no claim against the said bank further under t	e or disputes raise any court or Tribuna unequivocal. The p f our liability for pay	ed by the contract of relating thereto, of ayment so made by orment there under	tor(s) in ar our liability o by us under	ny suit or under this this bond	S
4. \	We ofthe Bank)	further agree	e that the guarante	e (indicate t	he name	

	herein contained shall remain in full force and effect during the period that would be taken
	for the performance of the said agreement and that it shall continue to be enforceable till
	all the dues of the Government under or by virtue of the said agreement have been fully
	paid and its claims satisfied or discharged or till Engineer-in-Charge, on behalf of the
	Government, certifies that the terms and conditions of the said agreement have been fully
	and properly carried out by the said contractor(s) accordingly discharges this guarantee.
5.	Wefurther agree with the Government that
	(indicate the name of the Bank) the Government shall have the fullest liberty without our
	consent and without affecting in any manner our obligations hereunder to vary any of the
	terms and conditions of the said agreement or to extend time of performance by the said
	contractor(s) from time to time or to postpone for any time or from time to time any of the
	powers exercisable by the Government 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 of omission on the part of the Government
	orany indulgence by the Government 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 effectof so relieving us.
6.	This guarantee will not be discharged due to the change in the constitution of the Bank
	orthe contractor(s).
7.	Welastly undertake not
	to(Indicate the name of bank)
	revoke this guarantee except with the previous consent of the Government in writing.
8.	This guarantee shall be valid uptounless extended on
	demand by Government. Notwithstanding anything mentioned above, our liability against
	this Guaranteeis restricted to Rs/-(Rupeesonly) and
	unless a claim in writing is lodged with us within six months of the date of expiry or the
	extended dateof expiry of this guarantee, all our liabilities under this guarantee shall stand
	discharged.
	Dated theday
	offor

(Indicate the name of the Bank)

# **AFFIDAVIT**

l/	we	have	Submitted	а	bank	guarantee	for	the	work
work)		No	datad						
Agree									
Addres to the D	sed birector,INST,	Sector-64, Phas		c with full					
160062							1	Name of d	ivision)
mone	y for exp	oansion joi		bearing	g/ bitumen	eposit / performal mastic wok in c	•	_	
at my	our ow	-	the validity of the upto a period	_		ntact by getting it	extended	d from time	e to time
Month Charg		he recorde	d date of comple	tion of t	he work or	as directed by th	e Engine	er-in-	
I/we a	also inde	mnify the g	overnment again	ıst any lo	osses arisi	ng out of	no	on	
encas	shment o	f the bank	guarantee if any						
								D	eponent
							Signa contr	ature of actor	

The affidavit is to be given by the executants before a first class Magistrate.

#### **Special Condition for Malba Disposal**

- 1 Contractor shall have to make himself fully acquaint with the procedure of dumping malbaat authorized MCD dumping ground well in advance. No hindrance shall be entertain on this account.
- The malba shall be disposed/removed from the site within 72 hours from the time of intimation from the Engineer-in-Charge.
- 3 For the purpose of removal of malba contractor shall have to make his own arrangement of adequate no. of vehicles required at the local body authorized dumping ground including necessary registration of vehicles for this purpose. Nothing extra shall be paid on this account.
- 4 The contractor shall intimate contact number/ mobile number of himself as well as of the supervisory staff who have to carry out this job of disposal of malba.

# **OUTSIDE/INDEPENDENT TESTING FACILITIES (Modified as per DG/MAN/308)**

Extensive testing of the materials used for construction is a pre-requisite for attaining high quality of the work. This shall also require specialized tests, physical, chemical, ultrasonic x-ray and various other types of tests which cannot possibility be carried out in a site laboratory. These tests also require specialized personnel who regularly deal in such testing. Therefore the need arises for carrying out the tests in outside laboratories. These laboratories may be in the Government sector, Semi Government or Private sector. All Govt. Institutes of Technology, National Institutes of Technology, Centre and state research approved. No approval is required for testing in these laboratories/institutes. However, the outside private laboratories shall be approved in the following manner:-

- 1. The ADG will approve the private lab on the recommendation of Chief Engineer if no approve is available within 200 km of the work site. A particular private lab will be approved for specified tests and work/project. Approving authority will specify the tests while approving the laboratory.
- 2. A lab will have to submit details of space available, equipment staff (Technical and Non-Technical) accreditation and approval from various department/institutes. Lab must NABL approved.
- 3. Initial approval of lab should be for one year and can be revalidated for further one year and so on.
- 4. Every lab will be audited for maintenance and calibration of equipment and employment of staff prior to approval/revalidation.

# Schedule of Quantity for Construction of d Wall and Chain Link Fencing and along IISER Boundary Providing and Fixing of Concertina Coil over existing external wall of INST Campus at Sector-81, Mohali

S.No.	Description of Item	Unit	Quantity	Rate (₹)	Amount (₹)	Amount in Words
1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :					
	1:5:10 (1 cement : 5 coarse sand (zone-III): 10 graded stone aggregate 40 mm nominal size)	Cum	58.10	5520.30	320729.00	Three Lakh Twenty Thousand Seven Hundred Twenty Nine Only
2	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc., up to floor five level, excluding the cost of centering, shuttering and finishing:					
	1:3:6 (1 cement : 3 coarse sand (zone-III) : 6 graded stone aggregate 20 mm nominal size)	Cum	8.40	8025.00	67411.00	Sixty Seven Thousand Four Hundred Eleven Only
3	Centering and shuttering including strutting, propping etc. and removal of form work for :					
	Columns, piers, abutments, pillars, posts and struts	Sqm	73.10	733.70	53633.00	Fifty Three Thousand Six Hundred Thirty Three Only
4	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:					
	Cement mortar 1:6 (1 cement : 6 coarse sand)	Cum	235.50	6157.45	1450079.00	Fourteen Lakh Fifty Thousand Seventy Nine Only

	T		T	T		T
5	Brick work with common burnt clay machine moulded perforated bricks of class designation 12.5 conforming to IS: 2222 in superstructure above plinth level up to floor five level in cement mortar 1:6 (1 cement : 6 coarse sand) :					
	With F.P.S.(non modular) bricks	Cum	39.70	7722.65	306589.00	Three Lakh Six Thousand Five Hundred Eighty Nine Only
6	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete	Kg	3100.20	101.75	315445.00	Three Lakh Fifteen Thousand Four Hundred Forty Five Only
7	12 mm cement plaster of mix :					
	1:4 (1 cement: 4 fine sand)	Sqm	862.50	266.85	230158.00	Two Lakh Thirty Thousand One Hundred Fifty Eight Only
8	Painting with silicon & acrylic emulsion based water thinnable sealer of approved brand and manufacture on wet or patchy portion of plastered surfaces:					
	Two coats	Sqm	34.60	129.05	4465.00	Four Thousand Four Sixty Five Only
9	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :					
	Two or more coats on new work	Sqm	69.00	121.55	8387.00	Eight Thousand Three Hundred Eighty Seven Only
10	Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sq.meters and under, including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete, including disposal of rubbish to the dumping ground, all complete as per direction of Engineer in-Charge.					

	With cement mortar 1:4 (1 cement : 4 fine sand)	Sqm	34.50	417.8	14414.00	Fourteen Thousand Four Hundred Fourteen Only
11	Making the opening in brick masonry including dismantling in floor or walls by cutting masonry and making good the damages to walls, flooring and jambs complete, to match existing surface i/c disposal of mulba/ rubbish to the nearest municipal dumping ground, all complete as per direction of Engineer-in-Charge.					
	For door/ window/ clerestory window	Cum	3.65	932.45	3403.00	Three Thousand Four Hundred Three Only
12	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.					
	Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	Cum	6.75	1737.45	11728.00	Eleven Thousand Seven Hundred Twenty Eight Only
13	Providing and fixing concertina coil fencing with punched tape concertina coil 600 mm dia 10 metre openable length ( total length 90 m), having 50 nos rounds per 6 metre length, upto 3 m height of wall with existing angle iron 'Y' shaped placed 2.4m or 3.00 m apart and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and G.I. clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle iron, all complete as per direction of Engineer in-charge, with reinforced barbed tape(R.B.T.) / Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq.mm with tape (0.52 mm thick) and weight 43.478 gm/ metre (cost of M.S. angle, C.C. blocks shall be paid separately)	Meter	870.00	390.80	339996.00	Three Lakh Thirty Nine Thousand Ninety Six Only

14	Providing and fixing G.I. chain link fabric fencing of required width in mesh size 50x50 mm including strengthening with 2 mm dia wire or nuts, bolts and washers as required complete as per the direction of Engineer-in-charge.					
	Made of G.I. wire of dia. 4 mm, PVC coated to achieve outer dia not less than 5 mm in required colour and shade	Sqm	1350.00	825.30	1114155.00	Eleven Lakh Fourteen Thousand One Hundred Fifty Five Only
	Total in l	4240592.00	Forty Two Lakh Forty Thousand Five Hundred Ninety Two Only			
	Quoted Rates in Figures ( Percentage)  Less (-) / Above (+)					
	Quoted Rates in Words ( Percentage)				•	

Signature and Seal of the Contractor