## BABA FARID UNIVERSITY OF HEALTH SCIENCES

Sadiq Road, Faridkot-151203 (Pb.) INDIA Phone: 01639-256232,256236, Fax: 01639-256234 Website: www.bfuhs.ac.in

Streo (B&R) No. 28 Name of Contractor :	
Name of Work: Purchase of 250 KVA Generator Set for main	Operation Theaters of
	Operation Theaters of
GGS Medical Hospital, Faridkot.	
	nated cost : _ <u>Rs_</u> <b>28,24,734.00</b>
( Form F-1 )	
PERCENTAGE RATE E-TENDER AND CONTRACT FO	R WORKS
This agreement made this day of between hereinafter called the "convice Chancellor of Baba Farid University of Health Sciences, Faridkot thro  Jniversity of Health Sciences, Faridkot) of the other part: Whereas the conthe work Purchase of 250 KVA Generator Set for main Operation  Hospital, Faridkot. Approx. Cost Rs. 28,24,734.00 Earnest Money	tractor has offered to execute <b>Theaters of GGS Medical</b>
Months and the University has accepted his tendered offer for the execution	n of above mentioned work.
NOW THIS AGREEMENT WITNESS AS FOLLOWS:	
<ul> <li>In this agreement, words and expression shall have the same meaning to them as per the general conditions of contract hereinafter referred t</li> </ul>	
<ul> <li>The following documents shall be deemed to form and be construed as</li> </ul>	
i) The "Notice inviting E-Tender" & "Instructions to tendere	
agreement.	as at rumexare re to this
ii) 'Percentage Rate/Item rate tender for works' as at annex	ure 'B' to this agreement.
iii) 'Conditions of contract' as at annexure 'C' to this agreeme	ent.
<ul> <li>The work will be executed strictly according to specifications &amp; draw indicated in the Notice Inviting e-Tender'. The schedule of items of wo per approved 'Notice Inviting Tender'.</li> <li>All correspondence and modifications of e-tendered offer and accept</li> </ul>	rk to be carried out will be as
this agreement.	
<ul> <li>In considerations of the payments to be made by the University to completed work or item of work, the contractor hereby covenants with work in conformity in all respects with the provisions of this Agreement.</li> </ul>	the University to execute the
The University hereby covenants to pay the contractor, in consideration	on of execution of work, the
price in the manner as specified in this Agreement.	
In witness there of the parties here to set their respective hands and s	eals on the day and year first
above written.	Signature of Contractor
In the presence of  Name and Address	Signature of Contractor Address
1.	
2	
Signed sealed &delivered by	in the capacity of
Name and Address	Reg
1	BFUHS, Fai
2	
<del></del>	For & on behalf of Vice Chancellor, BFUHS, Far

Contractor Witness <u>Registrar</u>

#### **ANNEXURE 'A'**

## BABA FARID UNIVERSITY OF HEALTH SCIENCES, FARIDKOT

**Notice Inviting Tender and Instructions to Tenderers** 

- Online Tenders in the Prescribed form P.W.D No F-1, are hereby invited on behalf of THE Vice Chancellor, BFUHS, Faridkot for Purchase of 250 KVA Generator Set for main Operation Theaters of GGS Medical Hospital, Faridkot Approx. Cost; Rs. 28,24,734.00, Earnest Money Rs. 56,500/, Time Limit 2 Months
- 2. The agency can purchase tender online on https://etender.punjabgovt.gov.in from 03-07-2017 at 9.00 am and Last date time for on-line submission of bids on 18-07-2017 upto 05.00 PM and date & time of opening of financial bids on 19-07-2017 at 11.00 am. Payment through online mode only @ Rs 1,500/- (Rs. one thousands five hundred Only) each tender form (non refundable,)
- 3. The time allowed for completion of the work will be 2 **Months** after the date of issuance of acceptance Letter to the contractor.
- 4. Blank
- 5. The Earnest money amounting to Rs. 56,500/- deposit must be submitted in the shape of a Bank Draft of any nationalized bank and issued in the favour of (Registrar, Baba Farid University of Health Sciences, Faridkot, Payable at Faridkot) and must be submitted upto 11.00 AM of the last date & time fixed for the opening of the tenders through e-tender mode. The bidder who will not submit the demand draft upto the last date and time fixed for the submission of tender will be considered as In-valid and his/ her bid will be rejected without any prior notice. The demand draft must reach to the office of the In-charge (UPFD), BFUHS, Faridkot on which the name and address of the bidder must be written on its back side.
- 6. The contractor whose tender is accepted shall be required to furnish security at the rate of 5% (five percent) of the cost of the work, by deductions from the running bills (three percent of the total cost to cover liability of defects and short comings and two percent of total cost for the winding up the contract satisfactory) The earnest money if realized from the bank will be treated as part of the security deposit.
- 7. The offer shall remain open for Acceptance for a period of ninety days from the date of opening of the Tender. The earnest money shall be forfeited if the tenderer withdraws or modifies his offer within the validity period or fails to sign the (Formal contract) agreement after acceptance of his offer or fails to commence the work or within ten days of issue of acceptance letter. After the forfeiture of earnest money the contract shall be immediately nullified.
- 8. On acceptance of the tender, the contractor shall be either himself remains available at site of work or arrange the availability of an accredited representative, fully authorized in writing at the site of work to receive instructions from the Engineer-in-Charge or his representative and to ensure prompt compliance thereof.
- 9. The undersigned does not bind himself to accept the lowest rate or any tender and receive instructions accepting the whole or part of the tender and tenderer shall bound to perform the same at the quoted rates.

- 10. Sale tax or any other tax on the material or the turnover shall be payable by the contractor and the University will not entertain any claim in this respect.
- 11. Before filling his tender the contractor shall visit the site and satisfy himself as to the conditions prevalent there especially regarding accessibility to the site, nature and extent of the ground working conditions stacking of materials, installation of tools plants etc accommodation and movement of labour, supply of water and power for satisfactory completion of the work contract. No claim whatsoever on such accounts shall be entertained by the University in any circumstances.
- 12. The contractor shall comply with the provisions of the apprentice Act 1961 minimum wages Act 1948 Workman's compensation Act 1923 contract labour (Regulation and abolition1970). Payment of wages Act 1936. Employers liability act 1938 maternity Benefits Act 1961 and the industrial disputes 1947 as applicable and the rules and regulations issued there under form time Failure to do so shall amount to breach of the contract and the Engineer in Charge may his discretion to terminate the contract. The contractor shall also be liable for any pecuniary liability arising on account of violation by him of the provisions of the Act.
- 14. The tenderer shall bear all costs associated with the preparation and submission of his tender and the University shall in no case be liable for these costs.
- 15. Each tenderer shall submit only one tender either by himself or as in a joint venture. A tenderer who submits or participates in more than one tender will be disqualified.
- 16. Unless otherwise stated the contact shall be for the whole work as described in schedule of item of works and the drawings, including the contractor shall be bound to complete the whole as described in the schedule of item of works and the drawings, including the additional items if any, as per drawings and instructions. The certificate of completion as issued by the Engineer-in-Charge shall be the conclusive proof of completion of work.
- 17. The tender shall be either typed or hand written in indelible ink and shall be signed by the tendered. The following documents shall accompany the tenders.
  - (i) Income Tax clearance certificate.
  - (ii) Partnership deed or Registration Certificate of the firm company as the case may be.
  - (iii) Copy of registration of contractor of appropriate class.
  - (iv) Power of Attorney as required under rule of joint venture.
  - (v) List of works executed and, or in progress with the agreement cost.
  - (vi) List of machinery and list of staff (Technical and Non-Technical)
  - (vii) Bank Draft for earnest money.
- 18. Incomplete tender or tenders not fulfilling any of conditions specified above are liable to be rejected without assigning any reason.
- 19. Tenderer should be approved contractors of Punjab PWD (B&R) or specialized agency dealing with providing "Gen set work".
- 20. The Allotted Agency/ Firm will be provided test certificate, Original bill and one year warranty of DG Set.

# ANNEXURE-B PERCENTAGE RATE / ITEM RATE TENDER

I/We hereby offer to execute for the Vice Chancellor, BFUHS, Faridkot for the work, specified in the underwritten Memorandum within the time specified in such memorandum at <u>F-1</u> percent below/ above the rate entered in the Schedule referred to in Para five of the 'Notice Inviting Tender' and annexed here to and in accordance, in all respects, with the specifications, designs drawings, and instructions in writing referred to in Para five and in clause 13 of the "Conditions of Contact" and with such material as are provided for and in all respects in accordance with such conditions so for as applicable.

#### Memorandum

a)	General Description	Purchase of 250 KVA Generator Set for main
		Operation Theaters of GGS Medical Hospital,
		Faridkot.
b)	Estimated Cost	Rs. 28,24,734/-
c)	Earnest money	Rs. 56,500/-
d)	Performance Guaranty	5% Performance Guarantee in shape of bank guarantee
e)	Percentage if any to be	Security @ 5% will be deducted from all the running bills.
	deducted from bills	
f)	Time allowed for completion	2 months ( two months)
	from the date of issue of	
	Acceptance letter to the	
	Contractor	

Should this offer be accepted in whole or, in part, I/We hereby agree to abide by all fulfill all the terms and provisions of the said conditions of contract annexed hereto and all the terms and provisions contained in the detailed "Notice Inviting Tender " and /or in default there to forfeit and pay to Baba Farid University of Health sciences, Faridkot, in office the sum of money mentioned in the said conditions.

A sum of Rs. 56,500/-\_is hereby forwarded in the shape of bank draft in favour of Registrar Baba Farid University of Health Sciences, Faridkot as Earnest money. I/We agree that the full value of Earnest money will be forfeited without prejudice to any other right or remedies to the University in office should I/we:

- Withdraw or modify my/our offer during the period of validity or
- fail to sign the contract agreement after acceptance of the after or
- fail to commence the work within ten days of the issue of acceptance of my/our offer, otherwise the said earnest money shall be retained by him towards security deposit against Clause (d) of above memorandum.

Date the	day of	20_	Signature of the contractor		
Witness					
Address			Address		
Occupation	 one				
•		me on behalf of the G	overnor of Punjab		
Date the	day of	20_	Signature of the contractor		

Contractor Witness Registrar

## ANNEXURE-C

#### CONDITIONS OF CONTRACT

#### **Definitions:**

- The "contract" means the document forming the tendered offer and acceptance thereof constituting binding contract between the Registrar, BFUHS, Faridkot and the contractor. The tender documents including the conditions, the drawings design, the specifications supplemented with instructions issued from time to time by the Engineer-in-charge and shall be binding on the parties in the stated order of precedence. All these documents taken together with the tendered offer and its acceptance shall be deemed to form the contract and shall be complementary to one another.
- The "Common Schedule of Rates" shall mean a printed document containing rates of different items of works pertaining to different branches of P.W.D. i.e. Irrigation, B&R (Buildings & Roads Branch) and the Public health branch and approved by the Committee of Direction of chief Engineers of these P.W.D. branches and the Punjab Govt.
- The "Completed works" shall mean, work completed in all respects as per laid down specifications, drawings, approved N.I.T and to the entire satisfaction of the Engineer-in-charge.
- The "Contractor" shall mean the individual or firm or company whether incorporated or not, undertaking the work and shall include the legal personal representative, or the persons comprising such firm or company or the successors of such firm or company as well as the assignees of such individual or firm or company whose tendered offer has been accepted.
- The "completion date" is the date when the Engineer-in-charge certifies that the work can be put to use, alter receipt of an intimation from the contractor regarding its completion.
- The "Communication" between parties is the written and signed letters notices, reminders, memoranda and instructions recorded in the instructions book or book kept at site.
- The "Days & months" are calendar days and calendar months.
- The "Engineer-in-charge" means the Engineer Deputed by University, Who shall supervise the work and administer the contract with the assistance of his authorized subordinates.
- The "Department" means Baba Farid University of Health Sciences, Faridkot.
- The "Site" shall mean the land and or other places on in to or through which the work is to be executed under the contract or any adjacent land, path or street which may be allowed to be used for the purpose of carrying out the contract.
- The "Schedule of material" shall mean the list of materials which are to be used on the work will be the liability of the contractor as per Annexure-E
- The "Start Date" is the date when contract came into existence upon the issue of "Letter of Acceptance" by the Registrar, BFUHS/Engineer-in-charge.
- The "Schedule of Items of Work" shall mean the Items of Work to be executed at site of work to be executed at site of work pertaining to the work allotted to the contractor.
- The "Works or Work" shall unless the context otherwise requires, mean what the contractor is required to execute and hand over to the University Authorities.

<u>Note</u>:- In interpreting these ""Conditions of Contract" singular also means plural, male means female and vice versa.

#### **CLAUSES OF CONTRACT**

#### Clause - I PERFORMANCE GURANTEE & SECURITY

The contractor, whose tender is to be accepted shall furnish:-

- A Bank Guarantee of Schedule Bank in the prescribed form (Specimen form attached) in favour of the Registrar, BFUHS, Faridkot for an amount of 5% of the amount of contract valid up to six months beyond the date of completion (Time Limit) to cover the amount of liquidated damages and or the compensation of the breach of contract. No payment for work done of any kind shall be released till such Guarantee is furnished. The performance guarantee will be released immediately on completion of work and accepted by the Engineer in Charge as satisfied O.K. Work.
- A cash security of 5% of the amount of the contract inclusive of the Earnest money initially deposited with the bid to cover the cost that may be involved in removal of defects, imperfections, or taking remedial measures in the work, which has been executed to be progressively deducted @ 5% in all payments after affording credit for the initial Earnest money 60% of the security will be refunded after 06 months of the completion of work as certified by the Engineer-in-Charge with respect to satisfactory removal of all defects, imperfections, short comings and taking remedial measures, that may be necessary and after recording of final measurements of work done, for which the certificate of the Engineer-in-charge would be conclusive.
- The remaining amount of security shall be released after the expiry of Twelve months or one rainy season whichever is later from the date of completion of work and after removal of all defects, imperfections and shortcoming that may be noticed during this period and after satisfactory winding up of the contract as provided in clause-6A the entire satisfaction of the Engineer-in-charge.
- Where the contractor requested for first & Final bill (without any running Bill) on completion of work contractor need not furnish performance guarantee as the contract has already been performed. Clause-2.

### **Clause - 2 COMPENSATION FOR DELAY**

The time allowed for carrying out the work shall be the essence of the contract and shall be strictly observed. It shall be reckoned from the date on which the order to commence the work is given to the contractor who shall ensure all due diligence to achieve progress of work not less than indicated below:

On lapse of 25% contractual Time	20%
On lapse of 50% contractual Time	50%
On lapse of 75% contractual Time	80%
On lapse of full contractual Time	100%
	On lapse of 25% contractual Time On lapse of 50% contractual Time On lapse of 75% contractual Time On lapse of full contractual Time

In case of default, the contractor shall not withstanding issuance of prior notice in this regard pay prospectively as liquidated damages an, amount of up to 1% of the amount of contract or such lesser amount that the Engineer-in-charge may levy, for every week that the work remains uncommented after 10 days of the issue of acceptance letter or the minimum progress of work stated above is not achieved or the work remains unfinished after the completion date. In case of continued default or shortfall in progress, The Engineer-in-charge may go on enhancing the levy of liquidated damages prospectively each time limited to 1% of the total estimated amount of work per week of further default subject to maximum unit of 5% of the amount of the contract.

#### Clause – 2A DISPUTE SETTELMENT

If over the works, any dispute arises between the two parties, relating to any aspects of this agreement, the parties shall first attempt to settle the dispute through mutual and amicable consultation.

In the event of agreement not being reached, the matter will be referred for arbitration by sole Arbitration not below the level of retired/ Serving Superintending Engineer of PWD (B&R) Punjab, to be appointed by the **Registrar**, **BFUHS**, **Faridkot**. The Arbitration will be conducted in accordance with the Arbitration and Conciliation Act 1996. The decision of the Arbitrator shall be final and binding on both the parties

#### Clause - 3 BREACH OF CONTRACT LEAVY OF DAMAGES

The Engineer-in-charge may without prejudice to other right and remedies, under the provisions of the contract or otherwise after issuing a notice in writing and getting the final bill prepared absolutely determine the contract after levying compensation for damages of five percent of the amount of the contract, if the contractor, commits breach of contract under any clause of the contractor in any of the following cases:-

- If the contractor suspends the execution of the work and inspire of having been given a notice in writing by the Engineer-in-charge fails to resume the work within ten days of the issue of the said notice.
- If the contractor, having been given a notice in writing by the Engineer-in-charge, fails to rectify, reconstruct or replace any; defective work or continues the execution or work in an inefficient, improper, un-workman like manner or not in accordance with sound Engineering practices or without complying with the directions and requirements within a period of 10 days of the issue of said notice.
- If the contractor being a company shall pass a resolution or a court shall make an order to the
  effect that the company shall be wound up or if a receiver or a manager on behalf of the credit
  or shall be appointed or if circumstances shall arise which entitle the court of creditor to appoint
  a receiver or manager or to make a winding up order.
- If the contractor being a company of acts or defaults mentioned in Clause 21 & 24 thereof.

Provided further, that in case action under clause 2 as aforesaid levy of liquidated damages is also taken, total amount of liquidated damages and compensation for breach of contract under both the clauses shall be limited to 7.5 percent of the amount of the contract or the amount available with the Deptt. Including Bank Guarantee whichever is less. The requisite amount for which the contractor may become liable shall be released by encashing the Bank Guarantee furnished by the contractor, as specified in clause I above and/or from other amount due to the contractor in respect of this work or any other work, under taken for the University Authorities.

- After the termination of the contract under this clause, the department shall be at liberty to
- Get the balance work executed through some other contractual agency or through departmental means or to
- Abandon the balance work altogether or to
- Modify the design and scope of the work in any manner. The contractor shall have no claim against the department for treating the work in any manner deemed fit.

# Clause-4 LIABILITY OF CONTRACTOR AND POWERS TO TAKE OVER AND DISPOSE OFF CONTRACTOR PLANT

In any case, in which any of the powers conferred upon the Engineer-in-charge by clause-3 hereof, shall have become exercisable and shall not be exercised, the non-exercise thereof shall not constitute a waiver of any of the conditions hereof and such powers shall, not withstanding, be exercisable in the event of any future case or default on the part of the contractor, for Which by any clause or clauses, hereof, he is declared liable to pay compensation and the liability of the contractor for past and future compensation remain unaffected.

In the event of the Engineer-in-charge putting in force all or any of the powers vested in him under the proceedings clauses, he may, if he so desires, after giving a notice in writing to the contractor take possession of any or all took materials and stores in or upon the works or the site thereof belonging or produced by him or intended to be used for execution of the work in any part hereof paying or allowing for the same in account at the contract rates or in case of these not being applicable at current market rates certified by the Engineer-in-charge whose certificate there of shall be final. Otherwise, the Engineer-in-charge may, be giving a notice in writing to the contractor or his agent at the site of work, require him to remove such tools, plants materials or stores from the premises within the time specified in notice. In the event of the contractor, failing to comply with any such requisition. The Engineer-in-charge may get them removed at the contractor's expense or sell them by auction or private sale on account of the contractor and at his risk in all respects. The certificate of the Engineer-in-charge as to the expenses of any such removal and the amount of proceeds and expenses of any such sale shall be final & conclusive against the contractor.

#### Clause-5 EXTENSION OF TIME

If the contractor shall desire an extension of the time for completion of the work on the ground of his having been unavoidably hindered in its execution or any other ground, he shall apply in writing to the Engineer-in-charge (with corresponding time extension in Performance Bank Guarantee) within thirty days of the date of hindrance (but before the expiry of the time limit) on account of which he desires such extension as afore said and Engineer-in-charge shall, if in his opinion be necessary or proper, No application for extension of time received late or any officer other than the Registrar/Engineer-in-charge shall be considered valid if the contractor fails to apply for extension as aforesaid and the work is not completed within the time limit, the contract shall be determined absolutely after action under clause 2 and 3 above.

#### Clause-6 COMPLETION CERTIFICATE

Within ten days of the completion of work, the contractor shall give notice of such completion to the Engineer-in-charge and within 30 days of the receipt of such notice, The Engineer-in-charge shall inspect the work and if there is no defect in the work, shall furnish the contractor with a certificate of completion, otherwise a provisional certificate of completion indicating the defects (a) to be rectified by the contractor and or (b) for which payment will be made at reduced rates shall be issued. However, no certificate provisional or otherwise shall be issued, nor shall the work be considered to be completed until the contractor shall have removed, from the premises on which the work shall be executed, all scaffolding, surplus material, rubbish and all huts and sanitary arrangements set up for his labour on the site and cleaned off the dirt from all wood work doors and windows, walls, floor or other parts or the building, in upon or about which the work is to be executed or of which he may have had possession for the purpose of execution thereof and not until the works shall have been measured by the Engineer-incharge if the contractor shall fail to comply with the requirements of his clause to the removal of scaffolding, surplus material and rubbish, all huts and sanitary arrangements and cleaning off as aforesaid

before the date fixed for the completion of work, the Engineer-in-charge may at the expense of the contractor get so cleared such dirt as afores and the contractor shall forth with did pay the cost of all expense so incurred shall have no claim in respect of any such scaffolding or surplus materials as aforesaid except for any sum actually released by the sale proceed thereof.

#### Clause -6A WINDING UP OF THE CONTRACT

On completion of the work, the contractor shall hand over the same to the Engineer-in-charge or his authorized representative free from all defects, shortcomings or imperfections. He shall clear the site of Distempering & Painting of 3 storey indoor Hospital with corridor in GGS Medical Hospital, Faridkot all temporary works pits, godowns. offices, sanitary, scaffolding, debris, waste materials, and installations. He shall also furnish the following documents duly signed by him or his authorized representatives:-

- Completion drawings showing the work as finally constructed.
- Variation statement showing the altered items, if any, against those provided in the original drawings.
- Original site instructions book.
- · Original registers for various quality control tests as specified,
- Cement consumption register.

#### Clause -7 PAYMENTS ON INTERMEDIATE CERTIFICATES REGARDED AS ADVANCES

No payment shall be made for a work estimated to cost less than 5% of Tender cost (Approx.), till after the whole of the work shall have been completed and a certificate of completion given. But in the case of works estimated to cost more than 5%, the contractor shall on submitting a bill there of be entitled to receive a monthly payment proportionate to the part there of the time limit that executed to the satisfaction or the Engineer-in-charge whose certificate of the sum payable Shall of final and conclusive against the contractor. But all such intermediate payments shall be regarded as payments by way of advance against the final payment only and not as payments for work actually done and completed, and shall not be preclude the requiring of bad. un-sound, imperfect or unskilled work to be removed and taken away and reconstructed or re-erected or by considered as an admission of the performance of contract or any part thereof in any respect of the accruing of any claim, nor shall it conclude, determine or effect in any way the power of the Engineer-in-charge under these conditions or any of them as so the final settlement and adjustment of the accounts otherwise or in any other way, very or affect of the contract. The final bills shall be submits by the contractor within one month of the date fixed for completion of the work, otherwise the certificate of the Engineer-in-charge as regards measurements and the total amount payable for the work shall be final and binding.

#### Clause - 8 BILLS TO BE SUBMITTED MONTHLY

A bill shall be submitted by the contractor each month on or before the tenth day or any other date fixed by the Engineer-in-charge accompanied by the following documents:-

- Measurements and quantities of items of work done since last bill.
- Up to date statement of materials received, from the stores showing the recoveries made up to last bill in question, both in terms of quantity and value.
- Copies of quality control tests on specified form at covering the work done since last bill.
- Copies of instructions recorded in the site instruction book containing the instruction and compliance made thereof, covering the work done since last bill.

A bill which is not accompanied with the above documents shall not be entertained.

The Engineer-in-charge shall get the bill verified if possible within 30 days from its presentation and the contractor shall be required to sign the corrections made, if any in token of its as acceptance, before releasing or adjusting the payable amount.

If the contractor does not submit the bill within time limit or delays its submission or acceptance of corrections after verifications the entire responsibility for non-payment or delay in payment shall rest with him.

## Clause-9 BILLS TO BE ON PRINTED FORMS/EXTRA ITEMS

The contractor shall submit all bills on the printed forms can be had on application from the office of the engineer-in-charge and the rates in the bills shall always be entered at the rates specified in the tender or in the case of any extra work ordered in pursuance of these conditions and not mentioned or provided for in the lender, at the rates hereinafter provided for such work.

The contractor shall deliver in the office of Engineer-in-charge on or before the 10<sup>th</sup> day of every month during the continuance of the work covered by this contract, a return showing details of any work to be charged of extra with value based upon the rates and prices mentioned in the contract shall include in such return particulars of all demands of whatever kind and who so ever arising, which at the date thereof he has in respect of or in any manner arising out of execution of work. The contractor shall be deemed to have waived off all claims not included in such return and will have no right to enforce any such claims not so included, whatsoever be the circumstances.

#### Clause-10 STORES SUPPLIED BY GOVERNMENT (DELETED)

#### Clause-10A SECURED ADVANCE

The contractor, on signing an indenture in the form to be specified by the Engineer-in-charge Shall be entitled to be paid during the execution of work, upto 75% of the estimated value of any materials, which are in the opinion of the Engineer-in-charge non-perishable under para 2.105 of PWD code coupled in accordance with the requirements with rule 7.37 of D.F.R. (Financial Hand Book No.3) of the contract and which have been procured and adequately stored against damage but which have not been incorporated in the works at the time of making the advance.

# Clause-11 WORK TO BE EXECUTED IN ACCORDANCE WITH SPECIFICATIONS DRAWINGS ORDER ETC.

The contractor shall execute the whole and every part of the work in the most substantial and workman like manner both as regards materials, and labour and otherwise in every respect in strict accordance with the Punjab PWD specifications latest Edition. The contractor shall also conform exactly fully and faithfully to the designs, drawings and instructions in writing relating to the work signed by the Engineer-in-charge and lodged in his office and to which the contractor shall be entitled to have access during the office hours or on the site of work. The contract shall be furnished free of have access during the office hours or on the site of work The contract shall be furnished free of charge one copy of all such drawings and such specification as are not included in the printed Punjab P.W.D specification. He shall, if he so requires, be entitled at his own expense to make or cause to make copies of the drawings designs, specifications and instructions as aforesaid for ensuring the requisite quality of construction, the material used in works shall be subject to quality control tests for materials and workman-ship test as laid down in Punjab PWD. Specifications as amended from time to time or the relevant standards laid down by the Bureau of Indian standards/Hand Book of quality control for construction of Roads and runway I.R.C latest edition or instructions issued under the orders of the Registrar Baba Farid University of Health Sciences, Faridkot & by the Engineer-in-charge. The contractor shall provide all help and assistance in proceeding with required tests.

The contractor shall set up a quality control field laboratory equipped at least with the test equipment indicated in to these "Conditions of Contract" Annexure-1 and employ trained staff to carry out periodical test as per directions and procedures laid down by the Quality control cell of the PWD (B&R). The records shall be maintained in the prescribed forms and copies thereof covering the work done each month shall be submitted with the bills.

## Clause-11A REMOVAL OF EMPLOYES/WORK MEN

The Engineer-in-charge shall have full powers at all times to object to the employment of any workmen, foremen, or other employees on the work by contractor, and if the contractor shall receive notice in writing from the Engineer-in-charge requiring the removal of any such person from the work, the contractor shall comply with the orders forth with. No such workman foreman or other employees, after his removal from the works by order of the Engineer-in-charge shall be re-employed or reinstated on the work by the contractor at any time except with the previous approval in writing of the Engineer-in-charge for requiring the removal of any such workman, foreman or any other employee.

#### Clause-12 ALTERATION IN SPECIFICATION AND DESIGNS

The Engineer-in-charge shall have the power to make any alterations, omissions from additions to on substitutions for the original specifications, drawings, designs and instructions that may appear to be necessary or advisable during the progress of work, and the contractor shall be bound to carry out the work in accordance with any instructions which may be given to him in writing signed by the Engineer-in-charge. Such alternations/additions or substitutions shall not invalidate the contract and any altered, additional or substituted work shall be carried out by the contractor on the same conditions in all respects on which he agreed to do the main work and at the same rates as are specified in tender for the main work. The time of completion of the work shall be extended in the proportion that the altered additional or substituted work bear to the original contract work and the certificate of the Engineer-in-charge shall be conclusive as to such proportion. The rates for such additional altered or substituted work shall be determined in accordance with the following provisions in their respective order.

- If the rate of the additional, altered or substituted work are specified in the contract for the work the contractor is bound to carry out the additional, altered, or substituted work at the same rates as are specified in the contract for the work.
- If the rates for the additional, altered or substituted work are not specifically provided in the contract for the work, the rates will be derived from the rates for a similar class of work as are specified in the contract for the work.
- If the rates cannot be determined as provided in (i) and (ii) above, then such work shall be paid at the rates entered in common schedule of the rates minus/plus the percentage rate at which the bid has been accepted.
- If the rates for the altered, additional or substituted work cannot be determined in the manner specified in Clause (i) (ii) (iii) above, then the contractor shall within seven days of the date of receipt of the order to carry out the work in form the Engineer-in-Charge of the rate which he intends to charge for such class of work supported by analysis of the rate in support of rates/claimed. The Engineer-in-charge shall determine the rate or rates on the basis of prevalent market rates and pay the contractor accordingly.

However the Engineer-in-charge by notice in writing, will be at liberty to cancel the order given to the contract to carry out such class of work and arrange to carry out in such manner as he may consider advisable, provided always that if the contractor shall have commenced work or incurred any expenditure in regards thereto before the rate shall have been so determined, then in such case he shall be entitled to be paid in respect of the work carried out or expenditure incurred by him prior to the date of the determination to the rates of dispute, the decision of the superintending Engineer of the circle shall be final.

#### Clause-13 NO COMPENSATION FOR ALTERATION OR RESTRICTION IN WORKS

If at any time, after the commencement of the work the University Authority shall for any reason what-soever does not require the whole or part of as specified in the contract to be carried out, the Engineer-incharge shall give notice in writing of the fact to the contractor, who shall have no claim to any payment or compensation what-so-ever on account of any profit or advantage which he might have derived from the execution of the work in full, but which he did not derive inconsequence of the full amount of the work having been made in the original specifications, drawings, designs and instructions, which shall involve any curtailment of the work originally contemplated.

#### Clause-14 ACTION AND COMPENSATION PAYABLE IN CASE OF BAD WORKS.

If it shall appeal to the Engineer-in-charge, or his subordinate in-charge of the work that any work has been executed with unsound, imperfect, unskillful workmanship or with materials of any inferior description or that any articles or material provided by the contractor for the execution of work are unsound or of a quality inferior to that contracted *for* or otherwise not in accordance with the contract, the contractor shall on demand in writing by the Engineer-in-charge specifying the work, materials or articles complained of, not withstanding that the same have been inadvertently passed, certified and paid for, forthwith rectify or as the case may be remove the materials or articles so specified and provide other proper and suitable materials or articles at his own proper charge & Cost. In the event of his failing to do so, within a period so specified by the Engineer-in-charge In his demand aforesaid the contractor shall be liable to pay compensation rate of one percent of the estimated amount for every week not exceeding ten weeks, while his failure to do so shall continue and in the case of such failure, the Engineer-In-Charge may rectify or remove and execute the work or remove and replace with others, the materials or articles complained of as the case may be at the risk and expenses in all respects of the contractor.

#### Clause-15 WORKS TO BE OPEN TO INSPECTIONS

All work under or in course of execution or executed in pursuance of the contract shall at all times be open to the inspection and supervision of the Engineer-in-charge and his senior subordinates and The contactor shall at all times during the usual working hours or at all other times at which reasonable notice of the intention of the Engineer-in-charge or his senior subordinates to visit the work shall have been given to the contractor, other himself be present to receive orders and instructions or have a responsible agent duly accredited in writing, present for that purpose. Orders given to a contractor's agent shall be considered to have the same force as if they had been given to the contactor himself.

#### Clause-16 NOTICE TO BE GIVEN BEFORE WORK IS COVERED UP

The contractor shall give not less than 10 days notice in writing to the Engineer-in-charge or his subordinate-in-charge of the work before covering up or otherwise placing beyond the reach of measurement, any work in order that the same may be measured and correct dimensions thereof may be taken before the same is so covered up or placed beyond the reach of measurement and shall not cover up or place beyond the reach of measurement any work without the consent in writing of the Engineer-in-charge or his subordinates in charge of the work if any work shall be covered up or placed beyond the reach or measurement without such notice having been given or consent obtained, the sum shall be uncovered at controllers expense or in default there of no payment or allowance shall be made for such work or of the material with which the same was executed.

#### Clause-17 LIABILITY FOR DAMAGE AND IMPERFECTION FOR ONE YEAR

If the contractor or his workmen shall break, deface, injure or destroy any part of a building in which he may be working or any building, road, fence, enclosure or green grass land, water pipes, cables, drains, Electric or Telephone posts or wires, trees or cultivated ground continuous to the premises on which the work or any part of it is being executed or if any damage shall happen to the work, while in progress from any cause what-so-ever or any defect, imperfection or other faults appear in the work within one year from the date of completion certificate issued by the Engineer-in-charge.

the contractor shall make good at his own expense or in default, the Engineer-in-Charge may cause the same to be made good by other workmen and deduct the expenses incurred both on labour and material (for which the certificate of the Engineer-in-Charge shall be final) from any sums that may be then due or at any time thereafter may become due to the contractor form his security deposit.

#### Clause-18 CONTRACTORS TO SUPPLY MATERIAL PLANT SCAFFOLODINGS

The contractor shall arrange and supply at his own cost all materials (except such specific materials as may be issued from the stores of the Engineer-in-charge) plant tools, appliances, implements, ladders, cordage tackle, scaffoldings, water and power supply and temporary work requisite or proper and effective execution of the work. Whether original, altered or substituted and whether included in the specification other documents forming part of the contract or referred to these conditions or not all which may be necessary for the purpose of satisfying or complying with the requirements of the Engineerin-Charge as to any matter which under these conditions he is entitled to be satisfied or which he is entitled to require together with the carriage there of to and from the work. The contractor shall also supply free of charge the requisite number of persons with the means and material necessary for the purpose of setting out works on counting weighing and assistance in the measurements or examination at any time or from time to time of the work or materials. Failing his so doing the same may be provided by the Engineer-in Charge at the expense of the contractor and this expense may be deducted from any amount due to the contractor under the contract or from his security deposit. The contractor shall also provide necessary fencing and lights required to or other proceeding at law that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay any damages and cost which may be awarded in any such suit, action or proceedings to any such person or which may with the consent of the contractor be paid to compromise any claim by any such person.

#### Clause-19 LABOUR LAWS

The contractor shall comply with all the provisions of minimum wages Act 1948. Workman's Compensation Act 1923. contract labour (Regulation and abolition) Act 1970 and the rules framed there under, the payment of wages Act 1936, Employees liability Act 1938. Maternity Benefits Act 1961. The apprentices Act 1961 and rules framed there under and the Industrial Disputes 1947. He shall also make satisfactory arrangements for labour huts, protection of health and sanitary arrangements for the workmen employed on the work.

In every case in which by virtue of provisions of the Contract Labour (Regulation and Abolition) Act 1970 and of the contract labour rules. Government is obliged to pay any amount of wages to a workman employed by the Contractor in execution of the works or to incure any expenditure in providing welfare and health amenities required to be provided under the above said act and the rules under PWD Contractor's labour Regulations or under the framed by the Government from, time to time, for the protection of health and sanitary arrangement for workers employed by The Approved Contractors. The Government will recover

from the contractor the amount of wages so paid or the expenditure so incurred under without prejudice to the rights of the Government under section 20 sub section (2) and section 21 sub section (4) of the contract labour (Regulation and abolition) Act 1970. Government shall be at liberty to recover such amount or any part thereof the deducting it from the security deposit or from any sum due by Government to the contractor whether under this contract or otherwise. Government shall not be bound to contest any claim made against it under section 20 sub section (I) and section 21 sub section (4) of the said Act expect on the written request of the Contractor and upon his giving to the Government full security for all costs of which the Government might become liable in contesting such claim.

# Clause-20 CONTRACTOR LIABLE FOR PAYMENT OF COMPENSATION TO INJURED WORKMEN OR IN CASE OF DEATH.

In every case in which by virtue of the provision of the section 12, sub section (I) of the workman's compensation Act 1922, the Government is obliged to pay compensation to a workman employed by the contractor in execution of work, the University authority will recover from the contractor the amount of compensation so paid and without prejudice to the rights of Government under section 12, sub Section (ii) of the said Act. The University authority shall be at liberty to recover such amount of any part thereof by deducting it from the security deposit or from any sums due by the University to the contractor whether under section 12 Sub Section (1) of the said Act except on the written request of the contractor and upon his giving to Government full security for the costs for which the University might become liable in consequence of contesting such claim.

#### Clause-2I WORK NOT TO BE SUB LET

The contractor shall not be assigned or sub let without the written approval of the Engineer-in-charge. Employment of labour *on* piece rate basis shall, not however, be deemed sub-letting. If the contractor shall assign or sublet his contract or attempts to do so without the approval as aforesaid or become insolvent or commence any or solvency proceedings or make am composition with his creditors or attempt to do so, if any bribe, gratuity, gift, loan, perquisite, reward or advantage, pecuniary or otherwise, shall either directly or indirectly be given, promised or offered the contractor or any of his servants or agents to any public such officer or person shall become in any way directly or indirectly interested in the contract, the Engineer-in-charge may absolutely there-upon terminate the contract as specified in clause 3 and in the event the said course being adopted, the consequences specified in the said clause 3 shall ensure.

# Clause-22 COMPENSATION CONSIDERED REASONABLE WITHOUT PREFERENCE TO ACTUAL LOSS.

All sum payable by way of compensation under any of these clauses shall be considered as reasonable competition to be applied to the use of Government without reference to the actual loss or damage sustained and whether or not any damage shall have been sustained,

# Clause-22A DEDUCTIONS OF GOVT. DUES ON ANY ACCOUNT WHATSOEVER TO BE PERMISSIBLE.

Any excess payment made to the contractor inadvertently or otherwise under this contract or on any account whatsoever, and any other sum found to be due to the Government, by the contractor in respect of this contract or any other contract work on order or on any account what-so-ever may be deducted from any sum payable by the Government to the contractor either in respect of this contract or any other work order or contract or on any account by any other department of the Government.

#### Clause-23 CHANGE IN CONSTITUTION

Where the contractor is a partnership firm, the proir approval in writing of Engineer-in-charge shall be obtained before any change is made in the constitution of the firm where the contractor is an individual or a Hindu Undivided Family business concern, such approval as aforesaid shall likewise be obtained before the contractor enters into any partnership agreement, where under the partnership firm would have the right to carry out the work hereby undertaken by the contractor. If prior approval as aforesaid is not obtained, the contractor shall be deemed to have been assigned in contravention of clause 21 hereof and the same action may be taken and the same consequences shall ensure as provided in the said clause-21

#### Clause-24 DIRECTIONS OF THE ENGINEER-IN-CHARGE

All work to be executed under the contractor shall be executed under the direction and subject to the approval in all respects of Engineer-in-charge authorized by the University, who shall be entitled to direct at what point or points and in what manner they are to be commenced and from time to time carried out

#### Clause-25 DISPUTES AND ARBITRATION

- If any dispute or difference of any kind what-so-ever, shall arise between the Government its authorized representative and the contractor in connection with or arising out of this contract or the execution of work there under.
- Whether before its commencement or during the progress of work or after the termination abandonment or breach of the contract, it shall, in the first instance, be referred for settlement to the Engineer-in-charge of the work and he shall with in a period of Sixty days after being requested in writing by the contractor to do so convey his decision to the contractor. Such decision in respect of every matter so referred shall subject to arbitration as hereinafter provided, be final and binding upon the contractor. In case the work is already in progress, the contractor shall proceed with the execution of the work on receipt of the decision by the Engineer-in-charge as aforesaid with all due diligence whether any of the parties requires arbitration as hereinafter provided or not.
- If the Engineer-in-charge has conveyed his decision to the contractor and no claim for arbitration has been filed by the contractor within a period of sixty days from the receipt of the letter of communicating the decision, the said decision shall be final and binding upon the contractor and will not be subject matter of arbitration at all.
- If the Engineer-in-charge fails to convey his decision within a period of sixty days after being requested as aforesaid the contractor may within further sixty days of the expiry of the final 60days from the date on which the said request was made by the contractor refer the dispute for arbitration as hereinafter provided.
- All disputes or differences in respect of which the decision is not final and conclusive shall at the
  request of either party made in a communication sent through registered A.D post be referred to
  the sole arbitration of Retired/Serving Superintending Engineer, PWD (B&R) Branch to act as an
  arbitrator on receipt of a request from either party.
- Registrar, BFUHS, Faridkot shall have the authority to change the arbitrator on an application by the either contractor or the Engineer-in-charge requesting change of arbitrator giving reasons thereof either before the start of the arbitration proceedings or during the cause of such proceedings. The arbitration proceedings would stand suspended as soon as an application for change of Arbitrator filed before the Registrar and a notice thereof is given by the applicant to the Arbitrator. The Registrar after hearing both the parties may pass a speaking order rejecting the application or accepting to change the Arbitrator simultaneously, appointing a technical officer not below the rank of Superintending Engineer as under the Contract. The New Arbitrator so

appointed may enter upon the reference a fresh or he may continue the hearings from the point where these were suspended before the previous Arbitrator.

- The reference to the Arbitrator shall be made by the claimant party within one hundred twenty days from the date of dispute of claim arising during the execution of work. If the claim pertains to rates or recoveries introduced in the final bill the reference to the Arbitrator shall be made within six calendar months from the date of payment of the final bill to the contractor or from the date of registered notice is sent to the contractor to the effect that his final bill is ready by the Engineer-in-charge (whose decision in this respect shall be final and binding) whichever is earlier.
- It shall be an essential term of this contract that in order to avoid furious claims, the party invoking arbitration shall specify the disputes on facts and Calculations stating the amount claimed under each claim and shall furnish a "deposit-at-call" for ten percent of the amount claimed, on a scheduled bank in the name of the Arbitrator, by his official designation who shall keep the amount in deposit till the announcement of the award. In the event of an award in favour of the claimant, the deposit shall be refunded to him in proportion to the amount awarded with respect to the amount claimed and the balance, if any shall be foresaid and paid to the other party.
- The provisions of the India Arbitration Act 1996 or any other statutory enactment there under or modification thereof and for time being in force shall apply to the arbitration proceedings under this clause.
- The Arbitrator shall award separately giving his award against each claim and dispute and counter claim raised by either party giving reasons for his award. Any lump-sum award enforceable shall not be legally enforceable.
- The venue of arbitration shall be such a place or places as may be fixed by the Arbitrator in his sole discretion. The work under the contract shall continue during the arbitration proceedings.
- The stamp fee due on the award shall be payable by the party as desired by the Arbitrator and in the event of such party's default, the stamp fee shall be recoverable from any other sum due to such party under this or any other contract.
- Neither party shall be entitled to bring a claim for arbitration, if it is not filed as per the time period, already specified or within six months of the following:-
  - Of the date of completion of the work as certified by the Engineer-in-charge.
  - Of the date of abandonment of the work or breach of contract under any of its clauses, or
  - Of its non-commencement or non resumption of work within 10 days of a written notice for commencement or resumption as applicable or
  - Of the cancellation, termination or withdrawal of the work from the contractor in whole or in part and/or revision or for enclosure of the contract or
  - Of receiving an intimation from Engineer-in-charge that the final payment due or recovery from the contractor has been determined, for the purpose of payment/adjustment whichever is the latest.

If the matter is not referred to arbitration within the period prescribed above all the rights and claims of either party under the contract shall be deemed to have been forfeited and absolutely barred by time for arbitration and even for civil litigation.

- No questions relating to this contract shall be brought before any civil court without first invoking
  and completing the arbitration proceedings, if the issue is covered by the scope of Arbitration under
  this contract. The pending of arbitration proceedings, shall not disentitle the Engineer-in-charge to
  terminate the contract and to make alternate arrangements for completion of the work.
- The arbitrator shall be deemed to have entered on the reference on the day he issues notices to the parties fixing the first date of hearing. The arbitrator may from time to time, with the consent of the parties enlarge the initial time for making and publishing the award.
- The expiry of the contractual time limit, whether originally fixed or extended, shall not invalidate the provisions of this clause.

#### Clause-25-A EXTRA ORDINARY CLAIMS

No claim for payment of an extra-ordinary nature, such as claims for bonus, for extra labour employed in completing the work before the expiry of the contractual period at the request of Engineer-in-charge or

claims for compensation where work has been temporarily brought to a stand-still though no fault of the

contract shall be allowed unless and to the extent that the same shall have been expressly sanctioned by the

Baba Farid University of Health Sciences, Faridkot Under the signature of one its Vice Chancellor.

#### Clause -26 (a) STORAGE OF CEMENT AND RECORD OF CONSUMPTION

Cement bags issued by the department shall be stored in godowns to be constructed by the contractor. Godown shall be provided with a single door with two locks. The keys of one lock each shall remain with the authorized representative of the department and the contractor at the site of work. Cement shall be taken out of the store according to daily requirement with the knowledge of both the parties and the account shall be maintained in the Performa as the Annexure II to these condition of contract.

#### (b) VARIATION IN CONSUMPTION OF MATERIALS.

Variation in consumption of material will be regulated as per amended para 27.4 of P.W.D Specification 1963 appended as Annexure "D'

## (c) DETERIORATION PILFERAGE OF MATERIALS.

In case any quantity of cement steel or any other commodity issued to the contractor by the Engineer-incharge for use (directly on the aforesaid work) or manufacture of material required in connection these with is disposal of by him or lost or allowed to get deteriorated the cost of such quantity of that material shall without prejudice to other rights and remedies available to the Government be recovered from the contractor at double the rate at which it is agreed to be supplied to the contractor

#### (d) DOOR AND WINDOW FITTINGS

Deleted.

#### Clause-27 LUMP SUM IN ESTIMATE

When the estimate on which a bid is made include lump sums in respect of part of the work the contractor shall be entitled to payment in respect of the items of work involved at the same rates as are payable under this contract for such items. If the part of the work in question is not, in the opinion of the Engineer-in-charge capable of measurement, the Engineer-in-charge may at his discretion pay the lump sum amount entered in the estimate and the certificate in writing from the Engineer-in-charge shall be final and conclusive against the contractor with regard to any sum or sum payable to him under provision of this clause.

### Clause-28 SPECIFICATION

In the case of any class of work for which there is no specification as mentioned in clause 11, the work shall be carried out in accordance with the specifications laid down by the Bureau of Indian Standards and in the event of there being no such specification, the work shall be carried out in all respects in accordance with the instructions and requirements of the Engineer-in-Charge.

#### Clause-28 –A (a) CONCRETE WORK

All the concrete work shall have to be done with mechanical mixer unless permitted otherwise by the Engineer-in-Incharge All R.C.C work shall be compacted with a mechanical vibrator driven by petrol/diesel

or electricity. All R.C.C work and plain cement concrete of mix 1:3:6 (M-10), and richer mixer, only Ghaggar coarse sand or Pathankot sand having a fineness modulus between 2.5 to 3.5 shall be used. Test samples shall be taken during the execution of work as per stipulations of the Bureau of Indian Standards. The compressive strength of test samples shall meet the requirements of relevant standards laid down by the B.I.S. The contractor shall set up a field testing laboratory with necessary equipment and appointed staff for carrying out the test at his cost.

### (b) CURING OF CEMENT WORK

The contractor shall ensure proper curing of all work involving use of cement strictly as per stipulation of the Punjab PWD Specifications. Since proper curing during the critical period has a direct bearing on the strength and safety of cement work, the Engineer-in-Charge shall, in the case of any default on the part of the contractor, take prompt action to arrange adequate curing at the cost of the contractor without issue any prior notice in this respect to avoid lapse of critical period of curing. The certificate of the Engineer-in-Charge would be final and binding in this respect and the cost incurred shall be recovered from the contractor.

## (c) PITS AT SITE PROHIBITED

No pits shall be dug by the contractor at or near the site of work for taking out earth for use in work. In case of default, the pits so dug shall be got filled by the department at the cost of the contractor, charging additional amount of fourteen percent towards departmental charges.

#### (d) CO-ORDINATION WITH OTHER AGENCIES

The contractor shall maintain close co-ordination and afford necessary facilities to other agencies executing other works like Electrification, Horticulture, Water supply, Sewerage and external service etc. No claim for additional payment on this account shall be entertained.

## Clause 29-A (a) STATUTORY LEVIES

The rates as offered and accepted in this contract are inclusive of all taxes and statutory levies as income fax, Octroi/Terminal Tax, Sales tax/turn over tax, royalty, contribution under Employment State Insurance and local taxes payable under the respective statutes (ESI contribution etc.)

#### (b) INCOME TAX

Income tax shall be deducted at source as per provisions of the Income Tax Act and a certificate such deduction made in each financial year shall be furnished to the contractor by the disbursing officer.

## (c) SALES AND OTHER TAXES

Sales tax turnover tax or any other tax shall also be deducted from the bills of the contractor if so directed by the authorities concerned.

#### (d) LOCAL LAWS AND LEVIES

The contractor shall comply with the proper bye-laws and legal orders of the local body or public authority under the jurisdiction of which the work is executed and pay all fees and charges for which he may be liable. Nothing extra shall be payable on this account.

### (e) DAILY PAYMENT IN EMERGENCY

In case of emergency, the contractor shall be required to pay his labour every day and in case of default, the requisite payment shall be made by the Government and the amount shall be recovered from the

contractor.

#### **Clause-30 VARIATION IN PRICES**

To compensate for the general rise or fall in prices of labour and material (excluding the material supplied at fixed rates by the department accordance with clause (10) the contractor's payment shall be adjusted for such increase or decrease as per provision detailed below subject to the condition that compensation for escalation in price shall be available only for work done during the stipulated period of the contract including such period for which the contract validly extended under the provisions of clause 5 of the contract without any action under clause 2 and also subject to the condition that no such compensation shall be payable for a work which the stipulated period or completion in six months or less.

The amount certified in each payment certificates shall be adjusted by applying the respective price adjustment factor to the net amount due for payment after recovery or material issued at fixed rates exhibited in the "Notice Inviting tender" as under.

$$P = 0.35 + 0.65 \times \frac{\text{Im}}{\text{lo}}$$

Where P, is the adjustment factor for the portion of the contract price.

Im= Im is the official whole sale price index published by the Ministry of Economic affairs at the end of the calendar month prior to preparation of the bill.

Lo= lo is the official whole sale price index published by the Ministry of Economic affairs at the end of the calendar month previous to the one in which the bids comprising the contract were received.

If the value of the index is changed or amended after it has been used in a calculation for a particular payment a correction shall be applied and an adjustment made in the next payment certificate. The index value is deemed to take into account of all changes in cost due to fluctuation and nothing extra shall be payable or deductable on account of variation in prices. The contract shall furnish documentary evidence of the whole sale price index from time to time to facilitate calculation for variation in prices.

**Clause-30 A** No escalation is to be paid for the work done in first 6 month irrespective of the time period specified .

**Clause-30 B** The date of tender for the purpose of escalation will be reckoned as the date on which final financial bid in submitted or rate negotiated whichever is later.

## Clause-31(A) TECHNICAL STAFF

The contractor shall employ the following technical construction staff on a whole time basis during the execution of work and shall submit names and attendance certificate on the  $10^{lh}$  of each calendar month.

- One graduate Civil Engineer & Electrical Engineer having relevant experience of not less than three years for work amounting to more than Rs. 50.00 lacs.
- One graduate Civil Engineer & Electrical Engineer or qualified diploma holder having relevant experience of not less than three years of works amounting up to Rs. 50.00 lacs.

The technical staff shall be available at site at all times.

In case the contractor fails to employ the above minimum technical staff or fails to submit the names and attendance certificate of such staff, ^recovery shall be made from his bills at the rate of twice the average pay of the corresponding staff working with the Public Works Department.

#### PERFORMANCE TEST

The contractor shall give a satisfactory performance test of the entire installation as per standard specifications before the work is finally accepted and nothing extra whatsoever shall be payable to the contractor for this test.

Deleted

#### (B) CONSULTANTS FOR QUALITY CONTROL

It is expected that every contactor will have proper quality staff and procedures in order to ensure quality, They are also expected to improve their procedures in line with I.S.O 9002 and get the certification. For all works amounting to more than Rs. 2.00 Crore. The contractor shall engage a competent and independent quality control consultant approved by registrar/Engineer-in- charge of work to exercise effective control over the construction operate in the field so as to produce quality work. The fully equipped laboratory shall be set up at site of work and trained staff shall be employed by the said consultant. The contractor shall supply to the Engineer-in-Charge a copy of his agreement and the fee for quality control should generally be between 0.5% and 1.5% at the contract value. The payment to the quality consultant shall be made by the Engineer-in-charge direct as per the copy of the agreement supplied by the contractor. This payment will be recoverable from the contractor. The consultant will guide the contractor for production of quality works at all stages and shall maintain records reports and test results, so as to indicate the extend of quality Engineer-in-Charge regularly. The contractor shall also attach a copy of these reports, tests and checks with his bill without which no payment shall be made. The Engineer-in-charge can also order the change of consultant if in his opinion they are not performing competently. The Engineer-in-charge will be free to conduct surprise, random or in site checks so as to have a cross check on quality control consultant, the Engineer-in-charge may order employment of a consultant at the cost of the contractor or may order the department staff to carry out the quality control checks and a deduction at the rate of 1.5% of the total cost of the work shall be deducted from the bill of the contractor even if the actual expenditure incurred on private consultant or department quality control is less, Nothing in this clause shall reduce the over all responsibility of the contractor quality and he shall remain liable for any defect in the execution.

**Clause-32 ACTS OF GOD** 

No claim whatsoever shall be entertained for any loss or damage caused by rain, floods or any other natural causes or other acts of God.

#### **Clausc-33 JURISDICTION**

The jurisdiction of Civil Court for matter under dispute shall be on the basis of the location of the office of the Engineer-in-charge.

#### Clause-34

The terms and condition of the Agreement have been explained to me us and I/we certify that I/We clearly understand the same.

#### Clause-35

The contractor will submit five photograph of the work showing physical progress of the work every month.

Deleted

#### **FAIR WAGES CLAUSE**

a) The contractor shall pay not less than fair wages to the labourers engaged by him on the work

#### **EXPLANATION**

- Fair wages means wage whether for time of piece work notified at the time of inviting tenders for the work and where such wages have not been notified the wages prescribed by the P.W.D. B&R Branch .Punjab (I) for the district in which the work is done.
- The contractor shall notwithstanding the provision of any arrangements to the contrary, cause to be paid fair wages to labourers indirectly engaged on the work, as the labourers have been directly employed by him.
- In respect of all labour directly or indirectly employed on the work for the performance of the contractor shall comply with or cause to be complied with the Punjab (1) P.W.D. Contractor's labour Regulation made by the Government from time to time in regard to payment of wages, wage period deduction from wages, recovery of wages not paid and deduction unauthorized made, maintenance of wages register, wage cards publication of wages and other terms of employment, inspection and submission of periodically returns and matters of such like nature.
- The Engineer-in-charge shall have the right to deduct from the money due to the contractor, any amount required or estimated to be required for making good the loss suffered by a worker while working by reason of non-fulfillment of the conditions of the contract for the benefit of the workers nonpayment of wages or deduction made from his or their wages, which are not justified bs the terms of the contract for non-observation of their regulation referred to in clause ( c ) above.
- Viz-a-Viz the Punjab (1) Government the contractor shall be primarily liable for all payment to bemade under and for the observance of the regulations aforesaid without prejudice to his right to claimindirectly from his sub-contractors.
- The regulation shall be deemed to be a part of this contract and any breach thereof shall be deemed to be a breach of this contract.

## The Registrar Baba Farid University of Health Sciences, Faridkot

#### CONTRACTOR'S LABOUR REGULATIONS

#### Short Titles:

The regulations may be called Punjab (1) Public Works Department Contractor's Labour Regulations.

#### Definitions:

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

- "Labour" means workers employed by Punjab (1) Public Works Department Contractor directly or indirectly through sub contractor or other person or by an agent on his behalf.
- "Fair Wages" means wages whether for time or piece works notified at the time of inviting tenders for the work and where such wages have not been so notified, the wages prescribed by the Punjab(I) Public Works Department for the district in which the work is done.
- "Contractor" shall include every person whether a sub contractor or headman or agent employing labour on the work taken on contract.
- "Wages" shall have the same meaning as defined in the payment of wages Act, 1936 and include time
- and piece rate wages.

## Display of notice regarding wages etc.:

The contractor shall, before the commence his work on contract, display and correctly maintain, and continue, to display and correctly maintain, in a clean and legible condition at conspicuous place on the work, notice in English and in the local Indian language spoken by the majority of the workers, giving the fair wages notified or prescribed by the Punjab (1) Public Works Department and the hours of the work for which such wages are earned.

## • Payment of Wages :

Wages due To every worker shall be paid to him direct.

All wages shall be paid in current coin or currency or in both.

#### 5. Fixation of Wages Period:

- The Contractor shall fix wage periods in respect of which the wages shall be payable.
- No wage period shall exceed one month.
- Wages of every workman employed on the contract shall be paid before expiry often days after the last day of the wage period in respect of which the wages are payable.

- When the employment of any worker is terminated by or on behalf of the contractor, the wages earned by him shall be paid before the expiry of the day succeeding the one on which the employment is terminated.
- All payments of wages shall be made on a working day.

#### 6. Wage Book and wages slips etc:

The contractor shall maintain a wage book of each worker in such form as may be convenient, but the same shall include the following particulars.

- a) Rate of daily or monthly wages.
- b) Nature of work on which employed.
- c) Total amount payable for the work during each wage period
- d) Total amount payable for the work during each wage period
  - e) All deductions made from the wages-with an indication in each of the ground for which the deduction is made.
- f) Wage actually paid for each wage period.
- (i) The contractor shall maintain a wage slip for each worker employed on the work
- (ii) The authority competent to accept the contract may grant exemption from the maintenance of wage Book and wage slip to a contractor who, in his opinion may not directly or indirectly employ more than 100 persons on the work.

#### 7. Fines and deductions which may be made from wages:

- (i) The wages of the worker shall be paid to him without any deduction of any kind expect the following
  - a) Fines
    - b) Deduction for absence from duty i.e. from the place from which the place of his employment he is required to work. The amount of deductions shall in proportion to the period for which he was absent.
- c) Deduction for damage to or loss of goods expressly entrusted to the employed person for custody, or for loss of money he is required to account, where such damage or missing is directly attributes to his neglect or default.
- d) Any other deductions which the University may from time to time allow.
- No fine shall be imposed on a worker and no deduction for damage or loss shall be made from
  his made until the worker has been given an opportunity showing cause against such fines or
  deductions.
- The total amount of fines which may be imposed in any one wage period on a worker shall not
  exceed an amount equable to half an anna in a rupee of the wage payable to him in respect of
  that period.
- No fine imposed on any worker shall be recovered from him by installments, or after the expiry of 60 days from the date on which it was imposed.

#### 8. Register of fines etc.

- The contractor shall maintain register of fines and of all deductions for damages or loss made.
- The contractor shall maintain a list, in English and in the local Indian Language clearly defining
  acts and omissions for which penalty or fines can be imposed. He shall display such list and
  maintain it in a clean and legible condition in conspicuous place on the work.

#### 9. Preservation of books:

The wage book, the wage slips and the register under these regulations shall be preserved for 12 months after the date of last entry made in them.

#### 10. Powers of Labour Welfare Offers to made investigation or enquiry.

The Labour Welfare Officers or any other person authorized of Punjab (1) Government on their behalf shall be have to make enquires with a view to **a** ascertaining and enforcing due and proper observances of the wages clause and the provisions of these regulations. He shall investigate into any compliant regarding the default made by the contractor or sub contractor in regard such provision.

#### 11. Report of Labour Welfare Officer.

The labour welfare officer or any other person authorized a aforesaid shall submit a report of the results of his investigations or enquiry to Engineer-in-charge, indicating the extent if any, to which the default has been committed and the amount of the recoverable in respect of the acts of omission and commission of the labour with a note that necessary deduction from the contractor's bill be made and the wages and the other dues be paid to the labour concerned.

#### 12.Appeal against the decision of Labour Welfare Officer:

Any person aggrieved by the decision and recommendations of the Labour Welfare Officer or other person so authorized may appeal against such decision to the Labour Commissioner but subject to such appeal, the decision of the officer shall be final and biding upon the contractor.

**12(a).** No party shall be allowed to be represented by a lawyer during any investigations, enquiry. A appeal or any other proceedings under these regulations.

#### 13. Inspection of Registers:

The contractor shall allow inspection of the wage book and slips to any of his workers or to his agents at a convenient time and place after due notice is received or to the Labour Welfare Officer or any other person authorized by the Punjab (I) Government in this behalf.

#### 14. Submission of returns

The contractors shall submit periodical returns as may be specified from time to time.

#### 15. Amendments

The Punjab (1) Government may, from time to time, add or amend these regulations and on, any question as to the application, interpretation or effects of these regulations, the decision of the Labour Commissioner to Punjab (1) Government, *or* any other person authorized by the Punjab Government in that behalf shall be final.

#### 16. Registration of work

The contractor shall require registration of workers in the building and other construction workers (RECS) act 1996 and extension of benefits to such workers under the act.

## **ANNEXURE-E**

## LIST OF APPROVED MAKES

1. Cement	:	PPC conforming to IS 1489-part-1 OR with the approval of Engineer.
2. Reinforced Steel	:	Fe 500/ Fe 550 conforming to IS 1786-2008 OR with the approval of Engineer.
3.Bitumen		Bitumen grade 85/25 from IOC/ HPCL/ BPCL refineries.
4. Any other:		The University will at liberty to take samples from such material and get tested from an approved laboratory at the cost of the contractor and the material shall be allowed to be consumed only if these tests conducted are in order.
Note :-		For recovery purpose the rate" be taken as follows:-
Cement :	:	P.P.C Rs. 266.64 Per bag of 50 kg
Steel:		Mild steel/Tor Steel/TMT Steel Fe-415 Rs. 39440.50/-Per M.T. Tor Steel/TMT Steel Fe-500 Rs. 39996/-Per M.T. Tor Steel/TMT Steel Fe-550 Rs. 40440.40/-Per M.T. Structural steel Rs. 41040.34/-Per MT.

## Note:

- The department will at liberty to take samples from such material and get tested from an approved laboratory at the cost of the contractor and the material shall be allowed to be consumed only if these tests conducted are in order.
- 2. As all the material are to be arranged by the contractor, the relevant clauses in the agreement/DNIT relating to the stores to be issued by department will not be applicable.

## ANNEXURE – II

## Cement/Steel Register Particular of issue

Particular of receipt of \_\_\_\_\_

Date	Qty. / O.B	Source of receipt with main store permit.	Total	Qty. issued	Qty. returned at the end of day	Qty. Actual used	Closing Balance	Item of work executed	J.E.'s Initials	Signature of contractors/ representative	Checking Engineer in charge
1	2	3	4	5	6	7	8	9	10	11	12

Contractor witness Registrar

Contractor Witness <u>Registrar</u>

#### **ANNEXURE-D**

#### **ITEM NO 5**

(Para 27.4 of P.W.D Specifications 1963)

On the completion of any work whether executed on through rates, labour rates of Department labour, the consumption shall be prepared for such materials, the actual quantities issued to work shall be compared with shall be compared with theoretical worked out quantities on the basis of consumption factor given in chapter 27 of common schedule of rates. The consumption of materials for different items will normally, confirm to the quantities given in that chapter, However if there is any excess or short consumption of materials, the following procedure should be adopted unless otherwise specified.

#### (a) Excess consumption of material

No action shall be taken if the actual consumption does not exceed the theoretical consumption the percentage detailed below.

- (i) For works costing up to Rs. 2\_lacs
   (ii) For works costing from Rs. 2\_lacs to 5\_lacs
   5% of total theoretical quantity.
   4% of total theoretical quantity.
- (iii) for works costing more than Rs. 5 lacs 3% of total theoretical quantity.

This variation will not be taken as matter of routine and will have to be properly justified in each case by Engineer-in-charge. If the actual consumption exceeds the theoretical consumption by more than the permissible limits given above, recovery shall be made for the excessive consumption of material beyond the permissible limits detailed above at penal rate provided in the contract from the contract and disciplinary action may be taken against the University/department officials, as the case may be where the excess consumption in the opinion of the Registrar, BFUHS, Faridkot is substantially high, he shall bring such case to the notice of University higher authority for further action whose decision in all such cases will be final.

## (b) FOR SHORT CONSUMPTION OF MATERIALS

Where the actual consumption of materials is short by percentage detailed below or less, no action shall be taken when the works is executed on the labour rate or departmentally.

For works costing up to Rs. 21acs
 For works costing from Rs. 21acs
 Far works costing more than Rs. 51acs
 Far works costing more than Rs. 51acs
 Far works costing more than Rs. 51acs

This variation will not be taken as matter of routing and will have to be properly justified in each case by the Engineer-in-charge where the work is done on through rate basis, the recovery of costs of material, thus saved shall be made from the contractor at the issue rate, when the consumption of material is short by more than the permissible percentage detailed above and the work is being done on through rate basis, the rates of the items shall be reduced or where it is not possible to determine the exact item on which short materials has been the cost of the material shall be recovered from the contractor at issue rate upto permissible limits and at panel rates there after provided in the contract. When the work is done departmentally or on labour rates and the consumption is short by more than the permissible percentage detailed above, the Registrar shall investigate the cause of such short consumption and shall bring to the notice of the Vice Chancellor of this University. All such cases, for such action against defaulting officials and contractors as he may deem fit. The decision of the Vice Chancellor of this University in this matter shall be final. It shall also be determined whether the stability of structure is affected adversely by short consumption of materials and in case where it is likely to be ml the work shall be rejected. The decision of the Vice Chancellor of this University in this regards shall be final.

- (c) For major projects involving weight batching actual variation will be ascertained and fixed by project authorities.
- (d) The cost of work shall be considered as based on C.S.R. 2010 plus ceiling premium.

#### **ADDITIONAL CONDITIONS:-**

- 1. The Contractor shall quote the overall excess or below or at par the NIT amount. Item rate will not be accepted. For payment purpose the quoted percentage shall be applicable uniformly to the rates of items described in the bill of quantity.
- 2. The prime Civil contractor will engage/identify his sub contractor for execution of Mettaled Road work, internal Public Health works, internal Electrical works having valid enlistment for executing the road work/water supply/sanitary engineering works, electrical works and he should have satisfactorily qualification criteria of similar nature of work as per contractor data. An undertaking will be given by the prime contractor in this regard as per Annexure-F
- The description of all the above items is subject to all notes and clarification included in the Common Schedule of Rates-2010 and of Pb. PWD specification latest edition corrected up to date.
- 4. Agenda & Corrigendum issued by the Chief Engineer Pb. PWD B& R from time to time upto date will be applicable for the purpose of measurement/Payment.
- 5. The payment will be made after deducting Income Tax, VAT, Labour Cess as applicable by the rules.
- 6. The contractor shall carryout the mixed design if required for the relevant item of concrete from a reputed institution/laboratories as approved by the Engineer at his own expenses. Prior approval of Engineer is to be taken before the samples (Cement, Coarse & Fine Aggregates) sent to the institution/laboratories for mix design. The design mix required may be with or without admixtures. The decision of Engineer-In-Charge final and binding above. Nothing extra will be paid on this account.
- 7. Cost of binding wire, wastage of steel is included in the rate and shall not be paid separately.
- 8. The material will be arranged by the contractor
- Amount/Quantity of any item can be increased or any item can be omitted or Substituted as per actual requirement at site of work as per approval of the Engineer-In

  - Charge. No claim in this regard will be entertained.
- 10. Nothing extra will be paid due to loss/damages caused by rains, floods, war, epidemic strike of the department officials or any other Act of God or any other cause what so ever.
- 11. The quantities given against respective item are arbitrary subject to actual as per approved designs/Drawings.
- 12. The work is required to be completed strictly as per the scope of NIT approved drawing irrespective of Qty, and amount of agreement as desired by the Engineer-In-charge.
- 13. No claim on account of paucity of funds, change in Priority or any other causes what so ever will be entertained and the Contractor/firm will have no right to go on for Arbitration on this account.

#### **TECHNICAL SPECIFICATIONS**

#### A. Building work:

- The work shall be executed as per Punjab PWD specifications amended up to date supplemented
  with relevant Indian Standard Code of Practice relating to building works shall be followed for the
  execution of the building works as per details in architectural drawings, structural drawings and
  details of finishing items included therein.
- 2. For RCC work steel shuttering or any plate Shuttering should be used.
- 3. The Joinery-work will be got executed as per detailed drawings supplied by the Architect engaged by the University and instructions issued by the Engineer-In-charge, Nothing extra on this account will be entertained.
- 4. The rubbing and polishing shall be done to granolithic granite finish.
- 5. (a) The contractor will have to set up fully equipped quality control laboratory duly equipped with necessary laboratory equipment at his own cost near the site of work /plant site and the tests required for quality control will be got done at the cost of contractor conforming to the tests mentioned in the quality control hand book/ specifications relating to each item of work.
  - (b) The quality control will be exercised/ observed by the Contractor /Engineer as per guidelines stipulated in hand book of quality control for construction of road and runways published by IRC (latest edition on the day of tenders) or in specifications.
  - (c) Four tests for quantity of bitumen in mixed materials shall be carried out in each kilometer length of material laid.
- B. Concrete Roads & parking
- 1. The work will be executed as per PWD Specifications/IRC Code of Practice, Guidelines and Standards and instructions issued from time to time including layout plans, levels, gradient and slopes described in the drawings as and where required as per site conditions. The materials and workmanship of best quality are to be employed for execution of the work and instructions of the Engineer are to be complied with. The latest edition of the Specifications/Standards 30 days prior to date of submission of bid shall be followed.
- 2. (a) The payment of earth work shall be made on the basis of cross section which should be signed by the tenderer before the commencement of work.
  - (b) The final X-sections shall be measured in the presence of the tenderer and signed in token of acceptance on completion of work.

#### D. Electrical works:

- The electrical works will be executed as per Punjab PWD specifications amended up to date supplemented with relevant Indian Standards and Code of Practice relating to internal electrical services, fittings, external lighting etc. as per detailed drawings and details included in items as per bill of quantities.
- 2. The work shall be carried out strictly in accordance with in the Punjab PWD Specifications amendment upto date for electrical works and also according to the instructions of the Engineer of the work. It any item is not available in Punjab PWD Specification, relevant ISI specifications shall be followed. Latest edition of ISI shall be applicable where ever ISI standards have been mentioned.
- 3. Any material desired to be got tested by department shall be supplied free cost by agency. In case the material fails to meet required specifications, testing charges will be borne by agency.
- 4. Power supply and water supply required for work, shall be arranged by the agency for installation and testing of the equipment at the site of work. All tools and tackles required for handling of equipment and material at the site of work as well for their assembly and erection including necessary test instruments shall be arranged by the agency.
- 5. The contractor will be responsible for any damage cause to P&T or Electricity cable or any other Estate services during execution of work. The debt/claim raised by P&T and Electricity department for such damages will be recoverable from him.
- 6. 6 pin 15 Amps sockets shall be used in all power plug controls in place of 3 pin sockets and nothing extra shall be payable on this account.
- 7. Contractor shall be required to provide suitable thimbles or turned sockets or glands at ends of P.V.C cables where the same are to be fitted in switches, motor plates, bus bar chamber if so required without any addition of cost. Rates given in the attached schedule are inclusive of this work.
- 8. The contractor where ever necessary, will have to provide deep type semi recessed/recessed surface inspection boxes, as the case maybe, so that both recessed and on surface pipes could run straight as they come and terminate in box/main switch/ B.D.Bs so as to ensure neat finish. For this no extra payment shall be made.
- 9. The connection to the main switches /B.D.Bs/Bus bar chamber should be with pipe nipples instead of flexible pipe for which neither any extra payment nor any deduction will be made. However the flexible pipe will be allowed to be used with prior approval of the Engineer.
- 10. The connection of earth wire with iron clad switch and iron clad branch distribution fuse board or other metallic cases shall be according to the Indian Electricity Act and the Rules there –under and made by means of suitable cables, sockets soldered at the end of the earth wire. Rates given in the schedule are inclusive of this work.
- 11. The suitable series of M.C.B's shall be used for light load, power load and motor wiring purposes and nothing shall be deducted or paid extra to the contractor on this account.
- 12. The contractor will arrange to provide all switches and B.D.Bs of the same make in each premises., An exception to this, in case of non-availability of some particular number/size of the switches of a particular make being used/intended to be used, can be made with prior approval of the Engineer.

- 13. G.I. pipe should be B-Class of TATA, Jindal make. However the choice of make shall rest with the Engineer
- 14. The breaking up and making good of walls, ceiling and floor etc. shall be done by the contractor at his own cost and to the entire-satisfaction of the Engineer of the work. All the cases and holes made for wiring or other purposes shall be filled in properly and neatly and brought to the original finish according to the entire satisfaction of the Engineer. No extra payment for the same will be made.
- 15. The rates for the wiring light, fan, call bell plug points etc. given in the attached schedule are irrespective of length of the points.
- 16. Looping in system of wiring shall be adopted for all sub-circuit wiring.
- 17. All the pipe work sheet-metal/ iron clad switches branch distribution fuse boards, conduit or strip for light ,fan and plug points ,T.W. board blocks etc shall be painted/varnished both from inside ad out side as the case may be with two coats of approved paint/varnish. Rates given in the attached schedule are inclusive of this work.
- 18. The connection of earth wire with Sheet-Metal/iron clad switch and branch distribution fuse boards or other metallic cases shall be according to the Indian Electricity Rules and made by means of suitable cable socket soldered at the end of the earth wire. Rates given in the attached schedule are inclusive of this work.
- 19. The size of branch distribution boards are designed on the basis of eight points (light, fan, Call bell and light plug) connected to one way of branch distribution boards and in cases of 10/15 Amp. power plug points are to be connected to one way of 32 Amp. B.D.B or one point per way 16 Amp. B.D.Bs. this practice should strictly be followed for connecting points to the ways of B.D.Bs.
- 20. G.l. pipe for earthing purposes only for protection of earthing wires may be of Class 'A' water quality
- 21. Where-ever saddle clamps are used for fixing pipe, same be of 3 mm thick iron sheet width of which shall not be less than the outer diameter of the pipe. Alternatively, suitable size holder bats may be used if desired by the Engineer. Neither any deduction nor any extra payment for the same will be made if the holder bats are used.
- 22. Before energizing the system, the following tests should be given by the contractor, so as to find out the installation conforming to the relevant rules/regulations:
  - Earth resistance test.
  - 2. Earth continuity test of conduit pipe or other iron clad system etc.
  - 3. Insulation test.
  - 4. Polarity test
- 23. All shutters for covering the switches & B.D.Bs should be as per approved drawings.
- 24. The control switch should not installed at a height less than 20 Cm from floor level.
- 25. The body of all the branch distribution fuse boards should be of machine made with 1.60mm thick mild steel sheet.
- 26. Grip fuse units of sheet metal/I.C switches and branch distribution fuse boards should be H.C type so as to have the facility of inter charge ability. Sheet metal/I.C switch should be rewire able type below 200A rating and H.R.C type for 200A and onward rating.
- 27. Brass screws to fix brown bakelite/white glazed or translucent backside painted sheet cover 3 mm thick. This sheet should be fixed by means of flat heads brass machine screws with brass ring washers underneath.

- 28. Welded conduit pipe (Screw type) made from 1.60 mm thick steel sheet as stipulated in the schedule enameled both from inside and outside shall be used. The length of conduit pipe shall be joined by means of screwed sockets so that it shall be electrically continuous throughout. The threads shall be free from grease oil etc. and material of the nature should be allowed to come in contract with the conduits. Sharp edges should not be allowed to remain due to which insulation of conductor is likely to be damaged.
- 29. All the conduit pipe to be used on the work shall be of heavy gauge welded screwed type(ISI marked), conduit pipe upto 32mm dia made of 1.6mm thick M.S sheet and more than 32 mm dia. 2.0 mm thick sheet. For the purpose of checking the gauge of the sheet the under noted weight of various sizes of conduit shall be considered as standard weight and conduit used by the contractor must to these weight.

Nominal size outside	Tolerance on outside	Minimum Outside Dia	Minimum wall	Gauge	Weight per meter
diameter of conduit	diameter.	meter	thickness		(gms)
1	2	3	4	5	6
20	0.3	19.7	1.6	16	735
25	0.4	24.6	1.6	16	935
32	0.4	31.6	1.6	16	1215
40	0.4	39.6	2.0	14	1910
50	0.5	49.5	2.0	14	2660
63	05	62.5	2.0	14	3340

- 30. All conduit used in the work shall be adequately bushed with PVC bushes to prevent a abrasion of insulation of conductor shall also be bonded to earth. This clause however does not apply to small conduit cases installed in the partition wall in PVC individually and PVC sheathed system of wiring were teak wood bushes can be installed and bonding to earth is not necessary.
- 31. Healthy gauge welded conduit pipe less than 20mm dia and higher than 25mm dia shall not be used in such circuit wiring.
- 32. Not more than 4 and 8 wires of 1.5 mm sq.PVC cables shall be encased in 20 mm and 25 mm dia conduit pipe respectively except with the special permission of the Engineer.
- 33. All cover plates whether of inspection boxes or outlet boxes shall be fixed with round head oxidized brass screws. All cast iron inspection boxes and outlet boxes for housing/accessories shall be of threaded type of suitable sizes as approved by the Engineer. Cover plats of round inspection boxes shall be of 1.2 mm thick M.S sheet painted white and 6mm bigger than the outer dia, of the inspection boxes. Cover plates of rectangular and inspection boxes shall be of 1.58 mm thick iron sheet and outlet boxes of 5mm thick bakelite brown/white glazed of translucent back side painted sheet as approved by engineer.

Ceiling roses of semi-recessed type shall only be used in case of conduit pipes and they shall be so fixed-in-such a manner so that canopy fan can effectively cover the same.

- 34. The whole system of conduit in a building shall be erected and the inside of it thoroughly dried of all sweating or dampness by means of drawing in a cloth fixed to steel fish wire through it before the conductors are put into it further before putting conductors in the conduit pipe the earth continuity test of whole the system should be taken by the Engineer. It would the responsibility of the contractor to arrange and give such tests.
- 35. Conduit pipe where already laid for wiring of light, fan call bell and plug points as well as for plug control will be delivered to the contractor, responsibility for erecting the wiring in works in absolutely cleaned condition with painted round inspection boxes and cover and

- the whole system is handed over to the contractor (later) the responsibility to whom wiring work is allotted.
- 36. Bonding of third pin of socket outlet shall be carried out by mean of 4 mm. dia. G.I wires, 2.24mm.dia aluminum wire and 4sq.mm G.I stranded wire, in case of casing and capping P.V.C sheathed recessed conduit pipe and surface conduit wiring respectively with suitable wall socket.
- 37. Watering tank at the CSR rate & specifications be provided on every earth variable.
- 38. Cost of Empty to be spared and suitable erection charges shall be deducted from the contractor.
- 39. The M.C.Bs shall be used of L'series for light load control and out of C' series for power load and wiring purpose and nothing shall be deducted.
- 40. M.S. boxes 16 gauge in place of cast iron can also be used with prior approval of the Engineer in charge and no extra cost of deduction shall be made.
- 41. Where sheet metal distribution boards or M.C.B's and isolators are used, all the conduit pipe/pipes reaching the point shall terminate direct in distribution board it-self and the same shall be fixed by mean of suitable size check –nuts on each on inside as well as outside the board to ensure proper continuing to extra payment or deduction to this effect.
- 42. Where miniature circuit breakers and isolators are used all of their terminals shall be connected only through suitable size thimbles or required shape and size and not direct. All of those lugs/thimbles shall be properly compressed with the crimping tool at the end each cable to avoid and loose connection. No extra payment or deduction to this effect shall be made.
- 43. All the cable, poles and street light fitting etc. To be purchased by the contractor from the manufacturers for installation at the site of works shall be inspect in the premises of the factory it-self by the concerned Sub-Divisional Engineer/executive Electrical Engineers before the material is received is received at site by the contractor. This will be a binding on the contractor to inform the concerned sub-divisional Engineers Executive Electrical Engineers under whom the work is executed while placing orders their levels.
- 44. The firm shall have to supply any documents if so desired by the Engineer-in-charge in support of the authenticity of the makes of the material brought at size.
- 45. The contractor shall be responsible for maintaining the street light including the replacement of lamps, chokes, igniters, starters etc. For a period of one year after the completion of work and final payment shall be released to the contractor only after the work is handed over to the Department compete in all respect.

#### FOR SUB-STATION

- 46. The contractor will provide qualified site Engineer as per site requirement for supervision of electrical installation on day to day basis who will assure the electrical work has been done as per PWD specifications.
- 47. The firm will submit to this office test certificate of material along with copy of bill & guarantee cards.
- 48. The firm will provide one year free service after the date of completion as defect liability period.

## Technical specification for 250 kVA, 415V, 50Hz, 3Phase D-G set

Supply, installation, testing and commissioning of 250kVA, 415V, 50Hz, DG-Set with weather proof acoustic enclosure, AMF panel, LT distribution switch gear panel for providing stand-by source of power supply. (Make Kirloskar, Crompton Greaves, Cummins)

Detailed specification for Diesel engine and Generator set Diesel Engine

The diesel should be vertical cylinder type having 6 cylinders totally enclosed, compression ignition, water cooled (radiator cooled), turbo charged cooled suitable for Power generation application having minimum of 306 BHP capacity to drive the 250 kVA alternator at 1500 rpm under NTP condition confirming to BS 649, complete with all interconnecting piping and the following standard accessories.

- a) Suitable fly wheel.
- b) Flexible coupling
- c) Air cleaner
- d) Radiator heavy duty type
- e) Cooling fan
- f) Water circulating pump
- g) Corrosion resistor
- h) PT fuel pump
- i) Electronic governing control (EGC)
- i) Fuel filter
- k) Fuel shut down solenoid (24Vdc, stop solenoid)
- 1) Lubricating oil filter
- m) Oil cooler
- n) By pass filter
- o) Silencer (Residential type)
- p) Starter
- q) Engine instrument panel with following f

Lubricating oil temperature *f* 

Lubricating oil pressure gauge f

Water temperature gauge f

Hour meter and speedometer

r) The engine should have following f

Safety control trip for low lube oil pressure f

Safety control trip for high lube oil temp. f

Safety control trip for high water temp.

Safety control trip for engine over speed

Contractor Witness Registrar

## **Fuel system**

Fuel (Diesel) system to the engine shall be supplied from a fuel tank. The supplier should provide a fuel tank of 900 liter capacity, including 200 liter reserve capacity to be installed in a weather proof enclosure. The supplier should provide mechanical fuel level indicator with 'Low' and 'High' markings. Also fuel level indication should be provided in the AMF panel with alarm for Fuel level 'low' (if fuel level falls below 200ltrs.) The fuel tank shall be free standing, floor mounting type with mounting brackets, fuel inlet and outlet, air vent, drain plug, opening with cover for direct filling from the top of the tank. Provide suitable fuel pipe lines for suction and return with bends, collars etc. An engine driven booster pump shall be provided to deliver fuel from the supply line to the fuel injector through two numbers of fuel filters.

## **Batteries**

The batteries shall be sized taking in to account the starting load requirement of the D-G set. 2Nos. of 12V, Lead acid batteries, of suitable capacity to start the engine by 24V DC electrical starting Motor without struggling, and with suitable capacity of battery cable. The batteries must be capable to try 3 unsuccessful starts continuously. The batteries have to be placed on a suitable well painted steel stand.

## **Exhaust system**

Engine exhaust system shall consist of exhaust gas driven turbo charger with lagged piping, interconnecting cylinder head out lets with the turbo charger inlet. Exhaust gas from the turbo charger shall be let out through exhaust gas silencer. The exhaust gas silencer, necessary pipes etc., shall be provided by the contractor. Exhaust piping shall be suitably cladded with aluminium sheets, mineral wool etc. The silencer should be of residential type. Flexible connection (expansion joints) shall be provided in the exhaust piping to avoid transmission of vibration from engine to the structure (acoustic and weather proof enclosure etc.). Also the exhaust line with suitable bends, collars, flanges, angle supports and other accessories should be provided. Provide necessary arrangements to avoid entry of rain water, falling dust etc. at the top of the exhaust pipe. The exhaust piping system should be designed and laid upto a height of 5 Meters above the acoustic enclosure or as directed by the NAL authorities to suit the site and environmental condition as per the controller pollution board, standards.

## The Alternator

The Alternator shall be screen protected, drip proof, separately excited system (with PMG) of brush less, continuously rated to give an out put of 200kW/250kVA at 0.8 pf at 415V, 50Hz, 1500rpm,3 phase, 4wire. The alternator should be provided with automatic voltage regulator with voltage regulation of  $\pm$  0.5% (MX321) and is designed, tested for confirming to IS 4772/1992 or IEC 34.

Requirement of alternator

a) kVA rating: 250b) b) kW rating: 200c) Terminal voltage: 415V

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d) Power factor: 0.8 (lag)

e) No. of phases: 3 f) No. of wires: 4

g) Type of excitation: with built in PMG

h) Voltage regulation :  $\pm 0.5\%$ 

i) Frequency: 50Hz

## **AMF** control panel

The automatic mains failure (AMF) panel should be made out of well painted 16SWG sheet steel enclosure with necessary components like mains contactor, control relays, timers, busbars, protective relays, metering, battery charger, indication annunciation system etc should be provided.

- a) The panel shall be floor mounting, cubical type, indoor, dust and worm in proof, totally enclosed, made out of 16SWG sheet steel, having hinged door with removable type bottom gland plates. Bottom frame for concrete floor mounting
- b) Bus-bar should be of 600A capacity tinned copper for all the phases and Neutral with color coded heat shrinkable sleeves. Sufficient capacity of earth bus should be provided on either side of the panel.
- c) The AMF should be operate in Test/ manual / auto mode and 3 attempt starting facility with necessary control relays.

## Requirements in AMF panel f

Four pole Air break contactor for Mains and for Alternator of 630A capacity f

Three over current relay for generator protection (CDV61/62) f

Instantaneous earth fault Rely through Neutral CT (1A-4A) f

Field failure relay YCGF-11A f

HRC fuses for short circuit protection on both mains and for alternator. f

Mode selector switch (Auto / Manual / test / off f

Voltmeter with selector switch 0-500V A.C. Analog type f

Ammeter with selector switch 0-400A, A.C. Analog type f

Line voltage monitor (3phase) with adjustment for presetting the voltage f

Current transformers 400/5A 5P10 for protection and class1 for measuring

Note: The line voltage monitor (LVM) should monitor the voltage condition of the mains supply and bring the D-G set in to operation if the line voltage falls below  $\pm 10\%$  from the rated voltage of 415V. f

kWh meter (energy meter) 3Phase, 4wire unbalanced type f

Suitable capacity of current transformer for Measuring and protection of 15VA class 1 (metering) & 15VA 5P10 for protection *f* 

Power factor and frequency meter f

Built in battery charger with DC voltmeter, DC ammeter selector switch for trickle and boost charge *f* 

Frequency monitor

Apart from the above the panel should have necessary DC/AC aux. relays, control fuses, MCBs, pushbuttons for start, stop, accept, reset, test, emergency, indication lamps for healthy, trip, faulty indication, fuel level low,24Vdc alarm with all indication for various faults. Use minimum of 2.5sq.mm copper wire for control circuit.

## Acoustic and Weather proof Enclosure

Design, fabricate, supply and install out door type acoustic and weather proof enclosure for the healthy operation of 250 kVA D-G set at site. The enclosure should be well fabricated structure using 14 SWG sheet steel on all sides. Provide sufficient working clearance around the D-G set inside the enclosure.

- a) Special acoustic panels of optimum sound attenuation using special aluminium sheets (perforated) and acoustic grade high density wool sandwiched with gypsum.
- b) Self insulated ventilation louvers for proper air aspiration and temperature control with suitable incorporation of special blower / axial fans of heavy duty depending on the on-site fresh air needs.
- c) Corrugated steel frames and sturdy supporting material for housing the panels, effective sealing with the right gasket/ neoprene materials.
- d) Well fabricated / nylon wheeled smooth sliding doors to be provided for easy access to the set. Suitable locking arrangement has to be provided on the doors.
- e) Aesthetic finish ( with intensive painting care ) for perfect integration with the surroundings.
- f) Noise level should be less than  $65 \pm 3$ dB at 3 meter distance from the enclosure.
- g) Acoustic and weather proof enclosure system should be complete in all respect as per prevailing standards.
- h)

  Adequate and suitable lighting arrangement inside the acoustic enclosure shall be made.

Note; Separate DP MCBS with control box to be provided for Lighting and blower fans.

Contractor Witness Registrar

## **LIST OF APPROVED MAKE**

1. ENGINE: Kirloskar, Greaves Cotton, CUMMINS

2. ALTERNATOR: Kirloskar, Crompton Greaves, STAMFORD

3. CONTACTOR: L & T / SIEMENS / ABB

4. CURRENT TRANSFORMER: KALPA / KAPPA

5. INDICATING METER: AE / MECO / ENERCON

6. PROTECTIVE RELAYS: GEC ALSTOM

7. INDICATING LAMPS: VAISHNO / TEKNIC (CLUSTER LED)

8. SELECTOR SWITCHC: SIEMENS / KAYCEE/ L&T

9. SDF & FUSES: L&T/ ABB/ MERLINGERIN

10. PUSH BUTTONS: VAISHNO/ TEKNIC

11. ENERGY METER: ENERCON (DM5240)

12. CABLES: UNIVERSA / CCI / NICCO

13. MCB: MERLINGERIN/ SIEMENS/ L&T HAGER

## **FORMAT**

## AFFIDAVIT/UNDERTAKING\*

1.	I/we, the undersigned, do hereby certify that all the statements made in the required attachments are true and correct.
2.	The undersigned also hereby certifies that neither our firm M/shave abandoned any work under Government of India or Govt. of Punjab nor any contract awarded to us for such works have been rescinded, during last five years prior to the date of this bid.
3.	The undersigned hereby authorize(s) and request(s) any bank, person, firm or corporation to furnish pertinent information deemed necessary and requested by the Department to verify this statement or regarding my (our) competence and general reputation.
4.	The undersigned understand(s) and agree(s) that further qualifying information may be requested, and agrees to furnish any such information at the request of the Department / Project/Work implementing agency.
5.	The undersigned binds himself with all the stipulations of the Bidding Document including period of completion, provision of adequate equipment, personnel and other resources required for completion within the stipulated completion period and agrees to augment them, if found necessary for timely completion of the Project/Work, as desired by the Engineer/Employer.
6.	Affidavit/undertaking of not having been black-listed by any Govt. /Semi Govt. Organization/Corporation at any stage and/or debarred by the department of Punjab PWD (B&R).
7.	The undersigned has never been convicted by any court of law for any of the offences under any Indian/ foreign laws.
	(Signed by an Authorized Officer of the Firm)
	Title of Office
	Name of Firm
	DATE
* To l	pe executed on a non-judicial stamp paper.

Contractor Witness <u>Registrar</u>