

**NAME OF THE WORK:** - Const. of Delivery Patient Waiting Room at Darpanarayanpur PHC.

The tender document contains 65 sheets of schedule of work, detailed tender call notice and technical Specification.

**Block Development Officer  
Ranpur Block**

Issued vide Money Receipt No.

. Dt.

**Block Development Officer  
Ranpur Block**

## CONTENTS

| <b>Section</b>   | <b>Items</b>                       | <b>Page No.</b> |
|------------------|------------------------------------|-----------------|
| <b>Section-1</b> | <b>Invitation of Bid</b>           | <b>4 – 17</b>   |
| <b>Section-2</b> | <b>General Rules and Direction</b> | <b>18 – 23</b>  |
| <b>Section-3</b> | <b>Condition of Contract</b>       | <b>24 – 40</b>  |
| <b>Section-4</b> | <b>Technical Specification</b>     | <b>41 – 56</b>  |
| <b>Section-5</b> | <b>Bill of Quantity</b>            | <b>57 – 62</b>  |
| <b>Section-6</b> | <b>Other Information</b>           | <b>63 –65</b>   |

## **RECORD OF RECEIPT OF TENDER**

*(To be filled in at the time of opening of tender)*

1. Date of Receipt :
2. Date of Opening :
3. No. of pages in the tender Document :
4. Details of E.M.D. with remarks ( Pledged/Unpledged) :
5. Whether valid PAN Card furnished :
6. Whether Contractor's Registration Certificate furnished :
7. Whether valid caste Certificate furnished :
8. Whether valid GST clearance Certificate furnished :
9. Whether valid Income Tax Clearance Certificate furnished :
10. Differential amount ( if quoted less than the estimated cost) :
11. Affidavit :
12. Work Experience Certificate :
13. Ownership proof of Machineries and Plant :
14. Details of works in hand :
15. Performance record of the Contractor :
16. No. of over writings if any with : Remarks (Attested / Un-attested) :
17. No. of interpolations :
18. No. of omissions if any :
19. If rates quoted in words and Figures tally :

**Signature of Tenderer /  
Authorized agents**

**Block Development Officer  
Ranpur**

**SECTION – 1**  
**INVITATION OF BID**

**OFFICE OF THE PANCHAYAT SAMITI  
RANPUR BLOCK**

**BID-IDENTIFICATION NO: 01/ 2021-22**

The Block Development Officer, Ranpur, At/PO-Ranpur, Dist-Nayagarh on behalf of Governor of Odisha invites sealed tenders on **percentage** rate basis as detailed in the table from registered class of contractors registered with State Govt. and Contractors of equivalent grade/ class registered with central Govt./MES/ for execution of Civil works with experience in similar nature of work for drawal of agreement in P1 contact form of Govt. of Odisha.

Five numbers of works pertaining to Block development Officer, Ranpur has been put to tender with the estimated cost mentioned against each work. The work list and other terms & conditions are mentioned in DTCN copy.

The sale of the bid documents shall start from **Dt. 16.06. 21 from 10.00 AM** and close on **Dt.30.06.21** up to **5.00 P.M.** on all working days during office hours at Block Development Office, Ranpur and submitted at Block development office Ranpur by post or by drop-box. The bid documents will be received up to **Dt.02.07.21 up** to **3.00 PM** on all working day during office hour at Block Development Office, Ranpur. The bids will be opened on **Dt. 05.07.21 at 11.30 AM** in the office of the undersigned and Committee in the presence of bidders who wish to attend or their authorized representative if any. If the office happens to be closed on the date of receipt of the bids as specified in the bids, it will be received and opened on the next working day at the same time and venue. The undersigned will not be responsible for any postal delay if any or non-receipt of paper in time and reserve the rights to reject any or all tenders without assigning any reason thereof.

**Block Development Officer  
Ranpur Block**

**OFFICE OF THE PANCHAYAT SAMITI RANPUR**

**BID-IDENTIFICATION NO: 01/ 2021-22**

The Block Development Officer, Ranpur on behalf of Governor of Odisha invites percentage rate bids for the construction of works detailed in the table from registered class of contractors registered with State Govt. and Contractors of equivalent grade/ class registered with central Govt./MES/Railways for execution of civil works, on production of definite proof from the appropriate authority.

| Sl. No | Name of work   | Estimated Cost (in Rs.) | Class of Contractor | Bid Security 1% E.M.D in (Rs.) | Cost of document in (Rs.) | Period of completion |
|--------|--|-------------------------|---------------------|--------------------------------|---------------------------|----------------------|
| 1      | 2  | 3                       | 4                   | 5                              | 6                         | 7                    |
| 1.     | Const. of Labour room at Darpanarayanpur PHC under NHM in the District of Nayagarh for the year 2020-21" | 2501967.00              | 'D' & 'C'           | 25197.00                       | 6000.00+1080 (GST)        | Six months           |
| 2.     | Const. of Delivery Patient Waiting Room at Darpanarayanpur PHC.  | 1550569.00              | 'D' & 'C'           | 15506.00                       | 6000.00+1080 (GST)        | Four Months          |
| 3.     | Const. of AEE Quarter at Block Office,Ranpur   | 1104443.00              | 'D' & 'C'           | 11404.00                       | 6000.00+1080 (GST)        | Four Months          |

**Terms & Conditions**

**1. Cost of Tender paper:** Tender documents can be obtained from the Office of the Block Development Officer, Ranpur at on payment towards the cost of tender papers as mentioned above (Non-Refundable) in shape of Bank Draft/Banker Cheque from any Nationalized bank drawn in favour of Block Development Officer, Ranpur payable at Ranpur

**2. Sale of Tender Paper:** Tender documents can be obtained from office of the Block Development Officer, Ranpur during office hours on working days from 16.06.2021 to 30.06.2021 for the above works and Cost of Tender paper will be submitted by in shape of Bank Draft/Banker Cheque from any Nationalized bank drawn in favour of Block Development Officer, Ranpur payable at Ranpur.

**3. Date of receipt and mode of submission of tender papers:** The tenderers have to submit sealed tender papers i.e. (BOQ Template and P1 Agreement Copy) in complete shape either by Dropping in Drop box at Office of Block development officer or in shape of Registered Post/Speed post only addressed to Block development Officer, Ranpur, At/Post-Ranpur, District-Nayagarh on or before 02.07.2021 (15.00 hrs.).The undersigned will not be responsible for any postal delay if any or non-receipt of paper in time. The tenders must super scribe the name of the work project on sealed envelopes.

**4. Date of Opening of Tender paper:** The tender papers shall be opened on 05.07.21 at 11.30 AM in the presence of the tenderers or their authorized representatives if any having written authorization for the purpose and the tender committee.

**a. Earnest Money Deposit:** The E.M.D. in shape of Post Office Short term Deposit/Term deposit/ N.S.C/KVP/ Deposit receipt of any nationalized bank duly pledged in favour of Block Development Officer, Ranpur payable at Ranpur. Tender documents without required amount of E.M.D will not be considered and transfer or adjustment of E.M.D is also inadmissible

**5. Documents to be attached:** The following documents should be furnished with the tender papers failing which the tender will be liable to rejection.(a) E.M.D.pledged in favour of the Block Development Officer, Ranpur (b) Attested copy of Contractors Registration Certificate (c) Attested copy of PAN card (d)Attested copy of GST Registration certificate (e) Attested copy of caste certificate issued by competent authority in case of SC/ST contractors desirous of availing preference (f) Differential less amount DD/Bankers Cheques/ Pay order / Bank Draft /TDR issued from any Nationalized Scheduled bank to be furnished at the time of dropping tender without which tender is liable for rejection (g) Affidavit as regards the fact of availing award of work without submission of EMD/ISD during the current financial year in case of Engineering Contractors desirous of availing exemption of E.M.D. (h) Work Experience Certificate regarding similar nature of work if any to be furnished from competent authority for Bridge/CD works. (i) Evidence of ownership proof of machineries and Plant (j) Attested Income Tax Clearance Certificate.

**6.** The bidders are instructed to deposit the differential amount if quoted less than the estimated cost at the time of bidding in shape of Demand Draft/ Banker's Cheque/ Pay order / Bank Draft /TDR issued from any Nationalized Scheduled bank may be prepared in the name of Block development Officer Ranpur Dist. Nayagarh as per clause Letter. No- 4559/W dated 05.04.2021.

**7.** The bidders are instructed that the deposited amount of each works such as E.M.D, I.S.D & P.S.D etc. are to be made separately.

**8.** If any Bidder quotes less than 15% of the tender value, then such a bid shall be rejected and the Tender shall be finalized basing on the merit of the rest bids and the provision laid down in Clause No 36 of Memorandum no 12366/dt 08.11.13 of Works department Govt of Odisha.

**9.** The E.M.D will be forfeited, if the tenderer backs out from the offer of acceptance of tender by the competent authority.

10. Submission of more than one tender paper by a bidder for single work will be liable for rejection of all such tender papers.
11. Within 3days from signing of the agreement the contractor should show his machineries to the Engineer in charge and commence the work immediately. Photographs of machineries along with the Department Staff should be produced to the authority.
12. On review of the last performance of the work executed through BDO Ranpur The Lowest-I tender May or may not be considered for the works though he/she becomes Lowest-I tenderer.
13. The Contractors who have failed to execute the projects of this agency/ backed out from execution process /abandoned the project midway/those who have declared by this agency to be defaulters otherwise will not be allowed to participate in the present tender process. If any of such Contractors participates then his/her papers will not be considered at all.
14. The authority reserves the rights to cancel any or all bids without assigning any reason.
15. **a. providing facilities to the Engineer contractor**
  - i. As per works Department No.FR-11/2001/10003/00 Bhubaneswar 24.5.01, 5% price preference allowed to the Engineer contractor in the tender rates has been withdrawn.
  - ii:The Engineer contractor shall have to execute the work if awarded to him under his direct supervision and he will not be allowed to execute such work through his Power of Attorney Holder.

b.No Cheque/ Bank Draft / Cash Payment will be accepted towards EMD.

c.Adjustment of earnest money given with other tenders previously and submitted in other tenders shall not be entertained.
16. The work is to be completed in all respect within 04 (Four) months from the date of issue of work order.
17. The plans specifications and scope for the work can be seen in the office of the Block Development Officer, Ranpur during any working days.
18. The tenderers shall carefully study the tentative drawings and specifications applicable to the contract and all documents which form part of the agreement to be entered into by the accepted tenderer and detailed specifications for Odisha and other relevant specifications and drawings which are available

for sale. Complaint at a future date that plans and specifications have not been seen by the tenderers cannot be entertained.

19. Every tenderer is expected before quoting his rates to inspect the site of the proposed work. He should also inspect the quarries and approach road to quarries and locality of the work and satisfy himself about the quality and availability of materials including the medical aids, labour and foodstuff etc. In every case the materials must comply with the relevant specifications.

The tenderer will be deemed to have satisfied himself that the rates quoted by him in the tender will be adequate to complete the work according to the specifications and conditions attached to and that he has taken into account all conditions, difficulties that may be encountered during its progress and to have quoted labour rates and materials, entry tax and other duties, leads, lifts, loading and unloading and freight for materials and all other charges necessary for the completion of the work to the entire satisfaction of the Engineer-in-charge of the work and his authorized subordinates. In the course of awarding a work, the Department may desire the analysis of the rate arrived for against any item(s) of work.

20. Only percentage based quoted tenders shall be considered. Percentage quoted by the Contractor shall be accurately filled in the figures and words, so that there is no discrepancy. If any discrepancy is found in words and figures, then the percentage quoted by the Contractor in words shall be taken as correct. If any discrepancy is found in the percentage quoted in percentage excess/less and total rate quoted by the Contractor then percentage will be taken as correct. The percentage quoted in the tender without mentioning excess / less and not supported with the corresponding amount will be treated as excess. The contractor will write percentage less up to one decimal point only. If he writes the percentage less up to two or more decimal point, the first decimal point shall only be considered without rounding off. Where the contractor has omitted to quote the rates either in figure and words, officer opening the tender should record the omission.

21. If any further necessary information is required the Block Development Officer, Ranpur will furnish such, but it must be clearly understood that the tender must be received in order and according to the instruction given in the tender documents.

22. The tender shall be written legibly and free from erasures, overwriting and corrections. Corrections where unavoidable, should be done by rewriting with dated initial of the tenderer. The contractor should sign on each & every page of tender documents in token of his acceptance; otherwise, it is liable for rejection.

The tendered amount shall be worked out as per procedure laid down in para 22(c) Appendix IX of O.P.W.D Vol-II

23. The Contractors participated in the tender for more than one work will offer conditional rebate. Rebate offer submitted in separate sealed envelope shall be opened, declared and recorded first. The rebate offered shall be considered after opening of all packages called in the tender notice. The contractor, who wish to tender for two or more works shall submit separate tender for each. Each tender shall have the same name and number of the works to which they refer, written in the envelope.

24. All taxes, fees, royalties payable under the local rule including GST, 1 % Cess for Building & other Construction Act, Income taxes & Surcharges as applicable, Octroi tax, Entry tax etc. will be borne by the contractor as admissible. It is implied that the quoted rates are inclusive of such elements.

25. Letters etc. found in the tender box raising and lowering the rates or dealing with any point in connection with the tender will not be considered.

26. Conditional tenders will not be taken in to consideration.

27. The tender containing extraneous conditions not covered by the tender notice are liable for rejection and quotations should be strictly in accordance with the tender call notice. Any change in the wording will not be accepted.

28. Tender paper received after due date & time will not be entertained. All tenders received will remain valid for 90 days from the date of receipt of tenders and validity of tenders can also be extended if required without any monetary compensation.

**29. No Relation Certificate**

The contractor shall have to furnish certificate along with the tender to the effect that he is not related to any officer in the rank of an Assistant Executive Engineer and above in the State Panchayati Raj & Drinking Water Dept.. If the fact subsequently proved to be false the contract will be rescinded. The earnest money and the total security will be forfeited and shall be liable to make good the loss or damage resulting from such cancellation.

30. While determining the validity of tenders the following points shall be taken in to consideration by the authority empowered to accept tenders and his decision in the matter shall be final.

- a. Any special condition which does not find place in the tender notice and which are not acceptable
- b. Indefinite conditions which will make it difficult for access to the financial implications.
- c. Tenders being incomplete in some important respects.

d. Incomplete schedule of time for completion of the work.

e. Failure to deposit the specified earnest money.

f. Tendered rates being unduly low and unworkable.

g. Rates in different items of a tender being irrational.

31. The Department reserves the right of authority to reject any or all tenders received without assigning any reason whatsoever

32. The tender may not (at the discretion of the competent authority) be considered unless accompanied by attested true copies of Registration of Firms/S.S.I. unit/ EPM rate contract holder certificate, PAN Card, GST registration certificate as the case may be and the original certificates are to be produced if required in any subsequent date during processing of tender. Attested true copy of work done certificate is to be furnished along with the tender obtaining from the Executive Engineer concerned.

33. The earnest money will be retained in the case of successful tenderer and will be dealt with as per the terms and condition of O.P.W.D. code. The earnest money of the unsuccessful tenderer except the three lowest tenderer should be refunded on application. The EMD given by the other two parties except one whose tender is accepted should also be refunded within 15 days of acceptance of tender and drawal of agreement.

34. The EMD will be forfeited if the tenderer backs out from offer before acceptance of tender by the competent authority, (As concurred in by law Deptt. & Finance Deptt. in their UOR No.848/L 31.5.97 & UOR No.202/WFD dt. 6.3.98 respectively and (Works Deptt. Memo No. 9101/dt.30.3.98).

35. The tenderer whose tender is selected for acceptance shall within a period of seven days upon intimation being given to him of acceptance of his tender make an initial security deposit in the form of NSC, postal time deposit, Post Office Bank Account / Deposit Receipt of Schedule Bank, Kisan Vikas Patra and in no other form including the amount already deposited as earnest money shall be 2% of the value of the accepted tendered amount and sign agreement in the P.W.D. form No.P-1 (Schedule XLV No.61) for the fulfilment of the contract in the office of Block Development Officer, Ranpur. The security deposit together with the earnest money, Initial Security money and the amount withheld according to the provision of P-1 agreement shall be retained as Security for the due fulfilment of this contract. Failure to enter into the required agreement and to make the security deposit as above shall entail forfeiture of the earnest money. The written agreement to be entered into between the contractor and the Govt. shall be the foundation of the rights of both the contractor and the Govt. and the contract shall be deemed to be incomplete until the agreement has first been signed by the contractor and then by the proper officer authorized to enter into the contract on behalf of the Govt.

Full differential amount if quoted less than the estimated cost to be deposited by the contractor at the time of bidding in shape of post office savings bank account / National Savings Certificate / Post Office time deposit Account Kissan Vikas Patra/ Deposit Receipt of Schedule Bank in addition to Initial security as notified in the letter of acceptance before concluding the Agreement failing which the tender awarded in his favour shall be liable for rejection with forfeiture of EMD under intimation to the License issuing Authority.

The security will be refunded after one year on completion of the work in all respect provided the final bill is passed and will not carry any interest. Any defect noticed during the period of 1 (one) year after the actual date of completion shall be rectified by the contractor at his own cost. Failure

to comply such rectification the cost involved to carry out the defective work shall be met from his dues available with Department.

36. Tenderer, whose tender is accepted must submit “programme of work” at the time of execution of agreement in prescribed format for approval of Engineer-in-charge.

37. The contractor shall sign as a token of final acceptance of the plans, sections and agreements for the work prior to take up the work for execution.

38. The date of commencement of work shall be as notified in work order.

39. On signing the agreement the site will be handed over to the contractor for execution and completion of works in all respect.

40. On no account, the contract work should be sublet to anybody without the prior approval of the Tender accepting authority of the Department. In such an event the contract may be rescinded.

41. The authority reserves the right to make such increase or decrease in quantity of items of works mentioned in the scheduled attached to the tender notice as may be considered necessary for the satisfactory completion of the contract work. All such increase or decrease shall in no way invalidate/vitiate the contract rates. The contractor shall not be entitled for any compensation on this account, except grant of extension of time where considered necessary.

42. The work may be splitted up and distributed among several contractors if considered necessary on the exigency of the circumstances of the work and the contractor is not entitled to any compensation on this account.

43. That for the purpose of jurisdiction in the event of any dispute if any, the contract would be deemed to have been entered into within the State of Odisha and it is agreed that neither party to the contract will be competent to bring a suit in regard to the matter by this contract at any place outside the State of Odisha.

44. Under section 12 of contract labour (Regulation and Abolition Act 1970) the contractor who undertakes execution of work through labour, should produce valid Labour license from licensing authority of labour department (labour license) to start the work.

45. The contractor shall be liable to fully indemnify the Department of any compensation under workmen compensation Act VII of 1993 on account of the workmen employed by the contractor and full

amount of compensation paid will be recovered from the contractor. In the event of any claim sub-judice before any court of law, the claim amount shall be kept withheld till final disposal.

46. Contractor is required to abide by the fair wages clauses as introduced by Govt. of Odisha and will not pay less than the Fair wages fixed by Govt. to the labourers engaged by him for the work.

47. In case of any complaint by the labourer about the non-payment of his wages as per latest minimum wages Act., the Block Development Officer, Ranpur will have the right to investigate and if the contractor is found to be in at fault, Block Development Officer, Ranpur may recover such amount due

in any form from the contractor and pay such amount to the labourer directly under intimation to the local labour office of the Govt. The decision of Block Development Officer, Ranpur is final and binding on the contractor.

48. The contractor will have to submit to Block Development Officer, Ranpur monthly return of labour both skilled and unskilled employed by him on the work.

49. The contractor should keep himself in touch with the Engineer in charge for smooth execution of the work and arrange adequate labour depending on the work load and working space available. No claim for detention for labour on any account will be entertained.

50. No compensation will be paid by the Department for any damage done by rain, flood, cyclone & earthquake tide or by any other natural calamities during the execution of the work.

51. It should be understood clearly that no claim whatsoever will be entertained in regard to extra items of work or extra quantity of any item besides estimated amount, unless written order is obtained from the Engineer-in-charge and rates settled before the extra items of work or extra quantity of any item of work is taken up.

52. The tenderer shall have to abide by the C.P.W.D. safety code rules introduced by the Govt. of India, Ministry of Works, Housing and Supply in their standing order No.44150 dated 25.1.1957.

53. The tenderer shall bear various incidentals, sundries and contingencies necessitated by the work in full within the following or similar category.

a. Rent, royalties and other charges of materials, octroi duty, entry tax & all other taxes including GST, ferry tolls, conveyance charges, 1% cess for building and other construction act and other cost on account of land and buildings including temporary building and temporary electric connection to work site as well as construction of coffer dam, construction of service road, diversion road and its maintenance till completion of work required by the tenderer for collection of materials, storage housing of staff other purpose of the work. No tenderer will however be liable to pay for temporary occupation of land owned by Govt. at the site of the work.

b. Labour camps or huts necessary to a suitable scale including conservancy and sanitation arrangements there in to the satisfaction of the local health authorities should be arranged by the contractor.

c. Suitable water supply including pipe water supply wherever available for the staff and labour as well as for the work.

d. Fees and duties levied by the municipal canal or water supply authorities.

e. Suitable equipment and wearing apparatus for the labour engaged in risky operations and medical aid to the labour engaged for the work.

f. Suitable fencing, barriers, signals including paraffin and electric signals where necessary at work and approaches in order to protect public and employees from accident.

g. Compensation including cost of any suit for injury to persons or property due to neglect of any major precautions also become payable due to operation of the workmen compensation Act.

h. The contractor has to arrange adequate lighting arrangement for the work wherever necessary at his own cost.

54. In case of delay in acquisition of land handling over possession of work site no compensation will be admissible but extension of time will be allowed if applied in prescribed format within due time to keep the contract in force.

55. The department will have the right to supply at any time in the interest of the work and departmental material to be used in the work and the contractor shall use such materials at the stock issue rate fixed by the Department by adding  $\pm 10$  percentage in a particular item of work or market rate whichever is higher.

56. If a contractor removes any Govt. material or stores supplied to him from the site of the work in contravention of the provision of this clause with a view to dispose of the same dishonestly, he shall be in addition to any other liability civil or criminal arising out of this contract be liable to pay penalty equivalent to (5) five times of the price of the materials cost. The penalty so imposed shall be recoverable at any time from the sum that may be due then or at any time thereafter become due to the contractor or from his security deposit or from his other available dues with the Department.

57. Over and above these conditions including the Technical specifications the terms, conditions, rules and regulations and specifications laid down in I.S.I. code are also binding on the part of the contractor.

58. The prevailing percentage of I.T. Department of the gross amount of the bill and surcharge as applicable will be deducted from the contractor's bill towards Income tax.

59. The prevailing of GST on the gross amount of the bill will be deducted from the contractor's bill.

60. As per Labour & Employment Department Resolution No.12653-LE dtd.15.12.2008 and as per Odisha Gazette No.2306 dtd.18.12.2008 Cess at @ 1% will be deducted from the gross amount of the contractor's bill.

61. The contractors are required to pay the Royalties on materials as fixed by Government from time to time and produce such authenticated documents like 'K' forms in support of their payment of royalty,

along with their bills, failing which the amount on royalties of different materials as utilized by them in the work will be recovered from their bills.

62. Schedule of quantity accompanies the tender notice: It shall be definitely understood that the Government do not accept any responsibility for the correctness and completeness of this schedule and this schedule is liable for alternations or omissions, deductions or additions as set forth in the condition of contract and such omissions, deductions, additions or alternations shall in no way invalidate/ vitiate the contract and no extra monetary compensation will be entertained.

63. Sample of stone, metal, chips, sand, cement, moorum etc. to be used are to be deposited noting the quarry under dated initial of the tenderer in the Block Development Officer, Ranpur before the procurement for testing and acceptance. The transportation & testing charges of construction materials will be borne by the contractor.

64. Items of works not covered by the tender notice shall be paid at the current schedule of rates of the State and those not covered by the said schedule of rate will be paid on actual analysis approved by the competent authorities prevailing during the period of execution of work.

65. All preliminary works such as vats, mixing platforms etc. are to be done by the contractor at his own cost. No payment will be made for benchmarks, level pillars, profiles, benching and levelling the ground where required. The rates to be quoted should be for finished items of works inclusive of such incidental items of works.

66. After the work is finished all surplus materials and debris should be removed from river portion and 100 Mt clear away from the site of the work. Preliminary work such as vats, mixing platforms etc. should be dismantled and all materials removed from the site and premises shall be made neat and clean and this is inclusive of the rates quoted by him.

67. The contractor is to supply necessary labour and materials for the purpose of alignment lying recording of levels whenever required at his own cost.

68. The contractor should arrange necessary tools and plants such as Pumps, Excavator, Trucks, compressors, Tippers, batching plants, Concrete Mixer, steel shutter plates etc. required for the efficient execution work at his own cost. The running charges of such plant and cost of consumables and conveyance are to be borne by the contractor. Any deviation from this may lead recession of contract.

69. In the event of delay in supply of design reasonable extension of time shall be granted on the application of the contractor. But no claim for monetary compensation will be entertained under any circumstances.

70. Under no circumstances, interest is chargeable for the dues or any additional dues, if any payable for the work.

71. An affidavit shall be furnished by the contractor at the time of submission of tender paper about the authentication of tender documents including bank guarantee. [Ref. Work Dept. Lr. No. 9414 (WE) dt. 8.6.2004]

72. Work Experience :

For Bridge nature of Work the contractor should furnish work experience certificate from competent authority executed during last Five years.

73. The debris, sand and other materials, accumulated in the work area during flood shall be removed by the contractor as required for continuing the work at his own cost. By any chance, if any excavated portion that could not be filled up with concrete by the contractor, gets filled up during the monsoon

period with earth such removal will not be paid again. The contractor will have to re-excavate the same at his own cost.

74. It shall be distinctly understood that it is entirely the responsibility of the contractor to make such arrangements may be required from time to time to protect the men, machinery, materials and the work under progress and work for which the measurements were recorded and payment made, against any damages either during working season or during the flood. The department accepts no liability, what so ever for any damage or loss of men, materials, machinery and type of hindrance caused to the progress of work.

75. The contractor should provide at his own cost adequate protection measures to the completed works at the end of working season or work in progress against such eventuality till completion and handing over the entire work to the Department.

76. Dewatering from the foundation of structures when and where necessary during execution will have to be done by the contractor and no extra payment will be made on that account. The rate of respective items of work is inclusive of the dewatering.

The term dewatering shall mean the execution or operation of the items due to standing water as well as due to percolation water.

77. The quantities in respect of the items for which quoted rates are more than 25% of the estimated rates are not allowed to be varied by more than five percent. In case, if it exceeds the limit approval of the competent authority should be obtained prior to execution.

78. In case of discrepancy revealed between P-1 form and Detailed Tender Call Notice, condition in P-1 form shall prevail over the Detailed Tender Call Notice.

79. No claim for idle labour etc. on any account will be entertained by the Department.

80. The clause of printed form of P-1 contract with latest addition/ deletion/ corrections/ substitution etc. will also be binding

81. All reinforced cement concrete work should conform to Odisha Detailed Specification and should be of proportion (1: 2: 4) having a minimum compressive strength (in work test) 150 Kg. Per Cm<sup>2</sup> respectively in 15 cm. Cubes at 28 days after mixing and test conducted in accordance with IS 456 and IS 516 using 12 mm. mm. size black hard crusher broken granite chips.

82. Shuttering and centering shall be with seasoned sal wood planks the inside of which shall be lined with suitable sheeting and leak proof and water tight or alternatively steel shuttering and centering may be used.

83. The Department will have the right to inspect the scaffolding and centering made for the work and can reject partly or fully such structures if found defective in their opinion.

84. Cement concrete in roof slabs, beams and wherever prescribed by the Engineer-in-Charge shall be machine mixed and vibrated and the contractor should arrange his own concrete mixer, vibrator, pumps etc. for the purpose.

85. Cement should be used by bags and weight of one cubic meter of cement being taken as 14.42 quintal.
86. All reinforced cement concrete works should be finished smooth, extra charges for plastering if required to any R.C.C. structure like Columns, Chajjas etc. shall not be paid.
87. The materials like Cement, Steel, Paints etc. procured & used by the contractor for the above noted work should be as per I.S.I. specification and to be got approved from the Engineer-in-Charge before execution.
88. Number of tests as specified in I.R.C. /M.O.R.T. H. / I.S.I. specification required for construction of roads / bridges / buildings or any structural works will be conducted in any Govt. test house / Deptt. Laboratories, reputed materials testing laboratories as to be decided by the Engineer-in-Charge. Testing charges including expenditure for collection / transportation of samples / specimen etc. will be borne by the contractor. The collection of samples and testing are to be conducted both prior to execution and during execution as may be directed by the Engineer-in-Charge and in both the counts the cost shall be borne by the contractor. An Engineering Personnel of the executing agency should be present at work site at the time of high level inspecting Officers in the rank of Assistant Executive Engineer & above.
89. Technical Specification: All items of work shall be executed in accordance with relevant specifications Bureau of Indian Standard.

**SECTION – 2**  
**GENERAL RULES & DIRECTION**

## **ODISHA PUBLIC WORKS DEPARTMENT**

### **(FORM P-1)**

#### **ITEM RATE TENDER AND CONTRACT FOR WORKS**

##### **GENERAL RULES & DIRECTIONS FOR THE GUIDANCE OF CONTRACTORS**

1. The work proposed for execution by contract will be notified in a form of invitation to tender pasted on a board hung up in the office and signed by the Block Development Officer, Ranpur. This notice will state the work to be carried out, the items and approximate quantities thereof as well as the date for submitting and opening tenders also the amount of earnest money to be deposited and the amount of the security deposited by the successful tenderer and the percentage if any to be deducted from bills. Copies of the specification, designs and drawings and any other documents required in connection with the submission of tender signed for the purpose of identification by the Block Development Officer, Ranpur shall also be open for inspection by the contractor at the office of the Block Development Officer, Ranpur during office hours.
2. In the event of the tender being submitted by a firm it must be signed separately by each member thereof, or in the event of the absence of any partner, it must be signed on his behalf by a person holding a power of attorney authorizing him to do so.
3. Receipts for payment made on accounts of works, when executed by a firm must also be signed by the several partners, except where the contractors are described in their tender as a firm in which case the receipts must be signed in the name of the firm by one of the partners, or by some other person having authority to give effectual receipts for the firm.
4. The memorandum of work tendered for and the memorandum of materials to be supplied by the Public Works Department and their issue rates shall be filled in and completed in the office of Block Development Officer, Ranpur before the tender form is issued. If a form is issued to an intending tenderer without having been so filled in and completed, he shall request the office to have this done before he completes and delivers his tender.
5. The amount of earnest money to be deposited will be 1%.
6. Any person who submits a tender shall fill up the usual printed form stating at what rate he is willing to undertake each item of the work. Incomplete tender and tender which propose any alternation in the work specified in the said form of invitation to tender, or which contain any other conditions of any sort, or omit to note the time within which the work can be finished or which are not accompanied by a

treasury challan for the required earnest money will be liable to rejection. No single tender shall include more than one work, but contractors who wish to tender for two or more work shall submit a separate tender for each tender. Tender shall bear the name of the work to which they refer written outside the envelope, cash deposits for earnest money herein before mentioned shall be made in Government treasuries and the challan thereof should be enclosed with the tender.

7. The B.D.O. Ranpur will open the tenders in the presence of any intending contractors who may be present at the time and will enter the amounts of the several tenders in a comparative statement in a suitable form. In the event of a tender being rejected the challan for the earnest money forwarded therewith shall thereupon be returned to the tenderer a pay order for the amount of the earnest money.

8. The B.D.O. Ranpur shall have the right of rejecting all or any of the tenders.

9. In the event of a tender being selected for acceptance the Engineer who opened the tenders will, if he is competent to accept the tender, inform the tenderer of the selected tender who shall there upon sign copies of the specification and other documents mentioned in rules 1 and 4 for the purpose of identification and for his acceptance with the tender. The tenderer to the selected tender shall also deposit the required amount of the security money within the prescribed time. If the tenderer fails to deposit the required amount of the security money within the prescribed time the Engineer may reject the tender.

When a tender is selected for acceptance, the tenderer shall deposit the required amount of the security money in cash in any treasury and shall forward the challan to the Block Development Officer, Ranpur. Government securities may be endorsed to the Block Development Officer, Ranpur in lieu of a cash deposit of the required amount of the security money. No tender shall be finally accepted until the required amount of the security money has been deposited.

10. The amount of security money to be deposited by the tenderer whose tender is selected for acceptance shall be 2% of the estimated value of the work and towards this amount the earnest money already deposited by him shall be credited. At least half of this security inclusive of the earnest money shall be deposited the tenderer within such time as may be notified to him in writing by the officer opening the tender, failing which tender shall be liable to rejection.

Any balance of the security money outstanding after completion of the contract with the tenderer may be made up by deduction of 5% of the amount of each payment to be made to him under clause 7 of the condition of contract for work done under the contract.

Taxes as per provisions of Government shall be deducted from the bills of the tenderer.

11. When tender has been selected for acceptance and the required amount of the security money has been deposited the Block Development Officer shall scrutinize a pages of the form of item, Rate

12. Tendered and Contract for works to see that the form has been properly filled up and signed by the contractor and the signature witnessed. He shall then, if he is competent to accept the tender, sign the acceptance of the tenders or if he is not so competent, shall send the form for signature of the acceptance to the officer competent to accept it.

13. All tenderers are required to submit a list of works, which are in hand at the time of submitting their tenders. The lists of works are required to be submitted in the proforma by the Block Development Officer, Ranpur under whom he has executed the work in order to judge their past performance (Vide Works Department Circular No. 15443 dt. 1-8.2005).

14. The earnest money deposited is liable to be forfeited to Govt, if the tenderer backs out from the offer before acceptance of the tender by the competent authority.

15. As per Circular No.: 23/2017 dated 19<sup>th</sup> July, 2017 issued by Central Board of Direct Taxes, TDS as per the provisions of Income Tax Act shall be applicable on the bill value excluding the GST paid to the agency.

## TENDER FOR WORK

I/We hereby tender for the execution for the Panchayat Samiti of the work specified in the under written Memorandum at the rates specified therein within a period.....months from the date of written order to commence and in accordance in all respects with the specification, designs, drawings, and other documents referred to in Rule-1 thereof and subject to the annexed conditions of contract and with such materials as are provided for by and in all other respects in accordance with such conditions so far as applicable.

### MEMORANDUM

- |   |  |
|---|--|
| a). If several sub-works are included they should be detailed in separate sheet.              | a) Name of the work:<br>b) Estimated cost : Rs.<br><br>Tender Value : Rs.<br><br>Agreement value: Rs.  |
| b) The deposit will be 5 percent of the estimated cost of the work                            | c) Earnest Money : Rs.<br>A.P.S.D amount: Rs.  |
| c) The percentage, deduction from bills the contractor's Security will be credited to deposit | d) Initial Security deposit (including earnest money) to be deposited before the commencement of the work Rs.<br><br>e) Percentage to be deducted from bill Rs.5% (Five Percent)<br>f) Time required for the work from date of written order to commence.....months.<br>g) Date of written order to commence<br>h) Total number of work tendered for |

| Item No                                     | Item of work | RATE TENDERED |         | Per- |
|---|--------------|---------------|---------|------|
|   |              | In Figures    | In Word |      |
| <b>Tender Schedule enclosed separately.</b> |              |               |         |      |

Should this tender be accepted I/we hereby agree to abide by and fulfill all the terms and provisions of the said conditions of contract annexed hereto so far as applicable or in default thereof to forfeit and pay to the Panchayat Samiti, RANPUR or his successors in office the sums of money mentioned in the said conditions.

Dated the .....Days of .....20..... Nature of contractor before submission of tender.

Witness:-

Address: -

Occupation

Signature of witness to one tender is signature.

The above tender is hereby accepted by me on behalf of the Samiti.

Dated the ..... Day of .....20 .....

**Signature of Officer by whom accepted.**

**CONTRACTOR**

**Page  
23**

**B.D.O,RANPUR**

**SECTION – 3**  
**Condition of Contract**

## **CONDITIONS OF CONTRACT.**

**Clause-1:** All compensation or the other sums of money payable by the Contractor to Samiti under the terms of his contract may be deducted from or paid by, the sale of a sufficient part of his security deposit or from the interest arising therefrom, or from any sums which may be due or may become due to the contractor by Samiti on any account whatsoever and in the event of his security deposit being reduced by reason of any such deduction or sale as aforesaid, the contractor shall within ten days thereafter make good in cash or Government securities endorsed as aforesaid any sum or sums which may have been deducted from, or raised by sale of the security deposit or any part thereof.

**Clause-2: Compensation or delay** -The time allowed for carrying out the work as entered in the tendered shall be strictly observed by the contractor and shall be reckoned from the date on which the written order to commence work is given to the contractor. The work shall through out the stipulated period of the contract, be carried on with all due diligence (time being deemed to be of the essence of the contract on the part of the contractor) and the contractor shall pay as compensation, an amount equal to one third percent on the amount of estimated cost if the whole work as shown by the tender for everyday that the work remains uncommenced, or unfinished after the proper dates. And further to ensure good progress during the execution of work the contractor shall be bound, in all cases in which the time allowed for any work exceeds one month to complete one-fourth of the whole of the work before one-fourth of the whole time allowed under the contract has elapsed one-half of the work, before one half of such time has elapsed, in the events of the contractor failing to comply with the condition he should be liable to pay as compensation an amount equal to one-third percent on the said estimated cost of the whole work for every day that the due quantity of work remains incomplete. Provided always that the entire amount of the compensation to be paid under the provisions of this clause shall not exceed 10 percent on the estimated cost of work as shown in tender.

**Clause-3-Action when whole security deposit is forfeited:**-In the case in which under any clause or clauses of this contract the contractor shall have rendered himself liable to pay compensation amounting to the shoe of his security deposit in the hands of Samiti (whether paid in one sum or deducted by installments) the Block Development Officer on behalf of the Samiti shall have power to adopt any of the following courses, as he may deem best suited to the interest of Govt.

(a) The rescind the contract ( of which rescission notice in writing to the contractor under the hand of the Block Development Officer shall be conclusive evidence) and in which case, the security deposit of the contractor shall stand forfeited, and be absolutely at the disposal of Govt.

(b) In employ labour paid by the Samiti and to supply materials to carry out the work or any part of the work, debiting the contractor with the cost of the labour and the price of the materials ( of the amount of which cost and price certificate of the Block Development Officer shall be final and conclusive against the contractor) and crediting him with the value of the work done, in all respects in the same manner and at the same rates as if it had been carried out by the contractor under the terms of his contract, the certificate of the Block Development Officer as to the value of the work done shall be final and conclusive against the contractor.

(c) To measure up the work of the contractor, to take such part of the work of contract as shall be unexecuted out of his hands, and to give it to another contractor to complete in which case any expenses which may be incurred in excess of the sum which should have been paid to the original contractor if the whole work had been executed by him ( of the amount of which excess the certificate in writing of the Block Development Officer shall be final and conclusive) shall be borne and paid by the original contractor and may be deducted from any money due to him by Samiti under the contract or otherwise or from his security or the proceeds of sale thereof, or a sufficient part thereof.

In the event of any of the above courses being adopted by the Block Development Officer, the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials, or entered into any engagements, or made any advance on account of or with a view to the execution of the work or the performance of the contract. And in case the contract shall be rescinded under the provision aforesaid, the contractor shall not be entitled to recover or be paid any sum for any work therefore actually performed under this contract, unless and until the Block Development Officer shall have certified in writing the performance of such work and the value payable in respect thereof, and he shall only be entitled to be paid the value of certified.

**Clause-4- Power to take possession of or require removal of or sell contractor's plants:-** In any case in which any of the power conferred upon the B.D.O,RANPUR by clause-3 hereof shall have become exercisable and the same shall not be exercised, the non-exercise thereof shall not constitute a waiver any of the condition hereof and such powers shall notwithstanding be exercisable in the event of any future case of default by the contractor of which by any clause or clauses hereof he is declared liable to pay compensation amounting to the whole of his security deposit, and the liability of the contractor for past and future compensation shall remain unaffected. In the event of the Block Development Officer putting in force the powers vested in him under the e preceding clause he may, if he so desires take possession of all or any tools, plants, materials and stores, in or upon the plants works, or the site thereof or belonging to the contractor or procured by him and intended to be used for the execution of the work or any part thereof, paying or allowing for the same in the account at the contract rates, or in case of these not being applicable, at current market rates to be certified by the Block Development Officer

whose certificate thereof shall be final. Otherwise the Block Development Officer may by notice in writing to the contractor or his clerk of the works. Foreman or other authorized agent require him to remove such tools, plants, materials or stores from the premises (within a time to be specified in such notice), and in the event of the contractor failing to comply with any such requisition the Block Development Officer may remove them at the contractors expenses or sale them by auction or private sale on account of the contractor and at his risk in all respects, and the certificate of the Block Development Officer as to the expenses of any such removal and amount of the proceeds and expenses of any such sale shall be final and 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 unavoidable hindered in its execution or any other ground,he shall apply in writing to the B.D.O,RANPUR within 30 days of the date of the hindrance on account of which he desires such extension as aforesaid and (the Block Development Officer shall if in his opinion), (which shall be final) reasonable grounds be shown therefore authorize such extension of time, if any, as may in his opinion be necessary or proper Block Development Officer shall at the same time inform the contractor whether he claims compensation for delay.

**Clause-6 - Final Certificate:-** On completion of the work ,the contractor shall be furnished with a certificate by the B.D.O,RANPUR of such completion, but no such certificate be given nor shall the work be considered to be completed until be given, nor shall the work be considered to be complete until the contractor shall have removed from the area of the premises to be distinctly marked by the B.D.O,RANPUR in the site plan on which the work shall be executed, all scaffolding, surplus materials and rubbish, and cleaning off dirt from all wood-work, doors, windows, walls, floors or other parts of any building, in upon or about which the work is to be executed or of which he may have had possession for the purpose of the execution, thereof, nor until the works shall have been measured by the officer of the Samiti in accordance with rules whose measurements shall be binding and conclusive against the contractor. If the contractor shall fail to comply with the requirements of the clause as to removal of scaffoldings, surplus materials and rubbish and cleaning of dirt on or before the date fixed for the completion of the work, the Block Development Officer may at the expense of the contractor remove such scaffolding surplus materials and rubbish and dispose of the same as he thinks fit and clean off such dirt as aforesaid and the contractor shall forthwith pay the amount of all expenses so incurred and shall have no claim in respect of any such scaffolding of surplus materials as aforesaid except for any sum actually realized by sale thereof.

**Clause-7-** A bill shall be submitted by the contractor each month on or before the date fixed by the BDO, RANPUR for all works executed in the previous month, and the BDO, RANPUR or his subordinate shall take the requisite measurement for the purpose of having the same verified, and the

claim, as far as admissible, adjusted, if possible, before the expiry of ten days from the presentation of the bill. If the contractor does not submit the bill within the time fixed as aforesaid, the Block Development Officer or his subordinate shall measure up the said work in the presence of the contractor, whose counter signature to the measurement list will be sufficient warrant, and the Block Development Officer or his subordinate shall prepare a bill from such list which shall be binding on the contractor in all respect.

Provided that, if any of the 10% security is outstanding from each such payment shall be deducted so much, not exceeding 5% as may be necessary to make up the balance of the security. All such intermediate payments to the contractor 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 preclude the requiring the bad, unsound and imperfect or unskilled work to be removed are taken away and reconstructed or re-created, or be considered as an admission of the due performance of the contract, or any part thereof in any respect, or the accrual of any claim nor shall it conclude, determine, of effect in any way the powers of the BDO, RANPUR under these conditions or any of them as to the final settlement or adjustment of the accounts or otherwise or in any other way vary or effect the contract.

**Clause-8:-** The final bill shall be prepared by the officers of the Samiti in accordance with the rules in the presence of the contractor within one month of the date fixed for the completion of the work.

**Clause-9 : Stores supplied by Samiti:-** If the specification or estimate of the work provide for the use of any special description of material to be supplied from the Samiti's store, or if it is required that the contractor shall use certain stores to be provided by the Block Development Officer under the condition of this contractor ( such materials and stores and the prices to be charged therefore as hereinafter mentioned being so far as practicable for the convenience of the contractor, but not so as in any way to control the meaning or effect to this contract are specified in the schedule on memorandum hereto annexed, the contractor shall be supplied with such materials and stores noted in the annexed schedule as are required from time to time to be used by him for the purposes of the contract only, and the value to the full quantity of materials and stores so supplied at the rates specified in the said schedule may be set of or deducted from any sums then due , or thereafter to become due to the contractor under the contract or otherwise, or against or from the security deposit, or the proceed of sale thereof, if the same is held in Govt. securities, the same or a sufficient portion thereof being in this case sold for the purpose. All materials supplied to the contractor shall remainn the absolute property of Samiti and shall not on any account be removed from the site of the work and shall at all times be open to inspection by the Block Development Officer. Any such materials unused and in perfectly good condition at the time of the completion or determination of the contractor shall be returned to the Samiti store, at the prevailing market rate or at the issue rate whichever is less if by a notice in writing under his hand he

shall so require, but the contractor shall not be entitled to return any such material unless with such consent and shall have no claim for compensation on account of any such materials so supplied to him as aforesaid being unused by him, or for any wastage in or damage to any such materials.

Only Ultratech/ACC/ OCL brand Cement (OPC – 43 Grade) will be used and weight of each cement bag being taken as 50Kg. Further that the M.S. & Tor Rod shall be used in the work as per SAIL Brand, which will be purchased by the contractor from the authorized dealers godown situated in Block Office campus, RANPUR as per direction of Engineer-In-Charge.

**Clause 9 (a)** - If a contractor removes any materials or stock so supplied to him from the site of the work in contravention of the provisions of this clause with a view to dispose of the same dishonestly, he shall in addition to any other liability, civil or criminal, arising out of this contract be liable to pay penalty equivalent to five times the price of the said materials of stock, according to the stipulated rate. The penalty so imposed shall be recoverable from any sum that may be then or at any time hereafter may become due to the contractor, or from his security deposit, or the proceeds of sale thereof.

**Clause-10- Works to be executed in accordance with specification, drawing and orders etc.:-**  
The contractor shall execute the whole and every part of the work in the most substantial and work-man-like manner, and both as regards materials and otherwise in every respect in strict accordance with the specifications. The contractor shall also confirm exactly, fully and faithfully to the designs, drawings and instructions in writing relating to the work lodged in Samiti Office, and to which the contractor shall be entitled to have access at such office, for the purpose of inspection during office hour and the contractor shall, if he so requires, be entitled at his own expenses to make or cause to be made copies of the specifications, and of all such designs, drawings and instructions as aforesaid.

**Clause-11- Alteration in a specification and designs:-** The BDO, RANPUR shall have power to make any alternations in or additions to the original specifications, drawings designs and instructions that may appear to him to be necessary or advisable during the progress of the work, and the contractor shall be bound to carryout the work in accordance with any instructions which may be given to him in writing signed by the BDO, RANPUR and such alteration shall not invalidate the contract and any additional work which the contractor may be directed to do in the manner above specified as part of the work shall be carried out by the contractor on the same conditions in all such respects on which he agreed to do the main work, and at the same rates as specified in the tender for the main work. The time for the completion of the work shall be extended in the proportion that the addition work bears to the original contract work and the certificate of the BDO, RANPUR shall be conclusive as to such

proportion. And if the additional work includes any class of work for which no rate is specified in this contract, then such class of work shall be carried out at the rates entered in the sanctioned schedule of rates of locality during the period when the work is being carried on and if such last mentioned class of work is not entered in the schedule of rates of district then the contractor shall within seven days of the date of his receipt of the order to carry out the work inform the BDO, RANPUR of the rate which it is his intention to charge for such class of work, and if the BDO, RANPUR does not agree to his rate he shall by notice in writing be at liberty to cancel his order to carry out such class of work and arrange to carry it in such manner as he may consider advisable, provided always that if the contractor shall commence work or order of any expenditure in regard thereof before the rates shall have been determined as lastly herein before mentioned, then and in such case he shall only be entitled to be paid in respect of the work carried out or expenditure incurred by him prior to the date of determination of the rate as aforesaid according to such rate or rates as aforesaid according to such rate or rates as shall be fixed in event of dispute, the decision of Superintending Engineer of the area shall be final.

Provided always that the contractor shall not be entitled to any payment for any additional work done unless he has received an order in writing from the B.D.O. For the additional work that the contractor shall be bound to submit his claim for any additional work done during any month on or before the 15<sup>th</sup> day of following month accompanied by a copy of the order in writing of the B.D.O for the additional work and that the contractor shall not be entitled to any payment in respect of such additional work if he fails to submit his claim within the aforesaid period.

**Clause-12- No compensation for alterations, in or restrictions of work to be carried out :-**

If at any time after the commencement of the work the Samiti shall for any reason whatsoever not require the whole thereof as specified in the tender to be carried out the BDO, RANPUR shall give notice in writing of the fact to the contractor who shall have no claim to any payment or compensation whatsoever on account of any profit or advantage, which he might have derived from the execution of the work in full, but which he did not derive in consequence of the full amount of the work not having been carried out neither shall he have any claim for compensation by reason of any alterations having been made in the original specification, drawings, designs and instruction which shall involve any curtailment of the work as originally contemplated.

**Clause 13- Action and compensation payable in case of bad work:** If it shall appear to the BDO, RANPUR or his subordinate-in-charge of the work, that any work has been executed with unsound, imperfect or unskillful workmanship or with materials of any inferior description, or that any materials or articles provided by him for the execution of the work are unsound or of a quantity inferior to that

contracted for or otherwise not in accordance with the contract, the contractor shall on demand in writing from the B.D.O specifying the work materials or articles complained of notwithstanding that the same may have been inadvertently passed, certified and paid for, forthwith rectify or remove and reconstruct the work so specified in whole or in part, as the case may require, 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 and cost and in the event of his failing to do so within a period to be specified by the B.D.O in his demand aforesaid, then the contractor shall be liable to pay compensation at the rate of one per cent on the amount of the estimate for every day not exceeding ten days, while his failure to do so shall continue and in the case of any such failure the B.D.O may rectify or remove and re-execute the work or remove and replace with others, the materials or articles complained of as the case may be, at the risk and expense in all respect of the contractor.

**Clause 14- Works to be open to inspection, contractor or responsible agent to be present:-**

All the work under or in course of execution in pursuance of the contract shall at all times be opened to the inspection and supervision of the BDO, RANPUR and the contractor shall at all times during the usual working hours and at all other times at which reasonable notice of the intention of BDO, RANPUR or his subordinate to visit the works shall have been given to the contractor either himself be present to receive order and instruction or have a responsible agent duly accredited in writing present for that purpose. Orders given to the contractors' agent shall be considered to have the same force as if they had been given to the contractor himself.

**Clause-15- Notice to be given before work is covered up:-** The contractor shall give not less than five days notice in writing to the B.D.O, RANPUR or his sub-ordinate 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 dimension thereof 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 B.D.O, RANPUR or his sub-ordinate in charge of the work and if any work shall be covered up or placed beyond the reach of measurement without such notice having been given or consent obtained, the same shall be uncovered at contractors expense, or in default thereof no payment or allowance shall be made for such work or the materials with which the same was executed.

**Clause-16 – Contractor liable for damage done and for imperfection for 3 months after certificate:-** If the contractor or his work people or servants shall break deface, injure or destroy and part of a building in which they may be working or any building, road, fence, enclosure on grass land, or cultivated ground contiguous 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 whatever or any imperfection

become apparent in it within six months from the date of final certificate or its completion shall have been given by the B.D.O as aforesaid, the contractor shall make the same goods at his own expense, or in default, the B.D.O may cause the same to be made good by other workmen and deduct the expense ( of which the certificate of the B.D.O, shall be final) from any sums that may be then, or at any time thereafter may become due to the contractor, or from his security deposit or the proceeds of sale thereof or of a sufficient portion thereof and the contractor shall be liable to pay any part of the expenses not so recovered by the B.D.O.,

**Clause-17- Contractor to supply plant, ladders scaffolding etc.:-** The Contractor shall supply at his own cost all materials (except such special materials, if any, as may in accordance with the contractor, be supplied from the Samiti store). , Plant tools, appliances, implements, ladders ,cordage, tackle scaffolding and temporary works requisite or proper for the proper erection of the work, whether original, altered or substituted and whether included in the specification or other documents forming part of the contract or referred to in these conditions or not or which may be necessary for the purpose of satisfying or complying with the requirement of the B.D.O, RANPUR, as of any matter as to which under these conditions he is entitled to be satisfied, which he is entitled to requisite together with carriage therefore to and from the work. The Contractor shall also supply without charge the requisite number of persons with the means and materials necessary for the purpose of setting out works and counting, weighing, and assisting in the measurement or examination at any time and from time to time of the work or materials. Failing his so doing the same may be provided by the B.D.O, RANPUR at the expenses of the Contractor and the expenses may be deducted from any money due to the contractor under the contract or from his security deposit or the proceeds of sale thereof or of a sufficient person thereof . The contractor shall also provide all necessary fencing or light required to protect the public from accident and shall be bound to bear the expenses of defense of very suit action or other proceedings 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-18-** No female labour shall be employed within the limits of a cantonment.

The contractor shall not employ for the purpose of this contract any person who is below the age of 14 years, and shall pay to each labour for the work done by such labourer, wages not less than the wages paid for similar work in the neighborhood.

The B.D.O, RANPUR shall have the right to enquire in to and decide any complaints alleging that the wages paid by the contractor to any labourer for the work done by such labour or less than the wages paid for similar works in the neighborhood.

The Officer in charge of the work shall have right to decide whether any labour employed by the contractor is below the age of 14 years and to refuse to allow any labourer whom he decided to be below the age of 14 years, to be employed by the contractor.

**Clause-19: Work not to be sublet: -** The contract shall not be assigned or sublet without the written approval of the B.D.O, RANPUR. And if the contractor shall assign or sublet his contract, or attempt so to do or become insolvent or commence any insolvency proceedings or make any composition with his creditor, or attempt so to do or any bribe, gratuity gift, loan , perquisite reward or advantage , pecuniary or otherwise , shall either directly or indirectly be given, promised or offered by the contractor, or any of his servants or agents to any public officer or person in the employ of Samiti in any way relating to his officer or employment, or if any such officer or person shall become in any way directly or indirectly interested in the contract, the B.D.O, RANPUR may there upon by notice in writing rescind the contract the security deposit of the contractor shall there upon stand forfeited and be absolutely at the disposal of the Samiti and the same consequence shall ensue as if the contract had been rescinded under Clause-3 thereof, and in addition the contractor shall not be entitled to recover or to be paid for any work here to actually performed under the contract.

**Clause 20- Sum payable by way of compensation to be any considered as reasonable compensation without reference to actual loss:** All sums payable by way of compensation under any of these conditions shall be considered as reasonable compensation to be applied to the use of the Samiti without reference to the actual loss or damage sustained, and whether or not any damage shall have been sustained.

**Clause-21-** In the case of tender by partners any change in the constitution of the firm shall be forthwith noticed by the contractor to the B.D.O, RANPUR for his information.

**Change in Constitution of form :-** In case of failure to notify the change in the constitution within 15 days the B.D.O, RANPUR may be notice in writing rescind the contracts and the security deposit of the contractors shall there upon stand forfeited and be absolutely at the disposal of Samiti and the same consequences shall ensue as if the contract had been rescinded under Clause-3 hereof, and in addition the contractor shall not be entitled or recover to be paid for any work therefore actually performed under the contract.

**Clause 22-** All works to be executed under the contract shall be executed under the direction and subject to the approval in all respect of the Block Development Officer of the circle for time being who shall be entitled to direct as what point or points and in what manner they are to be commenced and from time to time carried on.

**Clause-23** Except where otherwise provided in the contract all questions and disputes relating to the meaning of the specifications, designs, drawings and instructions hereinbefore mentioned and as to

the quality of workmanship, or materials used on the work of as to any other question, claim, right matter, or thing whatsoever, in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders, or these conditions, or otherwise concerning the work, the execution or failure to execute the same, whether arising during the progress of the work, or after the completion or abandonment thereof shall be referred to the sole arbitration of a Superintending Engineer of the Panchayatiraj & Drinking Water Department.

**Clause-24 – Lump sums in estimates:-** When the estimate on which a tender is made includes lump sums in respect of part of the work, contractor shall be entitled to payment in respect of the items of the work, involved or the part of the work in question at the same rates as per payable under this contract for such items, or if the part of the work in question is not, in the opinion of the B.D.O, RANPUR capable of measurement , the B.D.O, RANPUR may by his discretion pay the lumps sum amounts entered in the estimate, and the certificate in writing of the B.D.O, RANPUR shall be final and conclusive against the contractor with regard to any sum or sums payable to him under the provisions of this clause.

**Clause-25-Action where no specification:-** In the case of any , class of work for which there is no such specification as in mentioned in rule-1, such work shall be carried out in accordance with the circle specification and in the event of there being no circle specification, then in such case the work shall be carried out in all respects in accordance with the instruction and requirements of the B.D.O, RANPUR.

**Clause-26- Definition of the work :-**The expression ‘Works; or ‘work’ where used in these conditions shall, unless there be something either in the subject or context repugnant to such construction, be constructed and taken to mean the works by or by virtue of the contract contracted to be executed, whether temporary or permanent, and whether original, altered, substituted or additional.

**Clause-27-** Samiti shall be entitled to recover in full from the contractor, any amount that the Samiti may be liable to pay under workman’s compensation Act VIII of 1923, to any workmen employed in course of execution of any part of the work covered by these contracts.

**Clause-28:-**That the purpose of jurisdiction in the event of dispute if any, the contract should be deemed to have been entered into within the State of Odisha and it is agreed that neither party to the Contractor or agreement will be competent to bring a suit in regard to the matters covered by this contract at any place outside the State of Odisha.

**Clause-29** The department will have the right to inspect the scaffolding and centering made for the work and can reject partly or fully such structure if found defective in their opinion.

**Clause-30** Sanitary arrangements will be made by the contractor at his own cost for his labour camp.

**Clause-31-** The contractor shall bear all taxes including Sales tax, income tax, royalty, fair weather charges and tollage, where necessary.

**Clause-32 :-** After the work is finished all surplus materials and debris are to be removed by the contractor and preliminary works, such as vats, mixing platforms, etc. are to be dismantled and all materials removed from site. The ground up to 100m from the worksite should be cleared and dressed.

### **FAIR WAGE CLAUSE**

**Clause 33 (a) –** The Contractor shall pay not less than fair wage to labourers engaged by him on the work.

**Explanation:-** “ Fair wage” means wages, whether for time or piece work prescribed by the State Public Works Department/Electricity Department for the district in which the work is done.

(b) The contractor shall, notwithstanding the provisions of any contract to contrary, cause to be paid a fair wage to labourers indirectly engaged on the work including any labour engaged by his subcontractors in connection with said work, as if the labourers had been immediately employed by him.

(c) In respect of all labourers directly or indirectly employed in the works for the performance of the contractor's part of this agreement, the contractor shall comply with or cause to be complied with all regulations made by Govt. in regard to payment of wages, wage period, deductions from wages, recovery of wages not paid and deductions unauthorisedly made, maintenance of wage register, wage cards, publication of scale of wages and other terms of employment, inspection and submission of periodical returns and all other matters of a like nature.

(d) The B.D.O, RANPUR shall have the right to deduct, from the money due to contractor, any sum required or estimated to be required or making good and loss suffered by a worker or workers by reason of non-fulfillment of the conditions of the contract for the benefit of the workers, nonpayment of wages or of deduction made from his or their wages, which are not justified by their terms of the contract or non observance of the regulation. Money so deducted should be transferred to the workers concerned.

(e) Vis-à-vis the Samiti the contractor shall be primarily liable for all payments to be made under and for the observance of the regulations aforesaid without prejudice to his right to claim indemnity from his sub-contractor.

(f) The regulations aforesaid shall be deemed to be part of this contract and any breach thereof shall be breach of this contract.

**Clause 34-**

Contractors have to submit the vouchers showing procurement of different materials from authorized dealers for the said work.

**SPECIAL CONDITIONS**

1. It shall be responsibility of the contractor to produce all materials required for the work including procurement of steel, cement & bitumen etc. (to be approved by the Engineer-in-charge) from the market at his cost and complete the work within the stipulated time of completion as per accepted agreement. At no stage difficulty or obstacle for procurement of materials due any reasons whatsoever shall not be entertained by the Department nor any plea for extension of time or compensation/ claim to this effect shall be entertained on account of the above. The safe custody of the materials issued by the Deptt. of procured by the contractor will be sole responsibility of the contractor. For both departmental issue of the material or any procurement of materials by the contractor all incidental expenses like transport, storage, handling and any other expenditure shall be borne by the contractor. The materials as per Appendix-A, is available with the department, may not be supplied to the contractor at the discretion of the Deptt. at the place and rates noted against each. The contractor may satisfy about the quality, quantity of materials at the time of issue.
2. If required the empty cement bags and empty bitumen drums may be requisitioned by the Deptt. which the contractor is bound to comply for which the rates of relief will be Rs...3.09 per empty cement bag and Rs..... Per empty bitumen drums of good quality (to the satisfaction of Officer-in charge).
3. If the tenderer backs out from the offer before acceptance of the tender by the competent authority this E.M.D. will be forfeited.
4. Royalty for Moorum, Sand, Chips, Metal, Boulders & Earth will be deducted from the Contractor's Work Bill at the rate vide Gazette notification of OMMC Rule, 1961 (Second Amendment) below:

Morrum, Sand,Earth,Stone Products

} The rate fixed by the Govt. of Odisha/ as amended from time to time during the period of execution.

**Additional performance security:**

Additional performance security shall be deposited by the successful bidder when the bid amount is less than the estimated cost. In such an event the successful bidder will deposit the additional performance security to the extent of the differential cost of the bid amount in shape of Post Office Savings Bank Account/ National Savings Certificate/ Post Office Time Deposit Account/ Kisan Vikash Patra/ Deposit receipt of Schedule Bank/ Bank Guarantee issued from local branch of any Nationalized Bank duly pledged Block Development Officer, Ranpur

| Sl No | Range of difference between the estimated cost put to tender and Bid amount | Additional performance security deposited by the successful bidder      |
|-------|---|---|
| 1     | Below 5 %   | No additional performance security                                      |
| 2     | From 5 % and above & Below 10%  | 50% of (difference between estimated cost put to Tender and bid amount) |
| 3     | From 10 % and above   | 150% (Difference between estimated cost put to Tender and Bid Amount)   |

## 1. NOTIFICATION OF AWARD AND SIGNING OF AGREEMENT:

- 1.1. The bidder / Tenderer whose bid has been accepted will be notified of the award by the B.D.O. Ranpur prior to expiration of the validity period by cable, telex or facsimile confirmed by registered letter. This letter (hereinafter and in the conditions of contract called the (“Letter of Acceptance”)) will state the sum that the B.D.O. Ranpur will pay the contractor in consideration of the execution, completion and maintenance of the works by the contractor as prescribed by the contract (hereinafter and in the contract called the “Contract Price”).
- 1.2. The notification of award will constitute the formation of the contract, subject only to the furnishing of a performance security (ISD) and additional performance security in accordance with the provisions of the agreement.
- 1.3. The agreement will incorporate all agreements between the officer inviting the bid/B.D.O. Ranpur and the successful bidder. Within 15 days following the notification of award along with the letter of acceptance, the successful bidder will sign the agreement and deliver it to the B.D.O Ranpur. Following documents shall form part of the agreement.
  - a) The notice inviting bid, all the documents including additional conditions specifications and drawing, if any, forming the bid as issued at the time of invitation of bid and acceptance thereof together with any correspondence leading thereto & required amount of performance security including additional performance security.
  - b) Standard P.W.D. Form P-1.

## 2. TIME CONTROL

- 2.1 Progress of work and Re-scheduling programme

- 2.1.1. The Block Development Officer, Ranpur shall issue the letter of acceptance to the successful contractor. The issue of the letter of acceptance shall be treated as closure of the bid process and commencement of the contract.
- 2.1.2. Within 15 days of issue of the letter of acceptance, the contractor shall submit to the B.D.O. Ranpur for approval and programme commensurate to clause no 3 showing the general methods, arrangements, and timing for all the activities in the works along with monthly cash flow forecast.
- 2.1.3. To ensure good progress during the execution of the work the contractors shall be bound in all cases in which the time allowed for any work exceeds one month to complete, 1/4<sup>th</sup> of the whole of the work before 1/4<sup>th</sup> of the whole time allowed under the contract has elapsed, 1/2 of the whole of the work before 1/2 of the whole time allowed under the contract has elapsed, 2/3 of the whole of the work before 3/4<sup>th</sup> of the whole time allowed under the contract has elapsed.
- 2.1.4. If at any time it should appear to the Engineer-in-Charge that the actual progress of the works does not conform to the programme to which consent has been given, the contractor shall produce, at the request of to such programme necessary to ensure completion of the works within the time for completion. If the contractor does not submit an updated programme within this period, the B.D.O. Ranpur may withhold the amount of 1% of the contract value from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue programme has been submitted.
- 2.1.5. An update of the programme shall be a programme showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work including any changes to the sequence of the activities.
- 2.1.6. The B.D.O. Ranpur's approval of the programme shall not after the contractor's obligations. The contractor may revise the programme and submit it to the B.D.O. Ranpur again at any time. A revised programme is to show the effect of variations and compensation events.

## **2.2. Extension of the Completion date.**

- 2.2.1. The time allowed for execution of the work as specified in the contract data shall be the essence of the contract. The execution of the works shall commence from the 15<sup>th</sup> Day or such time period as mentioned in letter of award after the date on which the B.D.O Ranpur issues written orders to commence the work or from the date of handing over of the site whichever is later. If the contractor commits default in commencing the execution of the work as aforesaid, Government shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the earnest money and performance guarantee / security deposit absolutely.

2.2.2. As soon as possible after the contract is concluded the contractor shall submit a Time & Progress Chart for each milestone and get it approved by the Department. The Chart shall be prepared in direct relation to the time stated in the Contract documents for completion of items of the works, it shall indicate the forecast of the dates of commencement and completion of various trades of sections of the work and may be amended as necessary by agreement between the B.D.O. Ranpur and the Contractor within the limitations of time imposed in the contract documents and further to ensure good progress during the execution of the work, the contractor shall in all cases in which the time allowed for any work, exceeds one month (save for special jobs for which a separate programme has been agreed upon) complete the work as per milestone given in contract data.

2.2.3. In case of delay occurred due to any of the reasons mentioned below, the contractor shall immediately give notice thereof in writing to the B.D.O. Ranpur but shall nevertheless use constantly his best endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the B.D.O. Ranpur to proceed with the works.

For

1. Abnormally bad weather, or
2. Serious loss or damage by fire, or
3. Civil commotion, local commotion of workmen, strike or lockout, affecting any of the trades employed on the work, or
4. Delay on the part of other contractors or tradesmen engaged by B.D.O. Ranpur, in executing work not forming part of the contract.
5. In case of variation is issued which makes it impossible for completion to be achieved by the Intended Completion Data without the Contractor taking steps to accelerates the remaining work and which would cause the contractor to incur additional cost, or.
6. Any other cause, which in the absolute discretion of the authority mentioned in contract data is beyond the contractor's control.

2.2.4 Request for re-schedule and extension of time, to be eligible for consideration shall be made by the contractor in writing fourteen days of the happening of the event causing delay. The Contractor may also, if practicable, indicate in such a request the period for which extension is desired.

2.2.5 In any such case a fair and reasonable extension of time for completion of work may be given. Such extension shall be communicated to the Contractor by the B.D.O. Ranpur in writing. Within 3 months of the date of receipt of such request, Non-application by the contractor for extension of time shall not be a bar for giving a fair and reasonable extension by the B.D.O. Ranpur and this shall be binding on the contractor.

### 2.3 **Compensation for delay.**

2.3.1 If the contractor fails to maintain the required progress in terms of clause 2 or to complete the work and clear the site on or before the contract or extended date of completion he shall without

prejudice to any other right or remedy available under the law to the Government on account of such breach, pay as agreed compensation the amount calculated at the rates stipulated below as the Assistant Executive Engineer (whose decision in writing shall be final and binding) may decide on the amount of tendered value of the work for every completed day/month (as applicable) that the progress remains below that specified in Clauses 2 or that the work remains incomplete.

The existing relevant provision in the original documents shall stand modified accordingly. Provided always that the total amount of compensation for delay to be paid under this condition shall not exceed 10% of the Tendered Value of work or to the Tendered Value of the item or group of items of work for which separate period of completion is originally given.

The amount of compensation may be adjusted or set-off against any sum payable to the Contractor under this or any other contract with the Government. In case the contractor does not achieve a particular milestone mentioned in contract data, or the rescheduled milestone (s) in items of Clause 2.5. the amount shown against that milestone shall be withheld, to be adjusted against the compensation levied at the final grant of extension of time. Withholding of this amount on failure to achieve a milestone, shall be automatic without any notice the contract. However, if the Contractor catches up with the progress of work on the subsequent milestone(s), then withheld amount shall be released. In case the contractor files to make up for the delay in subsequent milestone(s) amount mentioned against each milestone missed subsequently also shall be withheld. However, no interest whatsoever, shall be payable on such withheld amount.

## 2.4 Management Meetings

- 2.4.1 Either the Engineer or the Contractor may require the other to attend a management meeting. The business of a management meeting shall be review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.
- 2.4.2 The Engineer shall record the business of management meetings and is to provide copies of his record to those attending the meeting and to the Employer. The responsibility of the parties for actions to be taken is to be decided by the Engineer either the management meeting or after the management meeting and stated in writing to all who attended the meeting.

Signature of Witness

Signature of Contractor

**CONTRACTOR**

**Page**  
**40**

**B.D.O,RANPUR**

**SECTION -4**  
**TECHNICAL SPECIFICATION**

## TECHNICAL SPECIFICATION

### 1.1 General

- (a) These Technical specifications, shall apply to all works as are required to be executed under the contract or otherwise directed by the Engineer. In every case the work shall be carried out to the satisfaction of the Engineer and conform to the location, lines, grades and cross sections shown on the drawings or as indicated by the Engineer. The quality of work and materials, shall comply with the requirements set forth in this and succeeding sections. Where the drawings and specifications describe a portion of the work in only general terms, and not in complete detail, it shall be understood that only the best general practice is to prevail, materials and workmanship of the best quality are to be employed and the instructions of the Engineer are to be fully complied with.
- (b) The works like Employee, Employer, Contract, Employer's representative, Contractor's representative, Engineer, Drawings, Government works site etc. used in these specifications shall be considered to have the meaning as understood from the definitions of these terms included in section 3 conditions of the contract.

The contractor shall carryout the works in accordance with the specifications laid down in this section together with the detailed specifications stipulated under succeeding sections, Odisha Standard Specification, relevant codes with all amendments published up to the date of tendering and the departmental manual for quality control

### 1.2 Test standards for Materials and Quality of works.

The relevant standards for materials, as well as for testing procedures, indicated in this section together with detailed specifications indicated at appropriate places in the succeeding sections shall apply.

If any special material not covered here, is required to be used, it shall conform to relevant Indian Standards, if there are any, or to the requirements specified by the Engineer or any special provisions.

Quality: All materials and workmanship shall be of the respective kinds described in the contract and in accordance with the Engineer's instructions and shall be subjected from time to time to such tests as the engineer may direct at the place of manufacture of fabrication or on the site or at such other places or places as may be specified in the contract or at all or any of the instruments, equipment, machines, labour and materials as are normally required for examining, measuring and testing any work and the quality, weight or quantity of any material used and shall supply samples of materials before incorporation in the works for testing as may be selected and required by the Engineer.

**Tests, inspection, rejection of defective material and work:**

The contractor shall without extra cost provide samples and cooperate in the testing of materials and inspection of the works. The Engineer shall have access at all times to the places of storage and where material are being manufactured and processed for use in the works under the contract to determine whether their manufacture and process are proceeding in accordance with the drawings and specifications

The Engineer shall during the progress of the works have power to order in writing from time to time.

- a) The removal from the site, within such time or time as may be specified in the order, of any materials, which in the opinion of the Engineer, are not in accordance with the contract.
- b) The substitution of proper and suitable materials and
- c) The removal and proper re-execution, notwithstanding any previous test thereof or interim payment thereof, of any work which in respect of materials or workmanship is not in the opinion of the Engineer, in accordance with the contract.

The Engineer shall during the progress of the works have power to order in writing from time to time.

The contractor shall carryout such order at no extra cost to the employer; in case of default on the part of the contractor in carrying out such order, the employer shall be entitled to employ and pay other persons to carry out the same and all expenses consequent thereon or incidental thereto shall be recoverable from the contractor by the employer or may be deducted by the employer from any moneys due to or which may become due to the contractor.

In lieu of removing the work or material which are not in accordance with the contract, the Engineer may allow such work or materials to remain, and in that case such work may be paid at the reduced rates as may be decided.

**1.3 Reference Marks and Bench Marks.**

- i) The basic centerlines, reference points and benchmarks will be fixed by the Department.
- ii) The Contractor shall establish at his own cost, at suitable points, additional reference lines and bench marks after conducting and transferring level from nearest bench mark as may be necessary. The contractor shall remain responsible for the sufficiency and accuracy of all his benchmarks and reference lines. He shall take precautions to see that the lines, points and bench marks fixed by the Department are not disturbed by his work and shall make good any such damage.

#### **1.4 Setting out works.**

The contractor shall be responsible for the correct setting out of all works at his cost. The Contractor shall execute the work true to alignment, grade and levels as shown in the drawings and as directed by the Engineer and shall check these at frequent intervals. The contractor shall provide all facilities like labour and instruments, and shall cooperate with the departmental officers to check all alignments, grades, levels and dimensions. Such checking shall not absolve the contractor of his own responsibility of maintaining the accuracy of the work.

#### **1.5 Power Supply.**

- a) He has to lay all internal lines from the transformer at its own cost and he should bear the cost of power consumption as per bills of electricity authority.
- b) He has to lay all internal lines from the transformer at its own cost and he should bear the cost of power consumption as per bills of electricity authority.
- c) If the available capacity is insufficient to meet the contractor's requirement, the contractor has to make his own arrangements for alternatives for power supply, including deposits to electricity authority.
- d) The contractor shall satisfy all the conditions of rules required as per Indian Electricity Act 1910 and under rule 45 (i) of the Indian Electricity rules 1956 as amended from time to time and other pertinent rules.
- e) The power shall be used for bonafide departmental works only.
- f) The contractor shall take all precautions to ensure safety to the workers. The department will not take any responsibility for any accidents that may occur on the Contractor's installations.
- g) The contractor shall take action to rectify the defects if any in the installations pointed out by the departmental Engineers in a reasonable time.
- h) The following particulars should be furnished in quadruplicate by the contractor to the employer before the power is released to the equipments.
  - i A schematic diagram of the installation from the point of commencement of supply to the points of utilization showing therein the various electrical equipment, switch gear, cables with their sizes etc.
  - ii Transformer sub station's drawings.
  - iii Layout plan indicating there in the position of motors and other electrical equipment, their switchgear and earthing arrangements. The contractor shall give the particulars of his power load, if so desired by the Engineer and he shall make necessary arrangements for the Engineer to check these loads if so desired. The total power requirements and the

- iv Percentage of diesel power proposed to be engaged by the contractor out of total power requirement shall be furnished by the contractor.
- i) The department is not responsible for any sort of power failures and power break down etc. and no compensation of any kind will be paid by the department on account of such failures and no extension of time will be granted under such reasons.
- j) After construction and maintenance the entire electrical system which require to maintenance of dam has to be hand over to the department by the contractor free of cost.

#### **1.6 Water Supply**

It is the responsibility of the Contractor to make own arrangements for water supply for work and labour and drainage from the work site, at his own cost. He will be permitted to draw water from Hadua River, subject to availability. But the contractor has to lay pumping line from water source to dam site and colony at his own cost. The pumps have to be installed by him at his own cost and pumping charges will be borne by him. The distribution system, measures for purification of water, shall be the responsibility of the contractor and shall be in accordance with rules and regulations of the Public Health Department. No compensation will be allowed to the contractor on this account

#### **1.7 Watching and Lighting**

The Contractor shall in connection with the works provide and maintain at his own cost all lights, guards, fencing and watching when and wherever necessary or required by the Engineer or Engineer's Representative, or by any duly constituted authority for the protection of the work, or for the safety and convenience of the public or others.

#### **1.8 Construction Plant**

The Contractor shall provide and install all necessary construction tools and plant, equipment, machinery and shall use such methods and appliances for the performance of all the operations connected with the work embraced under the contract as will secure a satisfactory quality of work and rate of progress which will ensure the completion of the work within the time specified.

#### **1.9 Clearing up during Progress and Delivery**

All rubbish shall be cleared and put in a thoroughly complete, clean, sound and workman like state to the satisfaction of the Engineer before the work is finally handed over. All rubbish and surplus materials not required shall be removed by the Contractor. The Contractor is responsible for its maintenance until it is taken over by the Department.

#### **1.10 Scaffolding**

All requisite scaffolding shall be provided at the Contractor's expense and shall be double i.e. it must have two sets of upright supports. Care shall be taken to ensure the safety of the work people

and the Contractor must comply with such instructions as the Engineer may issue to ensure such safety. The Contractor will be entirely responsible for any damage or injuries to persons or property resulting from ill-erected scaffolding, defective ladders, or otherwise arising of his fault in this respect.

**1.11. Protection of Adjoining and Existing premises.**

The Contractor shall protect the whole of the adjoining and existing premises, and all works and all fittings to all Buildings and adjoining the site against structural and decorative damages caused by the Execution of these works and make good in all respects all such damage done or occurring to the same, and leave such reinstatement in perfect order. He is also to make good any damage done in the execution of the work, the existing public or private property, foot ways and road ways, other overhead power lines or Telecommunication lines.

**1.12 Approach Roads and Roads in Work Area.**

- a) The roads inside the work area required by the Contractor to convey huge machinery and all materials to dam site shall be constructed and maintained by him at his own cost. The layout, design, construction and maintenance etc. of the road shall be subject to the approval of the Engineer.
- b) The Contractor shall without charge permit the Government and such other Contractor and other workmen to use the access facilities including roads, any other facilities constructed and acquired by the Contractor for use in the performance of the works.
- c) The Contractor's heavy construction traffic or tracked equipment shall not traverse any public roads or bridges unless the contractor has made arrangements with the authorities concerned and the approval of the Engineer to such arrangements has been obtained. In case Contractor's heavy construction traffic or tracked equipment is not allowed to traverse any public roads or bridges and the Contractor is required to make some alternative arrangements, no claim on this account shall be entertained.

**2.1 Excavation of Foundations.**

- a) All excavations (in foundation) shall be done as per the profile indicated by the Engineer-in-charge.
- b) Excavations shall be carried out to the required line and levels, widths and depths so that the dimensions of the permanent works shall not be less than what are indicated.
- c) All excavated materials shall be brought to surface and disposed of as directed by the Engineer-in-charge
- d) Selected and approved excavated materials, required for filling etc. shall be kept separately for reuse as directed.

- e) The phasing and method of excavations for all foundations and earth works shall be as per the approval of Engineer-in-charge.
- f) No permanent construction shall be started over the excavated surface until and unless approved by the Engineer-in-charge.
- g) Excavations done, wider or deeper than that required to contain the permanent work, shall be filled-in all the Contractor's expenses. However, exceptions may be specially permitted in certain situations as in the case of sand beds etc.
- h) Excavations taken wider than required shall be filled back with selected materials thoroughly compacted in layers of 150 mm. thickness.

## **2.2 Site Clearance**

Before the earth work is started, the area coming under cutting and refilling shall be cleared of shrubs vegetation, grass, brushwood trees and saplings of girth up to 30 cm. measured at a height of 1 m. above ground level and such other things, and rubbish removal up to a distance of 50 m. outside the periphery of the area under clearance. The rate of such clearance is deemed to be included in the rate of Earthwork.

## **2.3 Earthwork in excavation in Trenches for foundation.**

- a) All excavation shall generally be described as 'Excavate' and 'Get-out'. Getting-out shall include throwing of the excavating materials not less than one metre or less than half the depth of excavated trench clear of the edge of excavation whichever is greater and the subsequent disposal of excavated materials shall either be stated as a separate item or included with the item of excavation stating the lead. Foundation trenches shall be dug to the exact dimensions as shown in the drawings or as directed by the Engineer-in-charge.
- b) The bed of trenched shall be made level and firm by watering and ramming soft or otherwise. Defective spots shall be dug-out and filled with concrete of same mix as the foundation concrete or as may be directed by the Engineer-in-charge. The cost of such digging-out of soft spots and filling with concrete shall be paid extra. If the excavation is done to a depth greater than that shown in the drawings or as requested by the Contractor, the excess depth shall be made good, at the cost of Contractor, with concrete of the same proportion as specified for foundation concrete. The trenches shall be inspected and passed by the Engineer-in-charge, before the foundation concrete is laid or any other permanent work erected.

## **2.4 Protection**

Fencing and/ or other suitable measures for protection against risk of accident due to open excavation shall be provided at Contractor's cost.

**2.5 Excavation is disintegrated rock or soft rock in trenches for foundations**

Excavation in disintegrated or soft rock shall be carried out by crow bars, pickaxes or pneumatic drill or any other suitable means. Blasting operations are not generally successful in this case. If the Contractor desires to resort to blasting can do so, with the permission of Engineer-in-charge, but nothing extra shall be paid to him.

**2.6 Excavation in hard rock in trenches for foundation**

Excavation in hard rock shall be done by chiseling only, where blasting operations are prohibited or are not practicable. In trenches and drains, where blasting is not otherwise prohibited the excavation in hard rock shall be carried out by blasting in the first instance and finally by chiseling so as to obtain the correct section of trench as per drawings..

**2.7 Filling excavated earth in foundation trenches and plinth or under floors.**

a) Earth used for filling shall be free from salts, organic or other foreign matter. All clods of earth shall be broken or removed.

**b) Filling sides of Trenches**

As soon as the work in foundation has been completed and measured, the sides of foundation shall be cleared of all debris, brick bats, mortar droppings etc. and filled with earth in layers not exceeding 20 cm. Each layer shall be adequately watered, rammed and consolidated before the succeeding one is laid. Earth shall be rammed with iron rammers where feasible, and with the butt ends crowbars, where rammed cannot be used.

**c) Plinth Filling - Filling under Floors**

The plinth shall be similarly filled with sand of approved quality in layers not exceeding 20 cm. adequately watered and consolidated by ramming with iron or wooden rammers. When filling reaches the finished level, the surface shall be flooded with water for atleast 24 hours, allowed to dry and then rammed and consolidated in order to avoid any settlement at later stage. The finished level of filling shall be kept to slope intended to be given to the floor. Sand shall be clean and free from organic and other foreign matter. Sand filling shall be done in manner similar to earth filling in plinth. The surface of the consolidated sand shall be dressed to required level and slope. Concreting of floor shall not be started till the Engineer-in-charge has inspected and approved the filling.

**3. CEMENT CONCRETE**

3.1.0 Cement concrete for in site casting. This shall be prepared by fixing graded stone aggregate of nominal size as specified with cement and sand in specified proportions.

3.2.0 **Proportioning:** Proportioning shall be done by volume. Boxes of suitable size shall be used for measuring sand and aggregate. The size of boxes (internal) shall be 35 x 25 cm.

and 40 m. deep. The unit of measurement of cement shall be a bag of cement weighing 50 Kg. and this shall be taken as 0.035 cubic metre. While measuring the aggregate and sand, the boxes shall be on the basis of its dry volume and in case of damp sand allowance of bulkage shall be made as below.

| <u>Moisture Content % by weight</u> | <u>Bulking % by volume</u> |
|-------------------------------------|----------------------------|
| 2                                   | 15                         |
| 3                                   | 20                         |
| 4                                   | 25                         |
| 5                                   | 30                         |

3.3.0 **Mixing:** Mixing of cement concrete shall be as a rule be done in a mechanical mixer. However, the Engineer-in-charge may permit hand mixing in specific cases, where in his opinion it is not practicable to resort to mechanical mixing, either on account of the quality of cement concrete required being small or for any other reason. In such cases he should ensure, that inferior quality of concrete produced by hand mixing will not adversely affect the structure.

3.3.1 **Mechanical Mixing:**  
Measured quantity of aggregate, sand and cement required for each batch shall be poured into the drum of the mechanical mixer, while it is continuously running. After about half a minute of dry mixing measured quantity of water required for each batch of concrete mix shall be added gradually and mixing continued for another one and half minute. It shall be ensured that total mixing time for each batch shall be 2 minutes. The mixed concrete for one drum shall then be discharged completely and drum recharged as before for the next batch mix. The mixed concrete shall be used within 30 minutes from the time of adding water. The mixer shall be cleaned thoroughly before suspending the work each time by revolving the drum with plenty of water.

3.3.2 **Hand Mixing:**  
A heap of convenient size shall be formed by picking the calculated quantity aggregate, sand and cement (in that order) in layers. The ingredients shall be mixed dry thoroughly by turning them over and over again. The calculated quantity of water then shall be added gradually and the whole thing slowly and thoroughly mixed again.

### **3.4 Consisting.**

The quantity of water to be each batch containing 50 Kg. of cement, to give the required consistency shall be more than 34 litres for M-10 mix 32 litres for M-15 mix 30 litres for M-20 mix In case of vibrated concrete, the above quantity shall be suitably reduced.

### **3.5 Transporting.**

Concrete shall be handled from the place of mixing to place of final deposit as rapidly as practicable by methods, which will prevent segregation or loss of any of the ingredients. If segregation occurs during transport, the concrete shall be remixed before being placed.

### **3.6 Laying.**

Before laying the concrete, the sub-base shall be cleared off all injurious or foreign matter, water and well consolidated. Mixed concrete, that has been left standing, shall not be used after initial setting has commenced. The addition of water or cement, to make such a mix workable, shall not be allowed. In foundation trenches or such other situations, the entire concrete used in the work shall be laid gently (not thrown) in layers not exceeding 15 cm. thick. In deep trenches concrete shall be placed through chutes as directed by Engineer-in-charge. The chute plant shall be of such size and design as to ensure practically continuous flow in the chute. The slope of the chute shall be such as to allow the concrete to flow without the use of excessive quantity of water and without segregation of the ingredients. The delivery end of the chute shall be as close as possible to the point of deposit. The chute shall be thoroughly flushed with water before and after each working period and water used for this purpose shall be discharged outside the place of laying of the concrete.

The concrete so deposited shall be thoroughly vibrated by means of mechanical vibration till a dense concrete is obtained. The Engineer-in-charge may however release the condition at his discretion for certain items, depending on thickness of the members, and feasibility of vibrating the same. The layer of concrete shall be so placed, that the bottom layer does not finally set before the top layer is placed. Compaction shall be completed before initial setting starts i.e. within 30 minutes for ordinary cement and 5 minutes for rapid hardening, cement on addition of water to dry mixture. For items, where vibrators are not to be used, it shall be the duty of the contractor to take prior permission of the Engineer-in-charge before the start of work

### **3.7 Curing.**

After the concrete has begun to harden i.e. about 1 to 2 hours after its laying, it shall be protected from quick drying, with moist gunny bags, and or any other materials approved by the Engineer-in-charge. After 24 hours of laying of the concrete, the surface shall be cured by flooding water upto 25 mm. depth or by covering with wet absorbent materials. The covering

shall be done for a minimum period of 7 days, unless otherwise specified. Over the foundation concrete, the masonry work may be started after 48 hours of its laying, but the curing of concrete shall be continued along with masonry work for a minimum period of 7 days or for such period as specified. In case of cement concrete used as sub-grade for the flooring may be commenced within 48 hours of laying of sub-grade and covering continued along with top layer, for minimum period for 7 days after laying the top layer of flooring or for lesser period as specified in contract.

#### **4. REINFORCED CEMENT CONCRETE**

##### **Reinforced cement concrete cast-in-site work.**

##### **4.1.1 General.**

Reinforced cement concrete cast-in-site work comprise of the following, which may be paid for as separate item or as a composite item as indicated in the description of work.

- (a) Form work
- (b) Reinforcement
- (c) Concreting

##### **4.2.1 Formwork.**

The form work shall be rigid and so constructed as to retain the shape and dimensions of the members being cast. It shall have sufficient strength and rigidity to withstand the load of concrete, and vibration, movement of men, materials, plants and any other incidental loads without excessive deflection beyond permissible limits.

The form work shall be so constructed as to be removable by unscrewing or otherwise loosening them without hammering or levering with force. Only wedges, clamps, bolts and screws etc. shall be used in preference to nails or spikes. All side pieces shall be easily removable without disturbing the bottom pieces. Where, however use of nails or spikes become unavoidable, these shall be left projecting so that they can be easily withdrawn. If at any stage of work during or after placing concrete in structure, the form work sags or bulges out beyond the required shape of the structure, the concrete shall be removed and the work redone with fresh concrete and adequately rigid form work details of shuttering and centering shall be subject to the approval of Engineer-in-charge

##### **4.2.2 Propping or Centering.**

Prop shall consist of ballies or bricks masonry pillars in mud mortar. Ballies shall be placed at a spacing of 1 to 1.2 m. and shall rest squarely on wooden sole plates of 40 mm. thickness with a

minimum bearing of 0.1 Sqm. laid either on ground or brick masonry pillar in mud mortar. Double wedges shall be provided between the sole plates and the wooden prop so as to facilitate tightening and easing of shuttering without jarring the concrete. In case brick masonry pillars are used as props, the wooden sole plates shall be provided at the top of pillars and double wedges inserted between the sole plate and the bottom of shuttering.

In case of structures with two or more floors, the weight of concrete and centering and shuttering of any upper floor shall be suitably supported on atleast two floors below the same. In such case props of upper floor must necessarily come over the props of lower floor. The form work and concreting of upper floors shall not be done until the concrete of the lower floor has set for at least 14 days.

#### **4.2.3 Shuttering.**

Shuttering shall be either of wooden planking of 30 mm. minimum thickness with or without steel sheet lining on steel plates welded by steel angles and would be such as to give the required type of finish on the surface. The timber used in shuttering shall not be so dry as to absorb water from concrete and swell and bulge, nor as so green or as to shrink after erection.

The timber shall be accurately sawn and planned on sides and surface coming in contact with concrete. Thus the shuttering will have smooth and even surface and the joint and shall not permit any leakage of cement grout or slurry.

Unless otherwise desired, all angles in concrete work shall be sharp and well defined. Where however, a rounded edge or beveled edge or mouldings is required, the provision shall be made to formulate its self. Opening for fan clamps and other fittings concreted with services shall be provided in the shuttering as directed by the Engineer-in-charge.

From lining shall be such as would not discolour the concrete nor would interfere with the normal chemical reaction of cement. When steel sheets are used for lining, the sheets shall be placed and mounted on forms with minimum amount of kinks and other imperfections.

#### **4.2.4 Surface treatment for shuttering.**

Forms should be cleaned of all dust, wood shaving dirt and other matter by washing with water. This process is facilitated by providing draining holes in the shuttering. The surface shall then be coated with soap solution applied before concrete is done. Soap solution for the purpose shall be prepared by dissolving yellow soap in water to get consistency of paint. Alternately a coat of raw linseed oil refined pale paraffin mineral oil of approved manufacture may be applied. In case steel shuttering is used, soap solution or raw linseed oil shall be applied with a brush or sprayed, so as to cover the entire surface evenly. Care shall be taken that coating does not get into construction joint surfaces and reinforcement bars

The centering for beams and slabs shall have camber of 4 mm. per metre (1 in 250) or as directed by the Engineer-in-charge. The form work shall be erected true to line, vertical or battered to proper slope as required and free from twist. The completed form work shall be inspected and approved by the Engineer-in-charge before placing reinforcement and laying concrete

#### 4.2.5 Shaking/ Removal of Form works.

Form shall be removed gently. They shall be eased carefully in order to prevent the load being suddenly transferred to concrete. Form work shall not be removed unless the concrete has attained the strength atleast twice the stress to which concrete may be subjected at the time of removal

The period, that shall elapse after concrete has been laid and before easing and removal of centering and shuttering is undertaken, shall be as:

| Sl.No. | Part of Structure   | Period  |
|--------|---|---|
| 1.     | Sides of foundation, column & walls                           | 48 hours  |
| 2.     | Underside of Slabs Up to                                      |   |
|        | A. 4.5 metre Span   | 7 days  |
|        | B. over 4.5 metre Span  | 14 days   |
| 3.     | Underside of Beams soffits arches up to                       |   |
|        | A. 6 metre Span   | 14 days   |
|        | B. over 6 metre Span  | 21 days   |
| 4.     | Domes, shells, vaults plates and structures of special nature | As per written instructions of Engineer-in-charge |

This period is given for concrete work using ordinary Portland cement for rapid hardening cement this period equal to 3/7th of above period and will be sufficient in all cases except for vertical sides of beams and slabs and in which case it shall be 24 hours. In slabs and T. beam construction, sides shall be stripped off first, then the underside of slabs and lastly that of beam. In case of cantilever slabs and beams, centering shall remain till structures for counteracting or holding down have been erected and have attained sufficient strength.

#### 4.2.6 Measurements.

Form work shall be measured as the areas in square metre of shuttering in contact with concrete except in the inclined slab, and portion of curves shells requiring shuttering both on underside and over side in which case only area of underside shall be measured for payment.

Dimensions shall be measured correct to a meter and areas shall be worked out correct to two decimal places. No deductions of opening shall be made up to 0.4 sqm. in area.

Form work to secondary beams shall be measured up to the sides of main beams, but no deduction shall be made from form work of the main beam at the intersection point. No deduction shall be made from the form work of a column at intersection of beam.

#### **4.3.1 Reinforcement.**

The type of steel reinforcement to be used in the work shall be specified in the item of work. It shall conform to the relevant Indian standards given below

| <b>Sl.No.</b> | <b>Part of Structure</b>  | <b>Period</b>  |
|---------------|---|----------------|
| 1.            | Mild steel and medium tensile steel bars and hard drawn steel wire for concrete reinforcement | IS 432 - 1996  |
| 2.            | Deformed bars for concrete reinforcement, rolled mild steel and medium tensile steel          | IS 1139 - 1996 |
| 3.            | Cold twisted steel bars for concrete reinforcement  | IS 1786 - 1996 |
| 4.            | Hard drawn steel wire fabrics   | IS 1566 – 1967 |

Steel shall be supplied by the department where so stipulated in the contract. But where contractor has to arrange these steel products, he shall produce to the Engineer-in-charge, a copy of the Manufacturer's Certificate indicating the Indian Standard to which the particular steel conform and the grade, if any, before it is incorporated in the works.

#### **4.3.2 Bending and overlapping.**

Bending reinforcement shall conform accurately to the dimensions and shapes as shown in the detailed drawings or as directed by the Engineer-in-charge. Bars shall not be straightened in a manner that will cause permanent damage to the materials. Bars with cracks shall not be used. Bars shall be bent cold to the shape and dimensions as shown in the detailed drawings or as directed by the Engineer-in-charge.

Only bars of full lengths shall be used. But where this cannot be done, over lapping shall be done as directed by the Engineer-in-charge. As far as possible, over lapping bars shall not touch each other, but these shall be kept apart 25 mm. or 1/4 times the maximum size of the coarse aggregate whichever is greater, with concrete between them. But, where this cannot be done, the overlapping bars shall be properly tied with annealed steel wire 1.00 mm. to 1.60 mm. thickness twisted tight. The overlaps shall be staggered for different bars and located at points along the span, where both shear and bending moments are low.

Deformed bars may be used without hooks, provided anchorage requirements are adequately met with. When hooks are formed in deformed bars, the internal radius of bend bars shall be at least 3 times the dia. of bars.

#### **4.3.3 Placing in position.**

All Reinforcement bars shall be accurately placed in position with spacing and cover as shown in the drawing or as specified and firmly held so during the packing and vibrating and setting of concrete. Bars shall be thoroughly cleared of rust scales, grease, oil and any other foreign matter before placing them in position. The bars, crossing one another shall be tied at every intersection with two standards of annealed wire 1.00 mm. to 1.60 mm. thickness twisted tight, to make the skeleton of steel work rigid so that reinforcement does not get displaced during deposition of concrete.

The bars shall be kept in position by the following methods:

- (a) In case of beam and slab construction, sufficient number of precast cover blocks in cement mortar 1 : 2 about 4 x 4 section and thickness equal to the specified cover shall be placed between bars and shuttering, so as to secure and maintain the requisite cover of concrete over the reinforcement. In case of cantilevered or doubly reinforced beams or slabs, the main reinforcing bars shall be held in position by introducing chairs spacers or support bars shall be held in position by introducing chairs spacers or support bars at 1.0 to 1.20 m. centre
- (b) In case of columns and walls, the vertical bars shall be kept in position by means of timber templates with slots accurately art in them. The templates will be removed after concreting has been done below it.

#### **4.3.4 Inspection.**

Full details of numbers, sizes, lengths, weights, laps, welds, spacing of bars placed in position in different parts of the work shall be recorded, certified and signed by the Engineer-in-charge to show that all reinforcement has been placed correctly as per sanctioned drawing or as ordered by the Engineer-in-charge. No concrete shall be deposited until the Engineer-in-charge has inspected and certified the correctness of reinforcement recorded the steel reinforcement and given permission to place the concrete in writing. After the approval of the reinforcement by the Engineer-in-charge, it will be the contractor's responsibility to see that the reinforcement, spacing and arrangements are not tampered within anyway before concreting.

#### 4.3.5 Measurements.

Reinforcement including authorized spacer bars and lapping shall be measured in lengths of different diameters, as actually used in the work nearest to a cm. and their weight calculated in Kg., on the basis of which steel is calculated in Kg. Wastage and unnecessary overlaps shall not be paid, for annealed steel wire required for binding shall not be measured. Its cost being included in the rate of reinforcement.

Reinforced concrete shall be classified and measured separately as follows:

1. Foundations, footings, bases for columns etc. and mass concrete.
2. Walls (any thickness) including attached pilasters, buttresses, plinth and string course.
3. Suspended floors, roofs, landings, shelves and their supports and balconies.
4. Chajjas up to 15 cm. thickness shall be measured separately from those exceeding 15 cm. in thickness including position on bearing wall.
5. Lintels, beams, girders and cantilevers.
6. Columns, pillars, posts and struts.
7. Stairs including balustrades
8. Vertical and horizontal fins individually or forming box, lowers and bands. The work under the following categories shall be measured separately.
  - i. in foundation
  - ii. from foundation level to floor two level
  - iii. from floor two level to floor three level and so on; and
  - iv. RCC in parapet shall be measured together with the corresponding item in wall of the storey next below.

**No deduction shall be made for the following:**

1. Ends of dissimilar materials (e.g.) joists, beams, posts, girders, purlins, rafters up to 500 Sq.cm. in section;
2. Openings up to 100 Sq.cm.
3. Volume occupied by reinforcement shall not be deducted, and
4. Volume occupied by drainage, water pipes, conduits etc. not exceeding 100 Sq.cm. each in cross sectional areas shall not be deducted. Nothing extra shall be paid for leaving and finishing such cavities and holes.

**SECTION – 5**  
**BILL OF QUANTITY**

## BILL OF QUANTITIES

**Tender Inviting Authority - Panchayat Samiti, Ranpur** **District- Nayagarh**

**BID-IDENTIFICATION NO: 1/ 2021-22**

**Tender Schedule for the Work: Const. of Delivery Patient Waiting Room at Darpanarayanpur PHC.**

**Amount put to tender – Rs.1384437.00** **Period of Sale of tender: Dt.08.06.21 to Dt. 30.06.21 up to 5.00 PM.**

**E.M.D. required - Rs. 6,000.00** **Receipt of tender : Dt.08.06.21 to Dt. 02.07.21**

**Period of Completion- Four Months** **Date and time of opening of tender: Dt. 05.07.21 at 11.30 AM**

| Sl. No. | Description of Work  | Unit | Quantity | Rate    | Amount   |
|---------|--|------|----------|---------|----------|
| 1       | Earthwork in excavation of foundation & plinth in hard soil including dressing and levelling the bed up to the required depth & removing the excavated earth & positing the same away from the work site within initial lead of 50 mtr & initial lift of 1.5 mtr, including cost of labour T&P articles required for the work including shoring, shuttering, propping & dewatering if required, etc. complete in all respect as per the specification & direction of the Engineer-in-Charge. | Cum  | 79.55    | 199.68  | 15884.54 |
| 2       | Filling in foundation and plinth with excavated earth etc complete.  | cum  | 56.95    | 323.84  | 18442.69 |
| 3       | PCC(1:3:6)using 40 mm size HB metal including all cost etc complete.   | Cum  | 18.08    | 4286.05 | 77491.78 |
| 4       | Latrite stone masonry with C.M(1:6) using Latrite stone with all cost ,conveyance etc  | Cum  | 21.88    | 4411.63 | 96526.46 |

**CONTRACTOR**

**Page  
58**

**B.D.O,RANPUR**

|   |  |     |        |          |           |
|---|--|-----|--------|----------|-----------|
|   | complete.  |     |        |          |           |
| 5 | Fly ash brick masonry in cement mortar (1:6) by using 10" size Fly ash Bricks including all cost ,conveyance etc complete  | Cum | 36.63  | 4287.53  | 157052.22 |
| 6 | R.C.C. M.20 using 20mm & down graded hard granite crusher broken chips including laying,hoisting, centering and shuttering with all cost, conveyance etc complete. |     |        |          |           |
| a | Plinth band  | Cum | 2.80   | 4965.73  | 13904.04  |
| b | Column base  | Cum | 9.22   | 4710.93  | 43434.77  |
| C | Column s/s   | Cum | 3.70   | 10344.77 | 38275.65  |
| d | Lintel band  | Cum | 2.64   | 8179.15  | 21592.96  |
| e | Chajja   | Sqm | 15.79  | 754.14   | 11907.87  |
| f | Roof slab  | Cum | 12.70  | 8824.05  | 112065.44 |
| g | Roof beam  | Cum | 2.63   | 12052.38 | 31702.97  |
| 7 | 20 mm thick C.P (1:4) for RCC work (Grading Plaster ) per 1 Sqm.   | Sqm | 101.60 | 214.25   | 21767.80  |
| 8 | Supplying,fitting and placing ucoated HYSD bar reinforcement complete as per drawing and technical specification   | Qtl | 37.76  | 7096.68  | 267989.44 |

|    |  |      |         |         |           |
|----|--|------|---------|---------|-----------|
| 9  | 16 mm thick C.P (1:6) over brick masonry including all cost  | Sqm  | 206.89  | 195.14  | 40372.73  |
| 10 | 12 mm thick C.P (1:6) over brick masonry including all cost  | Sqm. | 199.80  | 137.06  | 27384.59  |
| 11 | 6 mm thick C.P (1:4) over RCC surface including deep chipping and including all cost, conveyance taxes, royalties etc, complete as directed by the Engineer in chief.  | Sqm  | 76.00   | 150.77  | 11458.52  |
| 12 | Wall painting 2 coats with plastic emulsion paint of approved shade on new work to give an even shade including cost of paint.   | Sqm  | 282.88  | 75.28   | 21295.42  |
| 13 | Finishing walls with water proofing cement paint of approved shade on new work tow coat over a coat of cement wash to give an even shade including cost of paint   | Sqm  | 282.88  | 45.34   | 12825.91  |
| 14 | Finishing walls with water proofing weather shield cement paint of approved shade on new work tow coat over a coat of cement wash to give an even shade including cost of paint  | Sqm  | 199.80  | 70.47   | 14080.10  |
| 15 | Providing & Fixing of vetrified tiles of 600mm coloured/printed series (Homogenous) in floors and laying on 25mm thick bed of cement mortar (1:1) joined with neat cement slurry mixed with pigments to match the shades of the vetrified tiles including cost of precast tiles other materials with all labour cess etc complete. | Sqm  | 168.43  | 1062.06 | 178879.83 |
| 16 | Supplying fittings and fixing of iron grill gate including cost ,conveyance, royalty etc complete  | Kg   | 1969.00 | 62.90   | 123850.10 |

|    |   |      |       |        |            |
|----|---|------|-------|--------|------------|
| 17 | Painting two coats over a coat of red oxide primer with any approved paint including cost of paint. | Sqm, | 76.71 | 185.77 | 14250.82   |
| 18 | Supplying fittings and fixing of PVC Door   | Nos  | 3.00  | 4000   | 12000.00   |
|    | 18 (Eighteen items only)  |      |       | Total  | 1384436.65 |

(Rupees Thirteen lakhs eighty four thousand four hundred thirty six only)

My/Our quoted rate is.....% (both in figures and words) excess/less than/equal to the estimated cost.

Signature of Tenderer

Block Development Officer  
Ranpur

### **INSTRUCTIONS TO BIDDER:**

- 1) Only “percentage quoted bid” of the bidder shall be considered.
- 2) Percentage quoted by the bidder shall be accurately filled in words and in figures.
- 3) If any discrepancy is found between words and figure rate quoted in words shall be taken as correct.
- 4) If any discrepancy is found in the percentage quoted in “percentage excess or less” and “total amount quoted by the bidder” then the percentage shall be taken as correct and accordingly the bid price shall be corrected which would be binding upon the bidder.
- 5) If the bidder quoted the percentage without mentioning excess and less and not supported with the corresponding amount will be treated as “Excess”.
- 6) The bidder shall write the percentage in excess or less up to one decimal point only. If the bidder writes the percentage up to two or more decimal point the 1st decimal point shall only be considered without rounding off.
- 7) Where the bidder omitted to quote the percentage either in words or figure the officer opening the bid should record the omission.

1. Nos. of correction –
2. Nos. of over-writing –
3. Nos. of interpolation –
4. E.M.D. –
5. GST registration Certificate –
6. ITCC. –
7. PAN Card. –
8. Affidavit –
9. Differential amount if quoted less than the estimated cost -

**Block Development Officer  
Ranpur Block**

**SECTION – 6**  
**OTHER INFORMATIONS**

## **NO RELATION CERTIFICATE**

I/We hereby certify that I/ We am /are related / not related to any officer of Panchayati Raj & Drinking Water Department, Govt of Odisha of the rank of Assistant Executive Engineer & Govt. of Orissa. I/We am/are aware that if the facts subsequently proved to be false my / our contract will be rescinded with forfeiture of E.M.D & security deposit and I/We shall be liable to make good the loss or damage resulting from such cancellation.

I/We also note that, non-submission of this certificate will render my/our tender liable for rejection.

Signature of the tenderer

Date.

