(REVISED)
CONTRACT FROM THE EXECUTIVE OF WORKS
GOVERNMENT OF THE PUNJAB

TENDER/CONTRACT DOCUMENTS

Name of Work: -_____

_____

_____

_____

Name of Contractor: - _____

Estimated Cost of Work Rs:-_____

Amount of Earnest Money Rs:-_____

Deposit at Call No:- _____

_____

Treasury Challan No:- _____

_____

Time Limit:- _____

Contractor **In-charge Tender Cell, UAF**

0Stereo LB No, 386 (revised) Agreement No.----------

Stereo I.B No. 389 (revised)

Stereo I.B No. 28(revised)

Stereo I.B No. 29(revised)

UNIVERSITY OF AGRICULTURE, FAISALABAD

ITEM RATE TENDER & CONTRACT FOR WORKS

1	Name of work	**Establishment of Sub-Campus of University of Agriculture Faisalabad at Depalpur-Okara (HEC Funded) (Construction of External Development)**
2	Estimated cost	PKR: **63.01 Million/-**
3	Time for completion	11-Months.
4	Amount of Bid Security	PKR---------- Million (s)
5	Issued to	---------- ----------
6	Pre-tender conference	----------
7	Dead Line for submission of Tender	27-09-2019 up to 10:00am ------
8	Opening of Tender	27-09-2019 up to 10:30am----------
9	Issued by	In charge, Tender Cell, University of Agriculture, Faisalabad. Signature:---------- Date:----------

OFFICE STAMP

Note: The officer opening the tender shall reject the tender which does not bear the stamp and signature of the issued official and which is not submitted by the same contractor to whom the tender form was issued

Contractor **In-charge Tender Cell, UAF**

GENERAL DIRECTIONS FOR THE GUIDANCE OF THE TENDERER

1. These directions are provided to assist the tenderer in preparing and submitting his tender. The tender shall contain all information and data required to be furnished and shall be prepared and submitted in accordance with the instructions set forth herein.

2. All necessary documents, such as copies of specifications (excluding standard specification books, **MRS, 2nd quarter 2018 District Okara**), contract documents, including bill of quantities, estimated scheduled rates and any other documents required in connection with the preparation of tender or execution of works, signed by the engineer-in-charge will accompany the tender form and the cost of such annexed documents will be reflected in the cost of the tender form.

3. The tenderer will not be reimbursed for any costs of any kind, whatsoever, incurred in connection with the preparation and submission of his tender.

4. No single tender shall include more than one work. A tenderer who wishes to tender for two or more works shall submit tender for each work, separately.

5. The memorandum of work tendered for, and the schedule of materials and equipment to be supplied by the engineer-in-charge and the rates at which they are to be charged for (annexed hereto) shall be filled in the office of the engineer-in-charge before the tender form is issued. At this stage the tenderer should ensure that the tender form so issued is complete in all respects.

6. The tenderer shall note that the ultimate responsibility for the quality of work and its conformity with the specifications and drawings rests solely with the successful bidder whose tender is accepted.

7. The tenderer shall, at his own expense, inspect and examine the site and surroundings and obtain for himself, on his own responsibility, all information that may be necessary for preparing the tender and entering into contract, and shall determine and satisfy himself by such means as he may consider necessary or desirable as to all matters pertaining to the tender. The tenderer shall also satisfy himself before submitting his tender as to the nature of grounds, hydrological and climatic conditions, the form and nature of the site, the nature and lay out of the terrain, the availability of labour, water, electric power and transportation facilities in the area. The tenderer shall specially investigate into the sources of materials to be used for the works and satisfy himself about the quality and quantities of materials available for the completion of the work and the means of access to the site, the accommodation he may require and, in general, shall himself obtain all necessary information, as to the risks, contingencies and other circumstances which may influence or affect his tender. The engineer-in-charge shall not assume any responsibility regarding information gathered interpretation or deduction, which the tenderer may arrive at, from the date that may be furnished with the contract documents.

8. (a) The tenderer shall fill up the Bill of Quantities ITEM WISE RATES which he is willing to undertake each item of work. No premium will be quoted by the contractor against non-MRS/item rates, for which the rate and amount has already been filled in by the engineer-in-charge in the bid schedule.

(b) The tenderer shall quote his own unit rate in the Bill of quantities on which he is willing to undertake each item of work.

9. i. The tender shall work out the amount against each item of work in the Bill of Quantities and will indicate the total amount of his tender (including the cost of Non-MRS items rates for which the rate and amount has already been filled in by the engineer-in-charge in the Bill of Quantities) on which he is willing to complete the works. The total amount worked out in the Bill of Quantities shall be entered by the tenderer in his tender as his tender price for the work. In case of discrepancy between amounts in figures and in words, the amount in words shall prevail.

ii. Should any discrepancy be found in the amount of pay items or if a column of amount is found blank after filling in a unit rate, the unit rate filled by the tenderer will be extended in working out of the amount of the tender and the total amount of the bid schedule will be adjusted accordingly.

iii. If a unit rate is left blank, but the amount against the item is filled, the unit rate will be worked out on the basis of the amount divided by the quantity of the item shown in the bid schedule.

iv. If it is found that the tenderer has not entered any unit rate and amount against any of the pay items of the bid schedule, the engineer-in-charge shall fill in the blanks by noting the word "NIL" In such blanks at the time of opening of the tender. Such pay items shall be deemed to be covered by the rates of other items.

v. If the tenderer does not accept the adjusted/corrected amount of tender according to the above provision, his tender shall be rejected and the earnest money forfeited.

10. The tender which proposes any alteration in the works specified in the Bill of quantities or in the time allowed for carrying out the works or any other condition mentioned by the Engineer-in-charge, will be liable to rejection. The tenderer shall sign each and every page of the tender and contract documents, without making any alteration. All enclosures issued with the contract documents, shall be attached with the tender duly signed by the tenderer. Any addition or alteration made after filing the forms shall duly attested by the tenderer. Non-compliance of this condition shall render the tender liable to rejection.

11. The tenderer shall fill in the tender documents, in ink. Errors, if any, shall be scored out, and corrections re-written legibly and attested by the tenderer. Any addition or alteration made after filling the form shall be duly attested by the tenderer. Non-compliance of this condition shall render the tender liable to rejection. Any tender with unattested correction shall be attested by the tenderer in the presence of other tenderers at the time of opening of the tender except that no correction shall be permissible in the rate or amount of the bid schedule or in the tendered price after the opening of the tender.

12. Additional Clause (s) for a particular work shall be typed on separate sheet(s) by the Engineer-in-charge, which will be annexed to the contract documents specifying the number of sheets. The tenderer shall not add or delete any additional clause(s) in the additional clauses sheet (s), provided by the Engineer-in-charge.

13. The quantities mentioned in the Bill of Quantities are estimated quantities, to be used for preparing tenders, and the Engineer-in-charge does not expressly nor by implication agree that the actual amount of works to be performed will correspond therewith. No payment will be made on account of anticipated profits for work covered by the contract which is not performed, nor will any adjustment in the unit rates set forth in the bid schedule be made because of an increase or decrease in the actual quantities from the estimated quantities indicated therein, except as determined in accordance

with the provisions of Clause 42 of the general conditions of contract.

14. No tender without earnest money shall be entertained, earnest money, calculated @ 2% of the estimated cost of the work (rounded suitably), shall be in the form of 'deposit at call receipt'. The earnest money of the unsuccessful tenderers shall normally be returned by the Treasurer, UAF within a week of opening of the tenders and in any case not later than sixty (60) days following the date set for opening of tenders. In the event of the tender being accepted, or receipt for the earnest money forwarded therewith, shall thereupon be given to the contractor. The earnest money of the successful tenderer on execution of the contract covering work will be adjusted towards the amount of security deposit to be retained from the first amount (s) payable to the contractor under the contract.

15. The successful tenderer will be required to enter into a contract, furnish the performance security (where-ever required) and to commence the work within the time specified in the memorandum of work. Should the successful tenderer refuse or fail for any reason to enter into contract, or to furnish the performance security or to commence the work within the time specified in the memorandum of work, it should constitute a just cause for the annulment of the award and in the event of such annulment, the entire earnest money shall be forfeited to Government, as compensation for such default.

16. (i) The tender shall be signed by the person (s) duly authorized to do so. In the event of the tender being submitted by a firm, it shall be signed separately by each member thereof, or in the event of the absence of any partner, it shall be signed on his behalf by a person holding a power of attorney authorizing him to do so. Such power of attorney should be produced with the tender and it must disclose that the firm is duly registered under the Partnership Act, 1932, or any other law in force.
    (ii) The tender submitted by a joint venture of two or more firms shall be accompanied by a document of formation of the joint venture, duly registered and authenticated by competent court, in which shall be stated precisely, the conditions under which it shall function, its period of validity, the person (s) authorized to represent it and accept it obligate, the participation of several firms forming the joint venture and any other information of necessary to permit a full appraisal of its function.
    (iii) A tender submitted by a corporation must bear the seal of the corporation and be attested by its Secretary.
    (iv) In all cases, the tender must be signed by an individual or individuals having powers to legally bind the firm, joint venture, corporation or companies on whose behalf they are signing.

17. Each tenderer shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender and of the rates and prices stated in the bid schedule which rates and prices shall, except in so far as it is otherwise expressly provided in the contract, cover all obligations under the contract and all matters and things necessary for the proper completion and maintenance of the works.

18. The tenderer may modify or withdraw his tender after submission, provided that the modification or notice of withdrawal is received in writing by the engineer-in-charge prior to the prescribed deadline for submission of tenders. The tenderer's modification or notice of withdrawal shall be prepared, sealed, marked and delivered, with the inner envelopes additionally marked "MODIFICATION or WITHDRAWAL as appropriate

.No tender may be modified subsequent to the deadline for submission of tender. Withdrawal of a tender during the interval between the deadline for submission of tenders and the expiration of the period of tender validity i.e. sixty (60) days as specified by the tenderer in the Form of Tender may result in the forfeiture of the tender security.

19. The tenderer shall submit the original Tender Documents complete in all respects and keep a copy of the tender for his own record. The original should be sealed in an inner ant an outer envelope, duly marking the envelops as "ORIGINAL". The inner and outer envelops shall (a) be addressed to engineer-in-charge (b) and bear the following identification: Tender for (Name of Contract), (Reference Number of Tender), and the words "DO NOT OPEN BEFORE (Time and Date, set for opening)".The inner envelops shall indicate the name and address of the tenderer to enable the tender to be returned unopened in case it is declared to have been received late or is otherwise unacceptable. If the outer envelope is not sealed and marked and instructed above, the Engineer-in-charge will assume no responsibility for the misplacement or premature opening of the tender submitted. A tender opened prematurely because of improper identification will be rejected.

20. The tenderer shall indicate in the space provided in the tender his full and proper address at which notice may be legally served on him and to which all correspondence in connection with his tender and the contract is to be sent.

21. The presentation of a tender implies full acceptance on the part of the tenderer of these instructions and all other conditions set forth in the contract document.

22. Any tender received by the Tender Cell after the deadline for submission offenders prescribed in the Notice Inviting Tenders will be returned unopened to the tenderer.

23. The Engineer-in-charge or his duly authorized officer (not below the rank of Assistant Engineer) will open tenders in the presence of intending tenderers or their authorized agents, who may be present at the time. The officer opening the tender will announce the names of the tenderer, tender rates and the presence of requisite tender security.

24. Promptly after the opening of Tenders, the Engineer-in-charge will undertake a detailed evaluation of tenders. The Engineer-in-charge will determine whether each tender is substantially responsive to the requirements of the tender documents and conforms to all the terms, conditions and specifications of the tender documents without material deviation or reservation. If a tender is not substantially responsive to the requirements of the tender documents, it will be rejected by the engineer-in-charge and may not subsequently be made responsive by the tenderer having corrected or withdrawn the non-confirming deviation or reservation.

25. Except for information to be read out by the Engineer-in-charge at the time of opening tenders in accordance with Para 23 above, no information relating to the examination, clarification, evaluation and comparison of tenders and recommendations concerning the award of contract shall not be disclosed to tenderers or other persons not officially concerned with such process. Any effort by the tenderer to influence the process of examination, clarification, evaluation and comparison of tenders, and in decisions concerning award of contact, may-result in the rejection of his tender.

26. To assist in the examination, evaluation and comparison of tenders, the Engineer-in-charge may ask tenderers individually for clarification of their tenders, including breakdowns of unit rates. The request for clarification and the response shall be in writing or by cable, but no change in the price or substance of the tender shall be sought, offered or permitted except as required to confirm the correction of arithmetical errors discovered by the Engineer-in-charge during the evaluation of the tender.

26 (A) In case the total tendered amount is less than 5% of the approved estimated (DNIT) amount, the lowest bidder will have to deposit additional performance security from the Scheduled Bank ranging from 5% to 10% and so on as under, within 15 days of issuance of notice or within expiry period of bid, whichever is earlier.

TOTAL TENDERED AMOUNTBELOW CORRESPONDING ESTIMATED COST.	ADDITIONAL PERFORMANCE SECURITY.
5%	5%
6%	6%
7%	7%
8%	8%
9%	9%
10%	10%
And so on	And so on

27. The Engineer-in-charge shall have the right of the rejecting all or any of the tenders without assigning any reason thereof. The Engineer-in-charge will not be bound to award the contract to the lowest or to any other tenderer.

28. The unit rates and prices entered in the bid schedule will be the rates at which the contractor will be paid (subject to the adjustment specified in clause 55 of the annexed conditions) and shall be deemed to include all costs of performing the work, including income tax, super tax and/or other charges, duties and taxes of the Government, autonomous, semi-autonomous and local bodies, profits and costs of accepting the general risk, liabilities and obligations set forth in or implied from the contract.

29. Prior to the expiration of the period of tender validity (60 days) prescribed in the Tender Form or any extension thereof that may have been granted by the tenderer, the Engineer-in-charge will notify the successful tenderer by cable and confirm in writing by registered letter that his tender has been accepted. This letter of acceptance shall name the sum which will be paid in consideration of the execution, completion and maintenance of the works as prescribed in the contract, (hereinafter called the contract price). The notification of award will constitute the formation of the contract.

30. At the time, the Engineer-in-charge notifies acceptance of the tender to the tenderer he will send the tenderer the Form of Agreement provided in the tender documents, incorporating all agreements between the parties. Within fifteen (15) days of receipt of the of Agreement, the successful tenderer shall furnish the performance security (10% of the Contract Price) and sign the contract m the presence of the Engineer-in-charge.
31. After the successful tenderer has signed the -contract famished adequate performance security the Engineer-in-charge will notify to the un-successful tenderers that they were unsuccessful.

32. The completion period will be reckoned from the date of delivering the award or the handing over of the site to the contractor, whichever is later.

33. A copy of the contract agreement may be obtained by the contractor at his own cost.

TENDER FOR WORK

To

The *Incharge, Tender Cell*

Dear Sir,

I/We.....

(Name of the contractor)

The undersigned tenderer, having examined the conditions of contract, specification, drawing bid schedule and addenda Nos……..... there to, for the work of ……

(Name of the work)

and the works associated therewith, and having examined the site of the above named works, or having caused the site to be visited OR our behalf by my/our competent and reliable agent, and having satisfied myself/ourselves as to all conditions under which the above named work must be performed, hereby offer to execute, complete and maintain the whole of the above mentioned work including its ancillary works associated therewith, in accordance with the said contract documents, including the addenda indicated above, at tender price of Rs. ..... (Rupees).....

Or such other sums as may be ascertained in accordance with the said conditions of contract and the rates, and the prices set forth in the bid schedule.

2. As security for the due performance of the undertaking and obligations of this tender, I/We submit herewith a deposit at call receipt No..... dated. In the amount of Rs.……(Rupees.....from…… the.....Bank .....Branch .....) drawn in favor of Treasurer UAF as earnest money, the full value of which will be absolutely forfeited to Government, without prejudice to any other rights or remedies of the said *Government*, should I/We withdraw or modify' the tender within its validity period of sixty (60) days, following the date of receipt of tender.
3. I/We understand that if my/our tender is accepted, the foil value of the earnest money as attached with the tender shall be detained by University towards the amount of security deposit specified in clause 48 of the said conditions of contract and item (d) of the Memorandum of work.
4. Should this tender be accepted by you; I/We hereby undertake: -
   (a) To sign ail the necessary documents for entering into a contract agreement in the form set out In the contract document within fifteen (15) days following your notification of such acceptance.
   (b) To commence the work within the stipulated time named in item (f) of memorandum hereto annexed following the date of issuance of your order to proceed with or the handing over of the site, whichever is later and in the event of my/our failure to do so, the entire amount of earnest money deposited by me/us for which deposit at a call receipt is enclosed herewith, is to be absolutely forfeited to the University. On the commencement of work, I/We hereby also agree to abide by and fulfill all the terms or provisions of the said conditions of the contract annexed hereto so far as applicable and in default thereof, to forfeit and pay to the University the sums of money mentioned in the said conditions.
   (c) To complete and deliver the whole work comprised in the contract within the time stipulated in

item No. (g) of the Memorandum hereto annexed, subject to such extension in the time limit as may be granted under the conditions of contract.

(d) the furnishing of performance security under item (h) of the memorandum annexed hereto, in the sum equal to 10 (ten) percent of the cost of the work in same form sum equal to 10 (ten) percent of the cost of the work in the same form and on the same condition as are prescribed by and to the satisfaction of the Engineer-in-charge.

5. I/We also agree that when materials and/or equipment for the work are provided by the t, the rates to be paid for them shall be as provided in Appendices annexed hereto.
6. I/We agree to abide by this tender for the period of sixty (60) days following the date set for receiving of tenders and it shall remain binding upon me/us and may be accepted by you at any time before the expiration of that period.
7. Unless and until a formal agreement is prepared and executed, this tender, together with your written acceptance thereof, shall constitute a binding contract between us, and shall be deemed for all purposes to be the contract agreement.
8. I/We understand that you are not bound to accept the lowest or any tender you may receive, and that you will not defray any expenses incurred by me/us in tendering.

Thanking you,

Yours faithfully,

(Signature of Tenderer)

Dated this …….Day NAME…….....

Of ……..…….20… *Address……

I hereby accept the above tender on behalf of the Government.

(Signature of Incharge, Tender Cell)

Contractor **In-charge Tender Cell, UAF**

MEMORANDUM OF WORK

a)	General Description	**Establishment of Sub-Campus of University of Agriculture Faisalabad at Depalpur-Okara (HEC Funded) (Construction of External Development)**
b)	Estimated Cost	PKR: **63.014Million/-**
c)	Amount of earnest money to accompany the tender (to be furnished by the tenderer in the shape of "deposit at call" from a scheduled Bank of Pakistan)	Rs. **1,260,200/-**
d)	Percentage of security deposit to be retained form the bills.	
	i) On the amount of work done up to Rs.5.0 million	Ten (10) percent
	ii) On the amount of work done beyond Rs.5.0 million.	Five (5) percent
e)	Mobilization period	Fifteen (15) calendar days
f)	Time allowed for completing the work after the expiry of mobilization period	----------calendar months
g)	Amount of performance security in the form of Bank Guarantee (see contract conditions clause 7 and General direction 26 (a)	Five (05) percent of the accepted tender price in the case of tenders with cost of exceeding Rs.50.00 millions and as per general condition 26(a) for all tenders.
h)	Time period of maintenance (after the issuance of certificate of completion)	One Year

i) <u>No Cost Escalation in the project</u>

Contractor **In-charge Tender Cell, UAF**

SUMMARY OF COST

ESTABLISHMENT OF SUB-CAMPUS OF UNIVERSITY OF AGRICULTURE FAISALABAD, AT DEPALPUR - OKARA
(HEC FUNDED)

(Construction of External Development)

S/N	DESCRIPTION	AMOUNT (Rs)
1	Construction Of Roads	
2	External Electrification	
3	Tube Well And Tube Well Chamber	
4	Water Distribution System	
5	Sewerage Collection System	
6	Boundary Wall & Check Posts	
7	Add 5% PRA	
8	**Grand Total :**	
	IN MILLION	

Contractor **In-charge Tender Cell, UAF**

ESTABLISHMENT OF SUB-CAMPUS OF UNIVERSITY OF AGRICULTURE FAISALABAD, DEPALPUR - OKARA (HEC FUNDED)

EXETRNAL DEVELOPMENT

BILL OF QUANTITIES

CONSTRUCTION OF ROADS

Bill No. 1: EARTHWORK AND ALLIED ACTIVITIES:

S. No	MRS (2018) Reference	Description of Works	Quantity	Unit	Rate (PKR)	Rate Quoted by The Contractor	Amount (PKR)
B1-01	C3-45a-P33	Cutting and removing trees within a distance of 100 ft. (30 m) upto 2½ ft. (760 mm) girth.	100.00	Each	891.35		
B1-02	C3-46-P33	Uprooting stump and removing within 100 ft. (30 m) from 2 ft. to 6 ft. (600 to 1800 mm) girth.	100.00	Each	1,142.45		
B1-03	C18-5-P108	Providing and laying road edging of 3" (75 mm) wide and 9" (225 mm) deep brick on end, complete in all respects.	500.00	Per Rft	32.15		
B1-04	C3-47a-P33	Jungle clearance and removing within 100 ft. (30 m): light	12,149.87	0% Sft	152.35		
B1-05	C3-5i-P27	Earthwork in ordinary soil for embankments lead upto 100 ft. (30 m), including ploughing and mixing with blade grade or disc harrow or other suitable equipment, and compaction by mechanical means at optimum moisture content and dressing to designed section, complete in all respects: 95% to 100% maximum modified AASHTO dry density.	392,282.81	0% cft	5,420.85		
B1-06	C3-17-P29	Transportation of earth all types when the total distance, including the lead covered in the item of work, (Lead 7 Km) (as per actual borrow pit lead)	392,282.81	0% cft	#REF!		

Contractor **In-charge Tender Cell, UAF**

B1-07	C3-25i-P31	Compaction of earthwork with power road roller, including ploughing, mixing, moistening earth to optimum moisture content in layers, etc. complete: 95% to 100% maximum modified AASHTO dry density. (NGC)	83,198.08	0% Cft	765.75		
		SUB TOTAL BILL NO 1					
Bill No. 2: SUB BASE AND BASE COURSE							
S. No	**MRS (2018) Reference**	**Description of Works**	**Quantity**	**Unit**	**Rate (PKR)**		**Amount (PKR)**
B2-01	C18-3aii-P107	(a) Providing and laying sub-base course of stone product of approved quality and grade, including placing, mixing, spreading and compaction of sub-base material to required depth, camber, grade to achieve 100% maximum modified AASHTO dry density, including carriage of all material to site of work except gravel and aggregate: (ii) Crushed stone aggregate.	34,893.76	% Cft	4,028.70		
B1-02	C18-3b-P107	(b) Subsequent carriage of gravel and crushed stone aggregate. (Lead 185 Km from Sargodha Quarry)	34,893.76	% Cft	#REF!		
B2-03	C18-4a-P108	(a)Providing and laying base course of crushed stone aggregate of approved quality and grade, and supply and spreading of stone screening, including placing, mixing, spreading and compaction of base course material to required depth, camber and grade to achieve 100% maximum modified AASHO dry density, including carriage of all materials to site of work except gravel and aggregate.	34,893.76	% Cft	6,928.00		
B2-04	C18-3b-P107	(b) Subsequent carriage of gravel and crushed stone aggregate. (Lead 185 Km from Sargodha Quarry)	34,893.76	% Cft	#REF!		
		SUB TOTAL BILL NO 2					

Contractor **In-charge Tender Cell, UAF**

Bill No. 3: BITUMINOUS WORK & RESURFACING

S. No	MRS (2018) Reference	Description of Works	Quantity	Unit	Rate (PKR)		Amount (PKR)
B3-01	C18-6-P108	Providing and laying bituminous priming coat, using 10 lbs. kerosene oil and 10 lbs. binder per 100 Sft. or 0.5 Kg kerosene and 0.5 Kg binder per square metre.	69,787.52	% Sft	1,028.45		
B3-02	C18-10aiii-P110	(a) Providing and laying plant premixed bituminous carpet, including compaction and finishing to required camber, grade and density. (iii) 4% Bitumen (1½" inch thick) (ABC)	69,787.52	% Sft	5,673.68		
B3-03	C18-7-P108	Providing and laying bituminous tack coat, using 10 lbs. of bitumen per 100 Sft (0.49 Kg of bitumen per sq.m.)	69,787.52	% Sft	576.20		
B3-04	C18-10aiii-P110	(a) Providing and laying plant premixed bituminous carpet, including compaction and finishing to required camber, grade and density. (iii) 4.5% Bitumen (1½" inch thick) (Wearing Course)	69,787.52	% Sft	6059.55		
		SUB TOTAL BILL NO 3					
Bill No. 4: Ancillary Works							
S. No	**MRS (2018) Reference**	**Description of Works**	**Quantity**	**Unit**	**Rate (PKR)**	**Column2**	**Amount (PKR)**

Contractor **In-charge Tender Cell, UAF**

B4-01	C10-43-P70	Providing and laying Tuff pavers, having 7000 PSI, crushing strength of approved manufacturer, over 2" to 3" sand cushion i/c grouting with sand in joints i/c finishing to require slope . complete in all respect. (50% Grey / 50% Coloured)					
		60-mm thick	1,000.00	P. Sft	97.70		
B4-02	C10-03-P66	Providing, laying, watering and ramming brick ballast 1½" to 2"(40 mm to 50 mm) gauge mixed with 25% sand, for floor foundation, complete in all respects.	330.00	% Cft	4,300.30		
B4-03	C13-34-P90	Painting traffic lane 5" (125 mm) wide with reflective chlorinated rubber (CR) paint including glass beads complete in all respect.	6,732.10	Per Rft	10.35		
B4-04	C18-18ivb-P111	Providing and erection at site of work:- iv) Sign post of M.S. plate 1/8" thick (3 mm) b) Warning/Direction/Informatory.	40.00	Each	5,066.70		
B4-05	NS	Providing and laying PCC Kerb Stone 300 x 450 x 150mm (3500 Psi) (As per approved manufacturer) complete in all respect as approved by the Engineer Incharge.	100.00	Per Rft	250.00		
		SUB TOTAL BILL NO-4					

Contractor **In-charge Tender Cell, UAF**

ESTABLISHMENT OF SUB-CAMPUS OF UNIVERSITY OF AGRICULTURE FAISALABAD, AT DEPALPUR - OKARA (HEC FUNDED)

BILL OF QUANTITIES

EXTERNAL ELECTRIFICATION

Sr No.	REF. Nos CH/ITEM	Item. No.	Description	Unit	Estimated Quantity	Rate (Rs.)	Rate Quoted by The Contractor	Amount (Rs.)
		PART- A - STREET LIGHT						
1	E-1011	1.1	Supply & fitting of LED flood light 100 watts IP65 BVP 161 Philips Made	No.	26	23010		
	Rate Analysis Attached as Appendix 'C' Page No-1	1.2	Supply and erection of street light pole bracket 30mm (1-1/4") G.I pipe 2 meter long with 2 No. G.I pole clamp on P.C Poles including Nuts & bolts complete in all respect as Approved by the Engineer Incharge. **Make Techno Engineering, Bashir Pipes, Jamal Pipe.**	No.	2	4905		
	Rate Analysis Attached as Appendix 'C' Page No-2	1.3	Supply and Erection of 25 ‘ (7.6 Mtr) hight Octo Conical with Single Arm pole as shown on drawing with foundation completes in all respects. For Road Lights. **Make Techno Engineering, Bashir Pipes, Jamal Pipe.**	No.	32	39856		
	Approved N.S	1.5	Providing and installation of LED Street Light 120 Watt (Philips).	No.	119	44917		
2			**Power Cable / Wiring Cable**					
		2.1	**a) 4 Core PVC/PVC Copper Conductor**					

Contractor **In-charge Tender Cell, UAF**

			Supply & Installation of PVC insulated, PVC sheathed 4 core 660/1100 volt grade cable, armoured with G.I wire 16 SWG.**(M/s. Pakistan Cables Ltd,Pioneer Cables,Newage Cables).**					
	13-d(iii)/24	i	4 core 50 mm2. armoured Cable (From Transformer to Main Switch)	Rft	150	1014.95		
	Rate Analysis Attached as Appendix 'C' Page No-3	i	4 core 16 mm2. armoured Cable (From Main Switch Board to External Lighting DBs)	Rft	900	445.14		
	Rate Analysis Attached as Appendix 'C' Page No-4	ii	4 core 6 mm2. armoured Cable. (From External DB to Light Poles & From Light Poles to Light Poles)	Rft	3500	191.10		
		2.2	**a) 1 Core PVC/PVC Copper Conductor**					
	11-(v)/24	i	1 core 6 mm2	Rft	900	36.01		
	12-(i)/24	ii	1 core 16 mm2	Rft	150	77.90		
	11-(iv)/26	iii	1 core 4 mm2	Rft	3500	25.95		
		2.3	**a) 3 Core PVC/PVC Copper Conductor**					
	13-b-(iii)/24	i	Supply & Installation of 3-core 2.5 mm2 PVC insulated and PVC overall sheathed 600/1000 Volt grade copper cable **(M/s. Pakistan Cables Ltd,Pioneer Cables,Newage Cables)**. from junction box to the fitting through the hollow of pole.	Rft	2975	51.15		

Contractor **In-charge Tender Cell, UAF**

3			**Distribution Board**					
			Supply, installation, connection of wires cables, and commissioning of distribution boards to be installed on floor, made of 16 SWG M.S. sheet with hinged door, handle, catcher, earthing bar and neutral link with necessary holes, nuts, bolts, washers, earthing of DB door with braided copper internal wiring , PVC cable glands for incoming and out going wires/cables, 2 earthing terminals designation label engraved on plastic sheet of appropriate size to be pasted on the front side of DB, 3 phase indication lamps of colour red, yellow, blue, make Hager, Legrand (France) SV122 SV128 SV126 moulded case circuit breaker with overload and short circuit protection (MCCB) to be installed on the incoming side, Icu not less than 10 KA , and for miniature circuit breakers Icu 6 KA make GE (Europe/ USA), Legrand (France), ABB (Italy), Terasaki (Japan) having overload and short circuit protection, including cost of all necessary fixing accessories complete in all respects.to be manufactured by any one of the manufacturers **Siemens, PEL,Techno Engineering, Tariq Electric, Bilal Engineering.**					

	Rate Analysis Attached as Appendix 'C' Page No-5	3.1	**DBLEX-1 & DBLEX-2 & DBLEX-3.** Road lighting control panel complete with all accessories like MCCBs (GE, T-max series), bus bars, magnetic contactors, photo electric switches etc. in 16 SWG sheet steel construction with IP 43 & 65 protection class, canopy, door, locking arrangement etc. 01 No. Incoming 60 Amp MCCB TP, RC=35 kA 06 No. Outgoing 20 Amp MCB TP, RC=6 kA 02 No. 32 Amp. Magnetic contactors 2 No. photo-electric switchs a) 1 No Digital ammeters 0-250 amp. b) 3 No indication lights c) 1 No Digital voltmeter with Demand d) 3 Ph N & Earth copper busboars e) Internal wiring & Line - up terminal etc f) Brass cable glands/ accessories g) Panel steel grid painted along with locking arrangement h) IP 43 panel	No.	3	91662		
			Water Tight Box (IP-64) MAIN SWITCH INSTALLED NEAR TRANSFORMER (MS-TRAF)					

Contractor **In-charge Tender Cell, UAF**

			Fabrication, supply at site, installation at designated location, testing and commissioning of Main Switch (M.S) comprising of cubicles, frame made of sheet steel 14 SWG and doors of 14 SWG, with flexible earthing straps, degreased and de-rusted, finished with electro-static powder coating of 50 micron thickness in approved color, panel housing to comply with protection class IP-64, outdoor floor mounting, in free standing design, with hinged door, lockable handle, all auxiliaries, internal wiring, designation labels on MCCBs, earthing bar, numbering beads on the control wires, panel suitable for system Voltage 415 V, 50 Hz, 3 Phase and neutral, bus bars of 99.8% purity electrolytic copper, including cost of cable termination lugs, brass cable glands for incoming & outgoing cables, wiring from breakers, indication lamps, instruments and control all accessories complete in all respects. Make Siemens, PEL,Techno Engineering, Tariq Electric, Bilal Engineering.					
	Rate Analysis Attached as Appendix 'C' Page No-6		Incoming from Transformer: 1 No. 150 Amps 3 pole Moulded Case Circuit Breaker (MCCB) with overload and short circuit protection RC: 25 KA. Copper Bus Bars of electrolytic copper 99.9% size not less than 50x10mm for each phase and neutral (3P+N) on incoming side of breaker of facilitate connection cables.	No.	3	49727		
4		4.1	**<u>Earthing System</u>**					

Contractor **In-charge Tender Cell, UAF**

	Rate Analysis Attached asAppendix 'C' Page No-8		Supply, installation, commissioning and testing of the earthing system including cost of the following 3 meter long of 5/8"dia tinned copper electrodes. up-to water level including cost of boring and lowering complete with clamp and 2 X 25mm2 stranded copper conductor from copper rod to ground surface in 1-1/2" **uPVC Pipe class D** with watering cap manhole with cover as per detail complete in all respects.	Job	15	47498		
		4.2	**Earth Connecting Point**					
	Rate Analysis Attached as Appendix 'C' Page No-7		Supply, installation of earth connecting points consisting of copper plate 12" long, 2" wide and 1/2" thick to be installed as and where shown on drawings on the wall of the trenches, complete with fixing arrangement, brass nuts bolts complete in all respects to facilitate connections of Incoming copper strips and Outgoing CPC.	Nos.	15	3278		
		4.3	**Manhole**					
	Rate Analysis Attached as Appendix 'C' Page No-9		Constructing of 2'x 2'x 2.5' (internal size) including earth work 4" thick PCC 1:4:8 9" thick first class burnt brick work in 1:5 mortar, plastered inside in 1:5 cement sand and 4" thick RCC cover with grade 40 reinforcement.	Nos.	15	7238		
						TOTAL PART- A		
		PART- B - H.T OVERHEAD TRANSMISSION LINE						
1-B			**HT.POLE 45' HIGHT**					
	As per WAPDA Rates 2019	1.1	Providing and installation of 45 feet - H.T Spun	Nos.	13.0	33,488		

Contractor **In-charge Tender Cell, UAF**

	As per WAPDA Rates 2019	1.2	Foundation of 45'H.T steel structure	Each	13.0	17,000		
	As per WAPDA Rates 2019	1.3	11KV STEEL x-ARMS WITH BRACES	Nos	39.0	4,760		
	As per WAPDA Rates 2019	1.4	Providing and fixing of Pin insulators	Nos	73.0	207.0		
	As per WAPDA Rates 2019	1.5	Providing and Fixing of Disc insulators	Nos	22.0	1013.0		
	As per WAPDA Rates 2019	1.6	Providing and Fixing of Insulators Pin	Nos	73.0	385.0		
	As per WAPDA Rates 2019	1.7	Providing and installation of Dead End clamp for ACSR Dog	Nos	11.0	217.0		
	As per WAPDA Rates 2019	1.8	Providing and installation of Eye Nut	Nos	11.0	83.0		
	As per WAPDA Rates 2019	1.9	Providing and installation of Double Arming Bolt (510X20MM)	Nos	11.0	137.0		
	As per WAPDA Rates 2019	1.10	Providing and installation of Anchor Shackles	Nos	11.0	102.0		
	As per WAPDA Rates 2019	1.11	Providing and installation of P.G Connector T-220	Nos	33.0	287.0		
	As per WAPDA Rates 2019	1.12	Providing and fixing of Danger Plate With Fitting	Nos	25.0	132.0		
	As per WAPDA Rates 2019	1.13	Providing and fixing of Barbed Wire	Kg	125.0	185.0		
	As per WAPDA Rates 2019	1.14	Providing and fixing of Nut & Bults 5/8 x 2"	Nos	489.0	30.0		
	As per WAPDA Rates 2019	1.15	Providing and fixing of Nut & Bults 5/8 x 10"	Nos	13.0	74.0		
	As per WAPDA Rates 2019	1.16	Providing and fixing of Round Warshers	Nos	489.0	7.0		
	As per WAPDA Rates 2019	1.17	Providing and fixing of Square Warshers	Nos	44.0	7.0		
	As per WAPDA Rates 2019	1.18	Providing and fixing of Stay Assembly Complete	Nos	22.0	1760.0		

Contractor **In-charge Tender Cell, UAF**

	As per WAPDA Rates 2019	1.19	Providing and fixing of Stay Strip	Nos	22.0	63.0		
	As per WAPDA Rates 2019	1.20	Providing and fixing of GS Wire 10mm	Kg	280.0	132.0		
	As per WAPDA Rates 2019	1.21	Providing and fixing of Earthing Unit complete	Nos	25.0	934.0		
	As per WAPDA Rates 2019	1.22	Providing and fixing of Construction of Earthing unit	Nos	25.0	750.0		
	As per WAPDA Rates 2019	1.23	Providing and fixing of ACSR DOG conductor	Mtr	3608.0	107.0		
	As per WAPDA Rates 2019	1.24	Providing and fixing of Cross Arm Wooden Chir	Each	6.0	1593.0		
	As per WAPDA Rates 2019	1.25	Providing and fixing of Drop Out Cut Out, Single Insulator (D-FUSE FITTING)	Each	18.0	5936.0		
	As per WAPDA Rates 2019	1.26	Providing and fixing of 11KV DROPOUT CUTOUT SINGLE	Each	18.0	765.0		
	As per WAPDA Rates 2019	1.27	Providing and fixing of Plate Form Double Structure	Each	5.0	10903.0		
	As per WAPDA Rates 2019	1.28	Providing and fixing of 31 feer - L.T Spun	Each	10.0	13160.0		
	As per WAPDA Rates 2019	1.29	Providing and fixing of Foundation of 31'L.T steel structure	Each	10.0	8000.0		
	As per WAPDA Rates 2019	1.30	Providing and fixing of Spool Insulator	Each	372.0	33.0		
	As per WAPDA Rates 2019	1.31	Providing and fixing of LT Ant Conductor	Mtr	4725.0	53.0		
	As per WAPDA Rates 2019	1.32	Providing and fixing of LT Wasp Conductor	Mtr	1098.0	85.0		
	As per WAPDA Rates 2019	1.33	Providing and fixing of HT Rabbit Conductor	Mtr	120.0	68.0		
	As per WAPDA Rates 2019	1.34	Providing and fixing of P.G Conector T-110	Each	18.0	97.0		
	As per WAPDA Rates 2019	1.35	Providing and fixing of P.G Conector T-150	Each	48.0	141.0		

Contractor **In-charge Tender Cell, UAF**

			TOTAL PART- B					
		PART- C -TRANSFORMER						
1-C		1.1	**Transformer (200 KVA) For Residences & VISITING SCIENTIST HOSTELS, ACADEMIC BLOCK**					
	As per WAPDA Rates 2019		Supply, insatllation, commissioning and testing of Oil cooled type Step down Pole Mounted Power Transformer **200 KVA**,11/0.415 kV, to be installed on pre prepaired Pad, including with following:- lifting hooks, thermometers, LT & HT bushing, tap changer, imported double float buchholz relay, 2 earthing terminals, roller wheels, connecting terminals for cables M.S box on transformer in order to cover completely L.T side, all necessary materials required for connections on H.T & L.T side, rated voltage 11000/415/230 V impedance 6.25% or as specified by ICE system earth: Delta / Star, neutral solidly earthed, complete in all respects. **Make PEL, Siemens, Transfopower**.	Nos.	2.0	428157.0		
		1.2	**Transformer (100 KVA) For GIRLS & BOYS HOSTEL, ADMIN LIBRARY BLOCK, MULTI PURPOSE HALL**					

Contractor **In-charge Tender Cell, UAF**

	As per WAPDA Rates 2019		Supply, insatllation, commissioning and testing of Oil cooled type Step down Pole Mounted Power Transformer 1**00 KVA**,11/0.415 kV, to be installed on pre prepaired Pad, including with following:- lifting hooks, thermometers, LT & HT bushing, tap changer, imported double float buchholz relay, 2 earthing terminals, roller wheels, connecting terminals for cables M.S box on transformer in order to cover completely L.T side, all necessary materials required for connections on H.T & L.T side, rated voltage 11000/415/230 V impedance 6.25% or as specified by ICE system earth: Delta / Star, neutral solidly earthed, complete in all respects. **Make PEL, Siemens, Transfopower**.	Nos.	4.0	266252.0		
2-C	As per WAPDA Rates 2019	2.1	3 - C Cable 2-AWG 10 KV (35mm2)	Mtr	55.0	1453.0		
	As per WAPDA Rates 2019	2.2	(O/D) 3/C 2/0 AWG	Rft	6.0	7400.0		
						TOTAL PART- C		

Contractor **In-charge Tender Cell, UAF**

ESTABLISHMENT OF SUB-CAMPUS OF UNIVERSITY OF AGRICULTURE FAISALABAD, DEPALPUR - OKARA (HEC FUNDED)

BILL OF QUANTITIES

TUBE WELL AND TUBE WELL CHAMBER

Item No.	MRS BI-Annual 2018 Ref. Ch# / Item#	Description	Unit	Qty	Unit Rate (Rs)	Rate Quoted by The Contractor	Amount (Rs)
A		**TUBE WELL**					
1	23/5 (a-i), (b-i)	Direct Rotary / Reverse Rotary drilling of bore for tubewell in all type of soil except shingle/gravel and rock					
		a) from ground level to 250 ft. below ground level ii) 15" to 18" (500 to 650 mm) i/d	P/Rft	250	521.65		
		b) exceeding 250 ft. depth below ground level ii) 15" to 18" (500 to 650 mm) i/d	P/Rft	150	521.65		
1.1	N.S	Taking soil samples after every 10 feet depth or from each strata change, testing and submission of complete results of strata analysis.	LS	60	50.00		
1.2	23/7	Providing strong substansially built box of wood 4"x 21/2" x 4" box with compartments lock and locking arrangment for preserving of strata from bore hole.	Each	1	13,766.20		
1.3	N.S	Providing and installation of Bail plug 10 ft long Fiber Glass of 10" internal dia and 6mm wall thickness i/c its locking fiber strip complete in all respect as per given design.	Each	1	16,000.00		

Contractor **In-charge Tender Cell, UAF**

1.4	N.S	Providing and installing, 10" i/d Fiber Glass strainer of 6mm thick in tube well borehole including fibre glass strips, complete in all respects	P/Rft	60	1,675.00		
1.5	N.S	Providing and installing, 10" i/d Fiber Glass blind pipe of 6mm thick in tube well borehole including fibre glass strips, complete in all respects	P/Rft	260	1,500.00		
1.6	23/14 (k)	Providing and installing M.S. blind pipe (housing pipe) socketed/ welded joint, M.S. reducer (where necessary) in tubewell bore hole, including sockets, special sockets, studs etc. complete;					
		(k) 15" i/d, ¼" (375 mm i/d 6 mm) thick housing pipe	P/Rft	80	2,824.40		
1.7	23/15 (a)	Providing and installing P.V.C. blind pipe, B.S.S. Class `B', in tubewell bore hole, including sockets and solvents and jointing with strainer, etc. complete. Two nos. gravel feeding pipe a) 3" i/d (75 mm)	P/Rft	50	134.72		
1.8	N.S	Providing fitting, centerlizers of 1½" width and 3/16" thickness including nuts and bolts/ welding, on 14" dia pump housing pipe, 10" dia fibre glass pipe, complete in all respects	Each	15	1,200.00		
1.9	23/18	Shrouding with graded pea gravel 3/8" to 1/8" arround tubewell in bore hole.	Cft	400	113.05		
1.10		Providing and placing stiff plastic clay puddle seal of appropriate consistency in the annular space between the borehole and pump housing pipe above the given shrouding level i/c ascertaining required depth of its bottom and top levels by taking soundings.	P/Rft	20	1,000.00		
1.11	23/17 (i)	Development and Testing (D&T) at 150 % of the rated capacity of tubewell for a minimum period of 72 hours. D&T will include pumping, disposal and backwashing as approved by the Engineer incharge.	Per Hour	72	1,184.15		

Contractor **In-charge Tender Cell, UAF**

1.12	N.S	Providing and fixing of MS cap to cover the pump housing.	Each	1	1,500.00		
1.13	N.S	Providing and fixing MS round bar 1/2" dia in concrete thrust block of 3' x 3' x4' using 1:2:4 concrete, complete in all respects	Each	1	25,000.00		
1.14	N.S	Chemical and becteriological testing of water samples. 3 Nos	No	1	25,000.00		
1.15	N.S	Provide, install, test and lower vertical shaft water lubricated deep well turbine pump of Groundfos or KSB of 1.0 cusecs capacity against a pumping head of 160 ft. including lowering of about 80 ft. column pipe alongwith 30 H.P. squirrel cage inducation motor (Siemens make or approved equivalent) alongwith control panel, flow meter, star delta starter, gate valves, check valves, air release valves, pressure guage complete in all respects as per drawings or as directed by the Engineer incharge.	No	1	3,000,000.00		
					Sub Total Cost (A)		
2	**TUBE WELL CHAMBER**						
2.1		**EXCAVATION**					
	3/21 (b)	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and rammiing lead upto one chain (30 m) and lift upto 5 ft. (1.5 m) (b) in ordenary soil	Cft	1000	6.43		
2.2		**P.C.C**					
	6/3 (b)	Cement concrete brick or stone ballast 1½ " to 2" (40 mm to 50 mm) gauge, in foundation and plinth:-)(b) Ratio 1: 4: 8	Cft	100.00	130.02		
2.3		**BRICK MASONRY**					
	7/4 (i)	Pacca brick work in foundation and plinth in:- i) Cement, sand mortar:- Ratio 1:5	Cft	600.00	141.67		
2.4		**DAMP PROOF COURSE**					

Contractor **In-charge Tender Cell, UAF**

	6/33 (ii)	Providing and laying damp proof course of cement concrete 1:2:4 (using cement, sand and shingle), including bitumen coating :- (a) with one coat bitumen and one coat polythene sheet 500gauge ii) 2" thick (50 mm)	Sft	80.00	52.93		
2.5		**WALLS IN SUPERSTRUCTURE**					
	7/5 (i)	Pacca brick work in super structure complete in all respect as per drawings and specifications. i) cement, sand mortar Ratio 1:4 Add extra labour on item No. 5 for brickwork	Cft	700.00	162.12		
2.6		**REINFORCED CEMENT CONCRETE WORK**					
	6/6 a(i) (3)	Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):- (a) (i) Reinforced cement concrete in roof slab, beams, columns lintels, girders and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:- (3) Type C (nominal mix 1: 2: 4)	Cft	550.00	361.90		
2.8		**REINFORCEMENT**					
	6/9 (c)	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):- c) deformed bars	Kg.	1200	134.00		

Contractor **In-charge Tender Cell, UAF**

2.9		**Roof Treatment**					
	9/35 (iii)	Providing and laying roof insulation, comprising of single layer of tiles 9"x4½"x1½" (225x113x40 mm) grouted with cement sand mortar 1:3 laid over 2" (50 mm) thick earth (including mud plaster) over thermopore sheet, over polythene sheet 300 gauge over a layer of bitumen, ver a layer of bitumen, complete in all respects:- iii) Thermopore sheet 1" (25 mm) thick	Sft	400.00	85.00		
2.10	9/5	Single layer of tiles 9"x4½"x1½" (225x113x40 mm) laid over 4"(100 mm) earth and 1" (25 mm) mud plaster without Bhoosa, grouted with cement sand 1:3 on top of RCC roof slab, provided with 34 lbs. per %Sft. or 1.72 Kg/Sq.m bitumen coating sand blinded.	Sft	400.00	65.20		
3		**FLOORS**					
3.1		**Brick Ballast**					
	10/3	Providing, laying, watering and ramming brick ballast 1½" to 2"(40 mm to 50 mm) gauge mixed with 25% sand, for	Cft	600.00	43.00		
3.2		**P.C.C**					
	6/3 (b)	Cement concrete brick or stone ballast 1½ " to 2" (40 mm to 50 mm) gauge, in foundation and plinth:-) (b) Ratio 1: 4: 8	Cft	150.00	130.00		
3.3		**Concrete and Terrazzo**					
	N.S	Providing and laying terrazzo floor 1-1/2 inches (38 mm) thick consisting of 1/2 inch thick topping 1:2 (1 grey cement 2 approved marble chips No. 0 to 4) in ground floor over a base of 1:2:4 (one cement, two sand and four crushed bajri) cement concrete 1inch thick laid in panels or pattern including form work, curing, rubbing and polishing complete.	Sft	250.00	60.00		
3.4		**Marble Strip**					

Contractor **In-charge Tender Cell, UAF**

	10/42/a	Providing and fixing marble strip of any shade for dividing the mosaic flooring into panels Size 1½" x 3/8" (40 x 10 mm)	Rft.	250	6.60		
3.5		**Khuras**					
	9/15	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm)	Each	2.00	497.55		
3.6		**Cement Sand Plaster**					
3.6.1	11/10 (b)	Cement plaster 3/8" (10 mm) thick under soffit of R.C.C. roof slabs only, upto 20' height. b) 1:3	Sft	400.00	220.74		
3.6.2	11/7 (b)	Cement plaster 1:3 upto 20' (6.00m) height:- b) 1/2" (13 mm) thick i/s pump house	Sft	10.00	21.69		
3.7		**Cement Pointing**					
	11/18/a	Cement pointing struck joints, on walls, upto 20' (6.00 m) height Ratio 1:2	Sft	1000.00	19.69		
3.8		**White Wash**					
	11/25/a/iii	White washing - three coats	Sft	1600.00	2.78		
3.9		**Painting**					
	13/5/d/i	Painting new surface:- d) Prepariang surface and painting guard bars, gates of of iron bars, gratings, railing (including standards, barces , etc.)and in similar open work:- 3 coats, gray painting.	Sft	150.00	4.83		
3.10		**Steel Door**					
	25/31	Making and fixing steel grated door with 1/16" thick (1.5mm) sheeting, including angle iron frame 2"x2"x3/8 (50x50x10 mm) and ¾" (20 mm) square bars 4" (100 mm) centre to centre, with locking arrangement	sft	80	104.95		
3.11							
a	9/20 (a)	Cast iron rain water downpipe fixed in position, excluding heads and shoes, but including painting and clamps, etc:- a) 4" dia (100 mm) cast iron down pipe.	Rft.	24.00	217.25		

Contractor **In-charge Tender Cell, UAF**

b	9/21	Rain water down pipe cast iron head fixed in place, including cost of clamp holdfast and painting.	Each	2.00	533.05		
c	9/22	Shoes, bends or offsets for cast iron rain water down pipe, including fixing and painting.	Each	2.00	323.60		
3.12	N.S	Provinding and fixing MS Gider 5'x10" and 16 feet long	Each	1.00	58,400.00		
3.13		**Windows and Ventilators**					
a	25/42 (a)	Providing and fixing steel windows using M.S. sheet (16 SWG) moulded tubular pipe 1½"x1½" (40x40mm) for frame and 1¼"x1¼" (30x30mm) for leaves including M.S. square bars ¼"x¼" (6x6 mm) welded around each panel of frame, 5 mm thick glass panes fixed with double M.S. square tubular pipe 3/8"x3/8" (10x10mm) (22 SWG) beading with U' shaped rubber lining, brass fitting, holdfast, including painting three coats complete in all respects. a) For openable panels fixed with wire gauze 24 SWG, 12x12 mesh and glass panes ¼" (6 mm) thick.	Sft.	66.00	334.60		
b	N.S	Electrification of tubewell chamber complete with distribution board, electrical point and fitting as shown on the drawing complete in all respect	Lump sum		40,000.00		
c	N.S	Providing and fixing Chain Pulley Block of 5 ton capacity with 5 meter length of chain as shown in drawing and as approved by the Engineer Incharge. The cost also includes the labour and tool plant.	Each	1.00	15,000.00		
					Sub Total Cost (B)		
Total Cost for One (01) No. Tube Well & Tube Well pumping Chamber							

Contractor **In-charge Tender Cell, UAF**

ESTABLISHMENT OF SUB-CAMPUS OF UNIVERSITY OF AGRICULTURE FAISALABAD, DEPALPUR - OKARA (HEC FUNDED)

BILL OF QUANTITIES

WATER DISTRIBUTION SYSTEM

Sr. No.	MRS BI-Annual 2018 Ref. Ch# / Item#	Description	Unit	Quantity	Unit Rate (Rs.)	Rate Quoted by The Contractor	Amount (Rs)
1	3/44	Excavation of trenches in all kinds of soil, except cutting rock, for water supply pipelines upto 5 ft. (1.5 m) depth from ground level, including trimming, dressing sides, leveling the beds of trenches to correct grade and cutting pits for joints, etc. complete in all respects.	Cft	12,126	4.60		
2	3/13 (a)	Rehandling of Earthwork complete in all respects as per specifications and as directed by the Engineer Incharge a) Lead up to a single throw of kassi	Cft	7,276	1.50		
3	3/24 (a)	Compaction of earthwork (soft, ordinary or hard soil) :- a) Mixing, moistening earth to optimum moisture content in layers for compaction, etc. complete.	Cft	6,063	0.73		
4	7/30	Supplying and filling sand under floor; or plugging in wells	Cft	2,917	16.93		

Contractor **In-charge Tender Cell, UAF**

5	23/42 (a,i,ii)	Providing, laying, cutting, jointing, testing and disinfecting High Density Polyethylene Pipe (HDPE 100) working presure pipe in trenches. complete in all respects:-.PN-8 (SDR-21)					
		(i) 3" (90mm)	Rft	4420	142.85		
		(ii) 8" (200mm)	Rft	350	609.40		
6	N-S	Providing and installing of sluice (gate) valves of B.S.S. 1218 quality for HDPE pipe line (Including cost of jointing material) complete in all respects. (Rate analysis attached)					
		3" internal dia	Each	4	18,713		
		8" internal dia	Each	2	55,439		
7	N-S	Providing and fixing PVC special of B.S.S. Class `B' (such as bend, tee cross collar, reducer, tail piece, flanged spigot, cap, flanged socket, taper, angle branch, plug etc.) complete in all respect. (5% of total pipe cost)					
8	N-S	Construction of Valve chambers for following types as per drawing and specifications complete in all respects. (Rate analysis attached)					
		Sluice Valve	Each	6	36,036.0		
9	N-S	Providing and installation of indication plates as per drawings. (Rate analysis attached)	Each	6	4,403.00		
10	6/5 (f)	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate): (f) Ratio 1: 2: 4 For Thrust Block	Cft	15	228.32		

Contractor **In-charge Tender Cell, UAF**

11	N.S	Provide & install Polyethelene service connection of approved make for Houses including Male bend , PP End Cap, PP Saddle Clamp and Brass Ferrule complete in all respect. It includes Male bend 18mm x3/4", PE End cap 18 x 18 mm, PE saddle clamp 160 mm x3/4", Brass Ferrule 3/4" (18mm), Tee (Female) 18 mm x 3/4", Tee (Male) 18 mm x 3/4", Ball Valves 3/4" With Handle and Union 3/4" Dia. It also includes Carriage loading and unloading. (Rate analysis attached)	Each	10	1,772.00		
12	N.S	Design and construction of R.C.C high level reservoir 20,000 imperial gallon over head water tank. Making 10% additional allowance for free board with 72 feet height of base slab from ground level. A cantilever of 2 ft. will be projected all around reservoir at the level of base slab with 2.75 ft. G.I railing (1-1/2: id) with 2 horizontal rows & vertical post 2" c/c 5 nos plat from with silver panting and the cost of following i) The R.C.C (1:1-1/2:3) shall be used of deformed bars grade = 60 ii) Provision of lighting of conductor with arrestor set an dropper tape. iii) Paddlo with appropriate ratio will be used for RCC of bowl.	Each	Per Gallon	220		
	Total Cost (Rs)						

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ESTABLISHMENT OF SUB-CAMPUS OF UNIVERSITY OF AGRICULTURE FAISALABAD, DEPALPUR - OKARA (HEC FUNDED)

BILL OF QUANTITIES

SEWERAGE COLLECTION SYSTEM

Item No.	MRS BI-Annual 2018 Ref. Ch# / Item#	Description	Unit	Quantity	Unit Rate (Rs.)	Rate Quoted by The Contractor	Amount (Rs.)
1		**EXCAVATION AND BACKFILL**					
1.1	3/42	Earthwork excavation in open cutting for sewer and manhole as shown in drawings including shuttring and timbring dressing to correct section and dimensions according to template and levels and removing surface water in all type of soil execpt shingle gravel and rock.					
		Up to 7 feet depth	Cft	18,711	5.35		
2		**BRICK BALLAST**					
2.1	NS	Providing and laying of brick ballast (1-1/2 to 3/4")"under pipe with levelling, ramming etc. complete in all respect to the satisfaction of the Engineer.	Cft	1,871	35.00		
3		**PIPE LAYING**					

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3.1	21/1 (iii)	Providing and laying R.C.C. pipe, moulded with cement concrete 1:1½:3, with spigot socket or collar joint, etc including cost of reinforcement, conforming to B.S. 5911 Part I: 1981, Class "L" including carriage of pipe from factory to site of work, lowering in trenches to correct alignment and grade, jointing, cutting pipes wher necessary, finishing and testing, etc., complete					
		225 mm (9") i/d	Rft.	1,247	343.20		
4		**MANHOLES**					
4.1		Construction of circular masonary manhole of 4 ft. dia (Type - A) for 9" to 15" sewer size having following depths including manhole cover and frame, rungs, complet in all respects as per drawings and satisfaction of the Engineer					
i		9" dia					
		upto 6 depth	Nos	26	35,100		
5		Providing , installation, testing and comissioning of 0.5 cfs submerssible sewage pumps for existing disposal station (KSB) or equivalent of 50 ft head including electric 5 HP motor (Siemens or equivalent). The rate includes motor control unit, connection with discharge header & electric wiring , complete in all respect.	Nos	1	1,500,000		
				TOTAL			

Contractor **In-charge Tender Cell, UAF**

ESTABLISHMENT OF SUB-CAMPUS OF UNIVERSITY OF AGRICULTURE FAISALABAD, DEPALPUR - OKARA (HEC FUNDED)

BOUNDARY WALL

BILL OF QUANTITIES

Item No.	MRS ITEMS NO	Description of Items	Unit	Qty	Rate (Rs.)	Rate Quoted by The Contractor	Amount (Rs.)
MRS, 2nd BI-ANNUAL-2018 (1st July-2018 to 31st December-2018) DISTRICT OKARA							
		SCHEDULE ITEMS-A					
		Earth Work					
1	CH:3/21(b)	Excavation in foundation of building and other sructures, including debelling,dressing,refilling around structure with excavated eart,watering and ramming lead upto one chain 100ft and lift upto 5 ft.in ordinary soil.	1000 Cft	7,890.00	6,434.20		
		Plain and Reinforement Concrete					
2	CH:6/5	Cement concrete brick or stone ballast 1½ " to 2" (40 mm to 50 mm) gauge, in foundation and plinth:-					
		(i) Ratio 1: 4: 8	100 Cft	1,315.00	13,002.75		
3	CH:6/5	Cement concrete plain including placing, compacting , finishing and curing complete (including screening and washing of stone aggregate)					

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		(i) Ratio 1: 2: 4 (2" Coping)	100 Cft	820.56	22,832.05		
	CH:6/6	Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):-					
4	(a)(ii)	Reinforced cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls; etc and other structural members other than those mentioned in i) above not requiring form work (i.e. horizental shuttering) complete in all respects:-					
		Type C (Ratio 1: 2: 4)	Per/ Cft	1,117.53	266.70		
5	(a)(i)	Reinforced cement concrete slabs, beams, girders, Lintels and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects;-					
		Type C (Ratio 1: 2: 4)	Per/ Cft	1,676.52	361.90		
		Steel Reinforcement					

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6	CH:6/9	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars) (ii) Deformed bar (Grade 60)	100Kg	8,557.09	13,223.50		
		Brick Work					
7	CH:7/-4i	Pacca brick work in foundation and plinth in:-Cement, sand mortar:-Ratio 1:6	100 Cft	1,972.50	17,558.45		
8	CH:7/5i	Pacca brick work other than building upto 10ft. (3 m) height i) cement, sand mortar:-Ratio 1:5	100 Cft	7,209.21	18,818.25		
		Surface Rendring					
9	CH:11/11(c)	Cement plaster 1:5 upto 20' (6 m) height and 3/4" (20 mm) thick.	100 Sft	15,873.14	2,370.10		
10	CH:11/18(b)	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:- b) ratio 1:3	100 Sft	9,612.29	1,851.05		
11	CH:13/5(c)	Preparing surface and painting of doors and windows any type (including edges) 3 Coats New Surface	100 Sft	210.00	1,562.65		
		Metal Work					

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12	CH:25/31	Making and fixing steel grated door with 1/16" thick (1.5mm) sheeting, including angle iron frame 2"x2"x3/8" (50x50x10 mm) and ¾" (20 mm) square bars 4" (100 mm) centre to centre, with locking arrangement.	Per/Sft	105.00	1,004.95		
		Total "A"(Schedule items)					
		2-NON SCHEDULE ITEMS-B					
		Rezor Wire					
1	N.S	Providing and fixing of rezor wire fence 2' dia ring 3 nos. in 1' on boundary wall consisting of M.S Angle iron 1-1/2"x1-1/2"x1/4" @8' c/c as per arrangement shown on drawings provided by consultants for fixing square bar 1/2"s1/2", 2 Nos. horizontal complete in all respects as approved by the Engineer Incharge.	Rft	5,915.00	350.00		
2	N.S	Construction of check post as per design approved by the client complete in all respects.	Job	6.00	150,000.00		
		Total "B"(Non Schedule items)					
		Net Total (A+B)					

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