PANCHAYAT SAMITI OFFICE: LOISINGHA

Letter No:2484

Date: 26.07.2023

INVITATION TENDER CALL NOTICE
Detail Tender Call Notice No. 01/LSG/2023-24

The Block Development Officer, Loisingha on behalf of Governor of Odisha invites percentage rate bids in sealed cover system for the work(s) as detailed below, from eligible contractors registered with the State Government and Contractors of equivalent Grade / Class Registered with Central Government / MES / Railways or other Licensing Authorities for execution of Civil works on production of definite proof from the appropriate authority.

Sl No	Name of Work	Amount Put to Tender (Rs.)	Bid Security 1 % EMD (Rs.)	Cost of Document (Rs.)	Class of Contractor	Period of completion (Calendar Months)
1	2	3	4	5	6	7
1	Implementation of Ama Hospital Programme under 5T at CHC Loisingha	1,78,57,433/- (Civil+El+PH)	1,78,574/-	10,000/	B & A	3 (Three)

Terms & Conditions

1. **Cost of Tender Paper:** Tender documents can be obtained from the office of the Block Development Officer, Loisingha/ DRDA, Balangir on payment towards the cost of tender papers as mentioned above (Non-Refundable) in shape of Bank draft / Bankers Cheque drawn in favour of Block Development Officer, Loisingha payable at SBI, Loisingha on any working day.
2. **Sale & Receipt of Tender Paper:** The sale and receipt of the Bid document shall start from **Dt. 26.07.2023, 11.00 A.M to Dt. 09.08.2023 upto 5.00 P.M during office hour.** Bid documents can be down loaded from official website of Government of Odisha (http://www.balangir.nic.in).
3. **Mode of submission of Tender Papers:** The Tenderers have to submit sealed tender papers in complete shape either by Dropping in Drop box at office of the Block Development Officer, Loisingha / DRDA, Balangir or in shape of Registered Post / Speed Post only addressed to Block Development Officer, Loisingha District- Balangir on or before **09.08.2023 (upto 5.00 P.M)**. The undersigned will not be responsible for any postal delay if any or non-receipt of paper in time. The tenderers must super scribe the name of the work on the top of the sealed envelopes.
4. The Bids will be opened on the **Dt. 10.08.2023 at 11.00AM** in the office of the undersigned.
5. For further details refer to (http://www.balangir.nic.in).
6. The authority reserves the right to cancel any or all the bids without assigning any reason thereof.

Sd/-

Block Development Officer,
Loisingha

ଓଡିଶା ସରକାର

GOVERNMENT OF ODISHA
PANCHAYAT SAMITI, LOISINGHA
DISTRICT: BOLANGIR, ODISHA - 767020

TENDER SCHEDULE

Name of Work:
Implementation of Ama Hospital Programme under 5T at CHC Loisingha

Amount Put to Tender: Rs 1,78,57,433.00
(Rupees One Crore Sevety Eight Lakh Fifty Seven Thousand Four Hundred Thirty Three Only)

Composite Tender (Civil+El+PH)

Head of Account: Ama Hospital

Block Dev. Officer, Loisingha

APPROVED TENDER SCHEDULE

TENDER CALL NOTICE NO: - 01/LSG/2023-24 of Panchayat Samiti, Loisingha

Name of Work: Implementation of Ama Hospital Programme under 5T at CHC Loisingha

Amount put to tender	:	Rs 1,78,57,433.00
Head of Account:	:	Ama Hospital
E.M.D. required	:	Rs. 1,78,574/-
Class of contractor	:	"B" & "A"
Cost of tender paper	:	Rs.10,000/-
Period of completion	:	3 Calendar months
Date of sale of tender paper	:	Dt.26.07.23, 11.00 A.M to 5.00 P.M of Dt. 09.08.23
Date of receipt of tender paper	:	Dt.26.07.23, 11.00 A.M to 5.00 P.M of Dt. 09.08.23
Date & time of opening of tender paper	:	Dt. 10.08.2023 at 11.00 AM

CONTRACTOR

Block Dev. Officer, Loisingha

RECORD OF SALE OF TENDER DOCUMENTS

Name of Work :		:	Implementation of Ama Hospital Programme under 5T at CHC Loisingha
1.	Tender Call Notice No	:	01/LSG/2023-24
2.	Name, class & address of the Contractor	:	_____
3.	Registering Authority with validity period.	:	_____
5.	Date of application	:	_____
6.	Date of Receipt of Application in Block Office	:	_____
7.	Date of Issue of Tender Documents	:	_____
8.	Date of Receipt of Tender Documents as per Call Notice	:	_____
9.	Cost of Tender Documents	:	
10.	Money Receipt No.	:	_____/Dt_____
11.	Total No. of Pages in the Tender Documents	:	71 (Seventy One) pages only

CONTRACTOR

Block Dev. Officer, Loisingha

RECORD OF RECEIPT OF TENDER DOCUMENTS

(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 / Un-pledged	:	_____
5.	Whether valid I.T.C.C./PAN furnished	:	_____
6.	Whether valid S.T.C.C./VAT furnished	:	_____
7.	Whether No- relationship certificate furnished	:	_____
8.	No. of corrections if any with remarks(Attested / Un-attested by the tenderers	:	_____
9.	No. of overwriting if any with remarks (Attested / Un-attested	:	_____
10.	No. of Interpolations	:	_____
11.	No. of omissions if any	:	_____
12.	If rates quoted in words and Figures tally	:	_____

CONTRACTOR

Block Dev. Officer, Loisingha

Panchayat Samiti, Loisingha
DIST. Bolangir

INVITATIONS FOR BIDS

Detail Tender Call Notice No.01/LSG/2023-24, Dated:26/07/2023

The Block Dev.Officer, Loisingha on behalf of Governor of Odisha invites percentage rate bids in sealed cover in conformity with detailed tender call notice no: 01/Loisingha/2023-24, Dated:26/07/2023 to be eventually drawn up in State P.W.D. Form P-1 contract for the execution of works detailed in the table from eligible class of contractors mentioned against the work registered with the State Governments and Contractors of equivalent Grade / Class Registered with Central Government / MES / Railways for execution of Civil works, on production of definite proof from the appropriate authority. The bidders may submit bids for the following works.

Sl no	Name of Work	Amount Put to Tender (Rs.)	Bid Security 1 % EMD (Rs.)	Cost of Document (Rs.)	Class of Contractor	Period of completion
1	2	3	4	5	6	7
1	Implementation of Ama Hospital Programme under 5T at CHC Loisingha	1,78,57,433/- (Civil+El+PH)	1,78,574/-	10,000/-	B & A	3 (Three) Calendar Months

1. Bid documents consisting of plans, specifications, the schedule of quantities and the set of terms and conditions of contract and other necessary documents can be seen in the office of the undersigned during office hours every day except on Sundays and Public Holidays till last date of receipt of tender papers. Interested bidders may obtain further information at the same address.
2. Bids must be accompanied with financial instruments towards E.M.D in shape of Bid security Declaration as provided in Memorandum No.5984 dt.27.04.2021 of Works Dept., Govt. of Odisha. The declaration of Annexure-II of Tender Document relating to Bid security Declaration also to be attached. Bids must also be accompanied by self attested xerox copy of valid GSTIN, PAN card and valid contract registration certificate, up to date ITCC failing which the bid will be liable for rejection..
3. The sale and receipt of the Bid document shall start from **Dt. 26/07/2023, 11.00 A.M to 5.00 P.M of Dt.9/08/2023 during office hour in Panchayat Samiti Loisingha and DRDA, Balangir.**
4. Bid must be delivered in the tender box having mentioned as Tender Call Notice **No.01/LSG/2023-24** in Panchayat Samiti, Loisingha and DRDA, Bolangir.
5. Bid documents can be down loaded from official website of Government of Odisha (http://www.balangir.nic.in). The bidders who have downloaded the bidding documents from the internet site will have to pay the cost of the tender document as indicated in col no. 5 of the above table in shape of demand draft in favour of **Block Dev. Officer, Loisingha,** payable at **SBI, Loisingha** in a separate envelope marked **"Cost of bidding documents down loaded from the internet"** with the bid document. Authority will not be held responsible, if any portion of the bid document is excluded or modified in the downloaded bid document.
6. Bidding documents requested by mail will have to be dispatched by registered / speed post on payment of an extra amount of Rs. 500/- over the cost of documents. The undersigned will not be held responsible for the postal delay if any, in the delivery of the documents or non-receipt of the same.
7. The Bids will be opened on the **Dt.10.08.2023 at 11.00 AM** in the office of the undersigned, in the presence of the members of tender committee of Panchayat Samiti, Loisingha, bidders or their authorized agents who wish to attend at the Conference hall of Panchayat Samiti, Loisingha. If the office happens to be closed on the last date of receipt/ opening as specified, the bids will be received / opened in the next working day at the same time and venue specified in the notification. Other details can be seen in the bidding documents.
8. Additional performance security shall be obtained from the bidder when the bid amount is less than the estimated cost put to tender. In such an event, only the successful bidder who has quoted less bid price/ rates than the estimated cost put to tender shall have to furnish the exact amount as per table below. Additional Performance Security (APS) has to be furnished in shape of **Demand Draft/ Term Deposit Receipt** pledged in favour of the **Block Development Officer, Loisingha, within seven days** of issue of letter of acceptance (LOA), otherwise the bid shall be cancelled and the security deposit shall be forfeited. Further proceeding for black listing shall be initiated against bidder.

CONTRACTOR

Block Dev. Officer, Loisingha

Amount of Additional Performance Security		
Sl No	Range of Difference between the estimated cost put to tender and Bid amount	Additional Performance Security to be deposited by the successful bidder
i	Below 5%	No Additional Performance Security
ii	From 5% and above and below 10%	50% of (Difference between estimated cost put to tender and Bid Amount)
iii	From 10% and above	150% of (Difference between estimated cost put to tender and Bid Amount)

9. In case of Engineering contractors seeking exemption of EMD are instructed to enclose an affidavit regarding the list of works awarded during the current financial year 2023-24 with exemption of EMD along with an application to avail the same for this work and will submit copy of original contract license and produce the original license at the time of opening of tender, otherwise the tender will be rejected.
10. Scheduled Caste and Scheduled Tribe Tenderers will be given concession where their tenders are within 10% of the rate quoted by the lowest tenderer, for any work, the work may be considered for award to him/ them at the lowest tendered rate. The Security deposit at half the usual rate may be deposited/realised by/from the Scheduled Caste or Scheduled Tribe contractors coming under categories up to "B" class only as against the permissible percentage under Rule 13 of the PWD contractor's regulations rules.
11. If any bidder quotes less than 15% (fifteen) of the amount put to tender then such a bid shall be rejected and the tender shall be finalized basing on merit of the rest bids and if more than one bid is quoted at 14.99% (decimal up to 2 nos. will be taken for all practice purpose) less than the estimated cost, the tender accepting authority will finalize the tender through transparent lottery system in present of bidder or their representatives.
12. The tenderer while submitting tender shall furnish an **affidavit** in original, along with the tender about the authenticity of the tender documents including E.M.D. **The conditional tender will not be accepted on any circumstances by the authority**.
13. The bidding documents are to be properly sealed and clearly superscripted with the name of work.
14. The percentage quoted in the tender without mentioning excess or less shall be treated as excess.
15. The agency bidding for the work put of this notice, shall have to mention percentage of excess/less (both in words & figure) over the amount put to tender required by him in the prescribed format at the end of the bill of quantity. In the event of discrepancies the words & figure, the percentage quoted in words will count.
16. Validity of tender shall be 90 days from the date of opening of tender.
17. Any addendum/ corrigendum/ cancellation of above tender will be published in the website: http: /www.balangir.nic.in only
18. The Block Dev. Officer reserves right to reject any or all the tenders without assigning any reason thereof.

Block Dev. Officer, Loisingha

Memo No: **2476 / Dt.26.07.2023**

Copy forwarded to the Manager (Publication) I & PR Department, Odisha, Bhubaneswar with a request to get publish in 2 (two) Odia Daily and 1 (one) no of local English Daily News paper on or before 26/07/2023 for wide circulation of the Tender Call Notice.

Complimentary copy of the News Paper containing the Tender Call Notice may be send to this office for reference and record.

Block Dev. Officer, Loisingha

Memo No: **2477 / Dt.26.07.2023**

Copy submitted to the NIC, Bhubaneswar/ copy submitted along with DTCN (Soft copy) to DIO, NIC Balangir with a request to display the bid document in the website from Dt.26/07/2023 to Dt.09/08/2023 up to 5.00 P.M..

CONTRACTOR

Block Dev. Officer, Loisingha

Memo No No: **2478 / Dt.26.07.2023**

Copy submitted to Deputy Secretary, PR Deptt. Odisha, Bhubaneswar for kind information and necessary action.

Block Dev. Officer, Loisingha

Memo No No: **2479 / Dt.26.07.2023**

Copy forwarded to Chief Construction Engineer, Lower Suktel Project Bolangir/ Executive Engineer (R&B) Division, Bolangir / Kantabnji / R.W. Division, Bolangir / Irrigation Division, Bolangir / M.I. Division, Bolangir / P.H. Division Bolangir / WESCO, Bolangir / ADM, Bolangir / All Sub Collectors of Bolangir District / All B.D.O.s/ All Tahasildars under Bolangir District / Office Notice Board for information and wide circulation.

Block Dev. Officer, Loisingha

Memo No No: **2480 / Dt.26.07.2023**

Copy submitted to The Collector & District Magistrate, Bolangir for favour of kind information.

Block Dev. Officer, Loisingha

Memo No No: **2481 / Dt.26.07.2023**

Copy submitted to the Additional Project Director (Tech), DRDA, Bolangir with request to attend in the O/O of the undersigned at the time of opening of sealed tender bid documents.

Block Dev. Officer, Loisingha

Memo No No: **2482 / Dt.26.07.2023**

Copy to PA to Superintendent of Police, Bolangir for kind information of SP, Bolangir Copy to Inspector-in-charge PS Bolangir for information and necessary action. He is requested to kindly arrange police force in the office of the undersigned for smooth completion of the tender process on above dates.

Block Dev. Officer, Loisingha

Memo No No: **2483 / Dt.26.07.2023**

Copy to Assistant Engineer, / JE/ of Loisingha Block for information and necessary action

Block Dev. Officer, Loisingha

Memo No No: **2484 / Dt.26.07.2023**

Copy to Office Notice Board / Tender File concerned.

Block Dev. Officer, Loisingha

CONTRACTOR

Block Dev. Officer, Loisingha

Schedule XLV-Form No. 61

PANCHAYAT SAMITI OFFICE: LOISINGHA

(FORM F-2)

PERCENTAGE RATE TENDER AND CONTRACT FOR WORKS

General Rules and Direction for the guidance of Contractors.

1. All works proposed for execution by contract will be notified in a form of invitation to tender pasted on a board hung up in the Office of and signed by the Block Development Officer, Loisingha.

   This notice will state the work to be carried out. The items and approximate quantities there of as well as the date of submitting and opening of tenders also the amount of earnest money to be deposited and the amount of the security deposit to be deposited by the successful tenderer and the parentage if any, to be deducted from bills. Copies of the specification, designs, drawings and any other documents required in connection with the submission of tender signed for the purpose of identification by the Block Development Officer shall also be open for inspection by the contractor at the office of the Block Development Officer during the 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 payments made on account of work, when executed by a firm must also be signed by the several partners, except where the contractor 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 Block Development Officer, Loisingha and their issue rates shall be filled in and completed in the office of the Block Development Officer before the tender form is issued. If a form is issued to an intending tender without having been so filled in and completed, he shall request the office to have this done before he completed and delivers his tender.

   The amount of earnest money to be deposited will be percent of the tendered amount.

5. Any persons who submit a tender shall fill-up the usual printed form starting at what rate he is willing to undertake each item of the work. Incomplete tender and tenders which propose any alteration 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 contractor who wish to tender for two or more works shall submit a separate tenders for each. Tender shall be the name of the work to which they refer written outside the envelope case deposits for earnest money herein before mentioned shall be made in Govt. Treasuries and the Challan thereof should be enclosed with the tender.

6. The Engineer of his duly authority assist 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 statements in a suitable form. In event of a tender being rejected the challan for the earnest money forwarded therewith be returned to the tender with a pay order for the amount of the earnest money.

7. The Engineer shall have right to rejecting all or any of the tenders.

8. 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 thereupon sign copies

CONTRACTOR **Block Dev. Officer, Loisingha**

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 of 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 amounts of the security money within the prescribed time. If the tenderer fails to deposit the required amount of the security money within prescribed time, the engineer may reject the tender.

If the engineer is not competent to accept the tender himself, he will inform the tenderer of the tender which he decided to recommended for acceptance. Such tender shall thereupon sign forthwith copies of the required amount of the security money within the prescribe time. The tender with the specification and other documents signed by the tenderer with then be forwarded for acceptance to the Engineer who is competent to accept the same. If the said Engineer rejects the tender the security money deposited shall be refunded to the tenderer.

9. When a tender is selected for acceptance, the tenderer shall deposit the required amount of the security money in cash in the Treasury and shall forward the challan to the Block Development Officer. Government securities may be endorsed to the Block Development Officer 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 10 percent of the estimate value of the work and towards this amount the earnest money already deposited by him shall be credited. Atleast half of the security inclusive of the earnest money, shall be deposited by 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 percent of the amount of each payment to be made him under clause 7 of the conditions for work done under the contract.

11. When tender has been selected for acceptance and the required amount of the security money has been deposited, the Engineer shall scrutinize all pages of the form of Item, Rate, Tender 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, shall send the form for signature of the acceptance to the officer competent to accept it.

CONTRACTOR

Block Dev. Officer, Loisingha

TENDER FOR WORK

I / We hereby tender for execution for the Block Development Office, Loisingha of the work specified in the under written Memorandum at the rates specified there in within a period of three months from the date of written order to commence and in accordance in all respects with the specification. Designs, Drawing and other documents refer to in rule, I here of and subject to the annexed condition and with such material as are provided for by, and in all other respects in accordance with such conditions so far as applicable.

MEMORANDUM

a)If several sub-work are included they should be detailed in separately

a) Name of work _____

b) Estimate Cost _____

b&c) sum total of these will be 2% of the estimated cost of agreement

c) Agreement Amount _____

d) Earnest Money _____

e)This percentage deduction from bills will be credited to the contractors security Deposit

e) Initial Security Deposit (Including earnest money) to Rs. _____

be deposited before the commencement of the work.

f) Income Tax @ 2% + surcharge of the Bill to be recovered or as

amended from time to time _____

g) Additional performance Deposit _____

h) Percentage to be deducted from Bill :

Signature of contractor before submission of tender

Rs._____(Rupees_____

i) Time required for the work from the date of written order to commencement

_____ calendar months.

j) Date written order to commence _____

k) Total No. of work tendered for _____

Signature of witness to one tenderers Signature.

Should this tender be accept. I/We hereby agree to abide by and fulfill all the term and provision of the said condition of contract annexed here to so far as applicable, on in default thereof to forfeit and pay to the Government of Odisha or his successors in office, the sum of Money mentioned in the said conditions.
Dated the _____ day of _____2023.

Witness –

Signature of Officer by whom accepted

Address –

Occupation –

The above tender is hereby accepted by me on behalf of the Government of Odisha.
Dated the _____ day of _____2023.

Block Development Officer,
Loisingha

CONTRACTOR

Block Dev. Officer, Loisingha

CONDITION OF CONTRACT

Compensation for delay

Clause-1: All compensation or other sums of money payable by the contractor to Government under the terms of the contract may be deducted from, or paid by, the sale of sufficient part of his security deposit or from the interest arising there from, or form any sum which may be due or may become due to the contractor by Government or 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 10 days there after 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 of thereof.

Clause-2: a) The time allowed for carrying out the work as entered in the tender 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 throughout the stipulated period of the contract, be carried on with all due diligence (time being deemed to be or essence of the contract on the part of the contractor) and the contractor shall pay, as compensation, an amount equal to half percent on the amount of the estimated cost, if the whole work as shown by the tender for everyday that work remains un-commenced, or unfinished after the proper dates.

The work should not be considered finished until such date as the Block Development Officer shall certify as the date on which the work is finished after necessary rectification of defects as pointed out by the Block Development Officer or his authorized agents, are fully complied with by the contractor to the Block Development Officer satisfaction.

And further, to ensure good progress during the execution of the 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 on-fourth of the whole time allowed under the contract has elapsed, one half of the work, before one half of such time has elapsed and three fourth of such time has elapsed, in the events of the contractor failing to comply with the conditions, he shall be liable to pay as compensation an amount equal to one-third percent on the said estimated cost of the whole work for everyday that the due quantity of work remains incomplete. Provided always that the entire amount of compensation to be paid under the provisions of this clause shall not exceed 10 percent on the estimated cost of the work as shown in the tender.

Actions when whole security deposit is forfeited

Clause-2:b) If there are possibilities of exceeding him compensation amount as mentioned in clause (a) 10%of the estimated cost, or in any case in which under any clause or clauses of this contract, the contractor shall have rendered himself liable to pay compensation amounting to the whole of his security deposit in the hands of Government (Whether paid in one sum or deducted by installment) the Block Development Officer on behalf of the Governor of Odisha, shall have the power to adopt any of the following courses, as he may deem best suited to the interests of the Government.

a) "To 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
20% of the value of left-over work will be realized the contractor as penalty" (Works Deptt. No. 10639, Dt. 27.05.2005)

CONTRACTOR **Block Dev. Officer, Lajsingha**

b) To employ labour paid by the P.R Department 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 vlue 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, and to take such part of the work of the contract as shall be unexecuted out of his hands and to give in 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 the Government under the contractor otherwise, or from his security deposit or the proceeds of sale thereof or a sufficient part thereof.

In the event of 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 advances 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 not be entitled to recover or be paid any sum for any work there to for actually performed under this contract unless & 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 so certified.

d) Security deposit of the contractor shall be refunded only one year after the date of completion of the work provided the final bill has been paid and defect, if any rectified.

Contractor remain liable to pay compensation if action not taken under Clause-6

Clause-3: In any case in which any of the powers, conferred upon the Block Development Officer by Clause-3 thereof, shall have become exercisable and the same shall not be exercised, the non-exercise thereof shall not constitute a waiver of any of the conditions thereof and such powers shall not withstanding 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 the whole of his security deposit, and the liability of the contractor for the 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 preceding clauses he may, if he so desire, take possession of all or any tools, plant materials and stores, in or upon the works, or the site: thereof or belonging to the contractor, or procure by him and intended to be used for the execution of the work or any part thereof shall be final, otherwise the Block Development Officer may be notice in writing to the contractor or his clerk of the works, foreman or other authorized agent require him to remove such 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, Block Development Officer as to the expense of any such removal and the amount of the proceeds and expenses of any such sale shall be final and conclusive against the contractor.

Power to take possession of or require removal of or sell contractors plants

CONTRACTOR

Block Dev. Officer, Teisingha

Extension of time

Clause-4: If the contractor shall desire in extension of time for completion of the work, on the ground of his having been unavoidably hindered in its execution or any other ground, he shall apply in writing: to the Block Development Officer 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 thereof, authorize such extension of time, if any, as may in his opinion, be necessary or proper. The Block Development Officer shall at the same time inform the contractor whether he claims compensation for delay.

Final Certificate

Clause- 5: On completion of the work, the contractor shall be furnished with a certificate by the Block Development Officer (Herein after called the Junior Engineer) of such completed, but no such certificate be given nor shall the 'work be considered to be completed until the contractor shall have removed from the area of the premises to be distinctly marked by the Block Development officer in the site plan on which the work' shall be executed, all scaffolding, surplus materials and rubbish and cleaned off the dirt from all wood work, doors, windows, 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 work shall have been measured by the Officer of the Block Development Office in accordance with the rules of the department whose measurements shall be binding and conclusive against the contractor. If the contractor shall fail to comply with the requirements of this clauses as to removal of scaffolding, surplus materials, rubbish & cleaning off dirt on or before the date fixed for the completion of works, the Junior Engineer may at the expense of the contractor remove such scaffolding, surplus materials and rubbish & dispose of the same as he thinks fit and clean off such dirt as aforesaid; and the contractor shall forth-with pay the amount of all expense incurred, and shall have no claim in respect of any such scaffolding or surplus materials as aforesaid, except for any sum actually realized by the sale thereof.

If in the opinion of Junior Engineer, which shall be final and binding on the contractor, occupation or utilization of a portion of the work completed in no way interferes with progress of the work the same may be occupied or utilized by on behalf of the Govt. under the written order of the Junior Engineer and to get the defects, if any rectified by the contractor at his (contractor) own cost within six months from the date of completion of the whole work provided that the contractor will not be allowed any concession either in the shape of extension of stipulated period or any other monetary compensation on account of such occupation or use.

Payments on intermediate certificate to be regarded as advance and bill to be submitted monthly.

Clause- 6: A bill shall be submitted by the contractor each month on or before the date fixed by the Junior Engineer for all works executed in the previous month, and the Junior Engineer or his sub-ordinate 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 10 days from the presentation of the bill. If he does not submit the bill within the time fixed as aforesaid the Junior Engineer or his Sub-ordinates shall measure up the said work in the presence of the contractor whose counter signature of the measurement list will be sufficient warrant, and the Junior Engineer or his Sub-ordinates shall prepare a bill from such list which shall be binding on the contractor in all respects.

Provided that, if any balance 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 & completed, and shall not preclude the requiring of bad, unsound and imperfect or unskillful work to be removed and taken away and reconstructed or re-erected, or be considered as an admission of the due performance of the contract, or any part thereof in any respect, or the actual of any claim nor shall it conclude, determine, or effect in any way the powers of the Junior Engineer 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 affect the contract.

Clause- 7: The final bill shall be prepared by the offices of the Block Development Officer in accordance with the rule of the Deptt. in the presence of the contractor within 1 month of the date fixed for completion of the work.

Store supplied by the Govt.

Clause- 8: If the specification of estimate of the work provides for the use of any special description of materials to be supplied from the Junior Engineer store, or it is required that the contractor shall use certain stores to be provided by the Junior Engineer under the conditions of this contract (Such materials & Stores, and the prices to be charged thereof as hereinafter mentioned being so far as practicable for the convinience of the contractor, but not so as in any way to control the meaning or effect of this contract are specified in the schedule or memorandum here to annexed), the contractor shall be supplied (with such materials and stores noted in the annexed scheduled as are required from time to time to be used by him for purpose of the contract only and the value of the full quantity of materials and stores so supplied) at the rates specified in the said schedule may be set off 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 proceeds 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 remain the absolute property of Govt. and shall not on any account be removed from the site of the work, and shall at all times be opened to inspection by the Junior Engineer, Any such materials used and in any perfectly good condition as the time of the completion or determination of the contract shall be returned to the Junior Engineer 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 materials, 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.

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 a penalty equivalent to 5 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 thereafter may become due to the contractor, or at from his security deposit, or the proceeds of sale thereof.

b) Owing to difficulty in obtaining certain materials in the open market the Govt. have undertaken to supply materials specified in the schedule hereto annexed. There may be delay in obtaining materials by the Dept. and the contractor is therefore, required to keep himself in touch with the day-to-day position regarding the supply of materials from the Junior

CONTRACTOR

Block Dev. Officer, Loisingha

Engineer and to so adjust the progress of the work that their labour may not remain idle nor may there be any other claim due to or arising from delay in obtaining the materials. It should be clearly understood that no monetary claim whatsoever shall be entertained by the govt. on account on delay in supplying materials. However extension of time for completion of work can be granted on timely application by the contractor vide also clause 5.

Works to be executed in accordance with specification, drawing & order etc

Clause- 10: The contractor shall execute the whole and every part of the work in the most substantial and workman like manner and both as regards materials and otherwise in every respect in strict accordance with the specification.

The contractor shall also conform exactly, fully and faithfully to the designs, drawings and instructions in writing relating to the works signed by the Junior Engineer and lodged in his 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 specification and of all such designs, drawings and instructions as aforesaid.

Do not invalidate the contractors

Extension of time in consequence of alterations

Rates of work not in estimate or schedule of rate of the district

Clause- 11: The Junior Engineer shall have power to make any alterations in or additions to the original specifications, drawings, designs and instructions that may appear to him necessary and advisable during In the progress of work, and the contractor shall be bound to carry out the work in accordance with any instructions which may be given to him in writing signed by Junior Engineer 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 of the same conditions in all respects on which he agreed to do the main work, and at the same rates as are specified in the tender for the main work. The time for the completion of the work shall be extended in the proportion that the additional work bears to the original contract work and the certificate of the Junior Engineer 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 the locality during the period when the work is being carried on and if such rates of mentioned class of work is not entered in the schedule of rates of the district then the contractor shall within seven days of the date of his receipt of the order to carry out the work inform the junior Engineer of the rate which it is his intention to charges for such class of work, and if the Junior Engineer does not agree to this 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 out in such manner as he may consider advisable.

No deviations from the specification stipulated in the contract nor additional items of work shall ordinarily be carried out by the contractor, nor shall any altered, addl. Or substituted work be carried out by him unless the rates of the substituted, altered or addl. Items have been approved and fixed in writing by the Junior Engineer. The contractor shall be bound to submit his claim for any additional work done during any month on or before the 15th day of the following month accompanied by a copy of the order in writing of the Junior Engineer. 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.

Provided always that if the contractor shall commence work or incur

any expenditure in regard thereof before the rates shall have been determined as lastly herein before mentioned, in such cases 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 the determination of the rates as aforesaid accordingly to such rate or rates as shall be fixed by the Junior Engineer. In the event of a dispute, the decision of the superintending Engineer of the circle will be final.

No compensation for alteration in or restriction of work to be carried out.

Clause- 12: If at all time after the commencement of the work the Governor of Odisha shall for any reason whatsoever not require the whole thereof as specified in the tender to be carried out. The Junior Engineer shall give notice in writing of the fact to the contractor who shall have no claim to any payment or advantage, which he might have derive 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 alteration having been made in the original specification, drawings, designs and instruction which shall involve any curtailment of the work as originally contemplated.

Action and compensation payable in case of bad work.

Clause- 13: If it shall appear to the Junior Engineer or his subordinate-in-charge of the work, that any work has been executed with un-sound, 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 quality inferior to that contracted for or otherwise not in accordance with the contract, the contractor shall on demand in writing from the Junior Engineer specifying the work materials or article complained of not-withstanding 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 article so specified and provide other proper and suitable materials or article 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 Junior Engineer in his demand aforesaid, then the contractor shall be liable to pay compensation at the rate of one percent on the amount of the estimate for everyday not exceeding 10 days, while his failure to do so shall continue and in the case of any such failure the Junior Engineer 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.

Work to be open to inspection

Contractor or responsible agents to be present

Clause- 14: All work under or in course of execution or executed in pursuance of the contract shall at all times be open to the inspection and supervision of the Junior Engineer and his subordinates and the contractor shall at all times during the usual working hours, and at all other times at which reasonable notice of the Junior Engineer or his subordinate to visit the works shall have been given to the contractor either himself be present to receive orders and instruction or have a responsible agent duly accredited in writing to be Present for that purpose. Order that given to the contractor's agent shall be considered to have the same force as if they had been given to the contractor himself.

Notice to be given before work is covered up.

Clause- 15: The contractor shall be given not less than five days' notice in writing to the Junior Engineer or his subordinate in charge of the work before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct dimensions thereof be taken before the same is so covered up or placed beyond the reach of measurement and any work without the consent in writing of the Junior Engineer or his subordinate-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 contractor's expense, or in default thereof payment or allowance shall be made for such work or the materials with which the same work executed.

Contractor liable to damage done and for imperfection for three months after certificate.

Clause- 16: If the contractor or his work people, or servant shall break, deface, injure or destroy any part of a building, in which they may be working or any building, road, fence, enclosure, or grass land or cultivated ground continuous to the premises on which the work or any part of it is being executed, or if any damage shall happen to the work, while in progress from any cause whatever or any imperfection become apparent in it within 3 months from the date of final certificate of its completion shall have been given by the junior Engineer, as aforesaid, the contractor shall make the same good at his own expense, or in default, the Junior Engineer may cause the same to be made good by other workmen, and deduct the expense (of which the certificate of the Junior Engineer 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 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 Junior Engineer.

Contractors to supply plant, ladders, scaffolding etc.

Clause- 17: The contractor shall supply at his own cost all materials (except such special materials, if any, as may in accordance with the contract, be supplied from the Junior Engineer stores), Plant, tools, appliances, implements, ladders cordage, tackle scaffolding the temporary work requisite or proper for the proper execution 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 Junior Engineer as to any matter as to which under this conditions, he is entitled to be satisfied, which he is entitled to require together with carriage therefore to and from the work. The contractor shall also supply without charge the requisite number of persons with the means & materials necessary for the purpose of setting out works and counting, weighting and assisting in the measurement 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 Junior Engineer at the expense 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 portion thereof. The contractor shall also provide all necessary fencing and lights required to protect the public from accident and shall be bound to bear the expense of defense of every 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.

And is liable for damages arising from non provision of lights, fencing etc.

Clause- 18: No female labour shall be employed within the limits of a cantonment.

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

The Block Development Officer, Loisingha shall have the right to enquire in to and decide any complain to alleging that the wages paid by the

contractor any labourer for the work done by such labourer, is less than the wages/ paid for similar work in the neighborhood.

The Junior Engineer or the work-in-charge shall have the right to decide whether any lobourer employed by the contractor is below the age of twelve years, and to refuse to allow any labourer whom he decide to be below the age of twelve years, to be employed by the contractor.

b) The contractor shall employ one or more Engineer Graduate or Diploma holders as apprentices at his own cost if the works as shown in the tender exceeds Rs. 2,50.000/-. The apprentices will be selected by the Block Development Officer. The period of employment will commence within one month after the date of work order and would last till the date when 90% of the work is completed. The fair wage to be paid to the apprentice should not be less than Rs. ....., the emolument of personnel of equivalent qualification employed under Govt. per month in case of graduate Engineer and less than Rs. 180.00 per month in case of Diploma Holder. The number of apprentices to be employed should be fixed by the Block Development Officer in a manner, so that the total expenditure does not exceed 1% of the tendered cost of the work.

c) Special class contractor shall employ under him one Graduate Engineer and two Diploma holders belonging to the state of Odisha like wise 'A' class contractor shall employ under him one graduate engineer or two diploma holders belonging to that state of Odisha. Undertakings/Private companies and firms or be ineligible for appointment to the contractor shall pay to the engineering personnel monthly emoluments which shall not be less the emoluments of the personnel of equivalent qualification employed under the state Govt. of Odisha. The Chief Engineer, Roads, Odisha may however assist the contractor with names of such un-employed Graduate Engineers and Diploma holders if such help is sought for by the contractor.

The name of such Engineering Personnel appointed by the contractor should be intimated to the tender receiving authority along with each tender as to who would be supervising the work.

Each bill of the Special class or 'A' class contractor shall be accompanied by an employment roll of the Engineering personnel together with a certificate of the Graduate Engineer or Diploma holders so employed by the contractor to the effect that the work executed as per the bill has been supervised by him. (Vide work Deptt. Office memorandum No. codes 15/85: 15384 Dt. 9.7.91)

Works not to be sublet.

Contract may be rescinded and security deposit forfeited for subletting, bribing or if contractor becomes insolvent.

Clause- 19: The contract shall not be assigned or sublet without the written approval of the Block Development Officer. And if the contractor shall assign or sublet his contract or attempt to do so, or become insolvent or commence any insolvency proceeding or make any composition with his creditor, or attempt to do so, or if 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 servant or agents to any public officer or person in the employ of Govt. in any way relating to his officer employment, or if any such officer or person shall become in any way directly or indirectly interested in the contract, the Block Development Officer may there upon by notice in writing rescind the contract and the security deposit of the contractor shall there upon stand forfeited and be absolutely at the disposal of Government and the same consequence shall ensure as if the contract had

CONTRACTOR

Block Dev. Officer, Loisingha

been rescinded under clause 3 thereof and in addition the contractor shall not be entitled to recover or to be paid for any work therefore actually performed under the contract.

Sum payable by way of compensation to be considered as a responsible compensation without reference to actual loss.

Clause- 20: All sums payable by way of compensation under any of these condition-8 shall be considered as reasonable compensation to be applied to the use of Government without reference to the actual loss or damage sustained and whether or not any damage shall have been sustained.

Clause- 21: In the case of tender by partners, any change in the constitution of the firm shall be forthwith notified by the contractor to the Junior Engineer for his information.

Change in constitution of firms.

In case failure to notify the change in the constitution within 15 days, the Junior Engineer may be notice in writing rescind the contracts and the security deposit of the contractor shall thereupon stand forfeited and be absolutely at the disposal of Government and the same consequences shall ensure as if the contractor shall not be entitled to recover or to be paid for any works therefor 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 Superintending Engineer of the circle for the time being who shall be entitled to direct at what point or points and in what manner they are to be commenced and from time to time carried on.

Clause- 23: Deleted

Lumps sums in estimates

Clause- 24: When the estimate on which a tender is made includes lump sums in respects of parts of the work the contractor shall be entitled to payment in respect of the items of work involved or the part of the work in question at the same rates as are payable under this contract for such items, or if the part of the work in question is not, in the opinion of the Junior Engineer capable of measurement, the Junior Engineer may at his discretion pay the lump sum amounts entered in the estimate and certificate in writing of the Junior Engineer shall be final and conclusive against the contractor with regard to any sum or sums payable to him under the provision of this clause.

Action where no specification

Clause- 25: In the case of any class of work for which there is no such specification as is 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 Junior Engineer.

Definition of work

Clause- 26: The expression "works" or "work" where used in these condition 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: Government shall be entitled to recover in full from the contractor any amount that the Government may be liable to pay under workman's compensation Act. VIII of 1923, to any workman employed in course of execution of any part of the work covered by these contracts.

CONTRACTOR

Block Dev. Officer, Loisingha

Clause- 28: That for the purpose of jurisdiction in the event of dispute if any, the contract should be deemed to have been entered in to within the state of Odisha and it is agreed that neither party to the contract or agreement will be competent to bring suit in regard to the matter 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 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: a) If during the progress of the work the price of any material incorporated in the work (Not being materials supplied from the Junior Engineer store) in accordance with clause there of increased or increases as a result of increase or decrease in the average whole sale price index (all commodities), and the contractor there upon necessarily and properly pay in respect of that materials incorporated in the work such increased or decreased price, then he shall be entitled to reimbursement or liable to returned quarterly as the case may be, such an amount, as shall be equivalent to the plus or minus difference of 85% in between the average wholesale price index (all commodities) which is operating for the quarter under consideration and that operated for the quarter in which the tender was opened, as per the formula indicated below, provided that the work has been carried out within the stipulated time or extension thereof as are not attributable to him.

b) Similarly, if during the progress of work, the wages of labour increases or decreases as a result of increases or decreases in the minimum wages prescribed by Govt. and the contractor there upon necessarily and properly pays in respect of labour engaged on execution of the work such increases or decreases wages, then he shall be entitled to reimbursement or liable to refund quarterly as the case may be, such an amount, as shall be equivalent to the plus or minus difference in between the minimum wages for labour, which is operating for the quarter under consideration and that operated for the quarter in which the tender was opened, as per the formula indicated below, provided the work has been carried out within the stipulated time or extension thereof as are not attribute to him.

Price adjustment and reimbursement of claim for escalation on labour under clause: 31 will be applicable only if there is any increases or decrease in the minimum wage, fixed by the State Government.

c) Similarly if during the progress of work, the price of petrol oil and lubricants. (Diesel Oil being representative item for price adjustment) increases or decreases as result of the price fixed thereof by the Govt. of India and the contractor thereupon necessarily and properly pays such increased or decreased price towards Petrol Oil and lubricants used on execution of the work, then he shall be entitled to reimbursement or liable to refund, quarterly, as the case may be such an amount as shall be equivalent to the plus minus difference in between the price of P.O.L. which is operating for the quarter in which the tender was opened as per the formula indicated below. Provided that, the work has been carried out within the stipulated time or extension thereof as are not attributable to him.

CONTRACTOR

Block Dev. Officer, Loisingha

SPECIAL CONDITION

1. It shall be the responsibility of the contractor to produce all the material required for the work including the procurement of steel, cement and bitumen etc. (to be approved by the Junior Engineer) from the market at his cost and complete the work within stipulated time of completion as per accepted agreement. At no stage difficulty or obstacle for procurement of material due to any reason whatsoever shall be entertained by the department nor any plea of extension of time or compensation claim to these effects shall be entertained in account of the above. The safe custody of the materials issued by the department or produce by the contractor will be sole responsibility of the contractor. For both departmental issue materials or any procurement of materials by the contractor all incidental expenses like transport, storage, handling, and any other expenditure shall borne by the contractor. The materials as per the Appendix-A, if available with the department may be supplied to the contractor at the description of the department at the place and rate noted against each. The contractor may satisfy himself about the quality, quantity of materials at the time of issue.
2. If required the empty cement bag and empty bitumen drums may be requisitioned by the department which the contractor is bound to comply for which the rate of relief will be Rs. 3.67 for empty cement bag and Rs. _____ for empty bitumen drums for good quality (to the satisfaction of the Block Development Officer, Loisingha).
3. Deduction of the royalty
   (a) Earth/Sand/Moroum @ Rs. 38.41 per Cum
   (b) Stone Products @ 138.29/- per Cum
4. If the tenderer backs out from the offer before acceptance of the tender by the competent authority his EMD will be forfeited.
5. Royalty will be reimbursed on production of valid money receipt by the contractor.
6. In the event of any particular item(S) work for which the contractor as quoted rate(S) which are grossly below the corresponding estimated rates (or C.S.R)for the particular item the difference between the amount corresponding estimated (or C.S.R) rate and this grossly under quoted rate for quantity of work to be executed by the contractor shall be kept withheld from the payment due to the contractor until such time as the execution of the said item(s) of work is/are completed in all respects by the contractor to the full satisfaction of the Junior Engineer.
7. Additional Performance Security:
   Additional performance security shall be obtained from the bidder when the bid amount is less than the estimated cost put to tender. In such an event, the bidders who have quoted less bid price/ rates than the estimated cost put to tender shall have to furnish the exact amount of differential cost i.e estimated cost put to tender minus the quoted amount as Additional Performance Security in shape of Demand Draft/ Term Deposit Receipt pledged in favour of the Block Developemnt Officer, Loisingha in the sealed envelope along with the price bid at the time of submission of bids.
   The bids of the technically qualified bidders will be opened for evaluation of the price bid. In case of the bidders quoting less bid price/rate than the estimated cost put to tender and have not furnished the exact amount of differential cost (i.e estimated cost put to tender minus the quoted amount) as Additional Performance Security in shape of Demand Draft / Term Deposit Receipt, their price bid will not be taken into consideration for evaluation even if they have qualified in the technical bid evaluation.
8. Provision of Incentive
   For availing incentive clause in any project which is completed before the stipulated date of completion , subject to other stipulations it is mandatory on the part of the concerned Block Development Officer to report the actual date of completion of the project as soon as possible through Fax or e-mail so that the report is received within 7 (seven) days of such completion by the concerned PD, DRDA and Collector.
   The incentive for timely completion should be on a graduated scale of 1 (One) percent to 5 (Five) percent of the contract value Assessments of Incentives may be worked out for earlier completion of work in all respect in the following scale.
   Before 30% of Contract Period = 5% of Contract Value
   Before 20 to 30% of Contract Period = 4% of Contract Value
   Before 10 to 20% of Contract Period = 3% of Contract Value
   Before 5 to 10% of Contract Period = 2% of Contract Value
   Before 5% of Contract Period = 1% of Contract Value

CONTRACTOR **Block Dev. Officer, Loisingha**

TECHNICAL SPECIFICATION OF CIVIL PORTION OF WORK

Materials of following specification are to be used in work. The Tenderers are expected to possess and be wellconversant with the following IS standard and code of practice.

1.	Cement	Will be as per I.S. 269/255 (However the grade of cement to be selected by the Engineer-in-Charge of work and compressive cube test before commencement of work in each batch).
2.	Steel	I.S. 432 (Plain) and 1786 (Tor)
3.	Vibrator	I.S. 7246
4	Aggregate	I.S. 383. I.S. 515
5	Water for mixing and curing	Shall be clean, free from injurious amount of oil, salt, acid, vegetable materials and other substances and harmful to concrete in conformity to I.S. 456 and I.S. 2025
6.	Sand/ Fine Aggregate	I.S. 2116. 383
7.	Binding wire	I.S. 280 (galvanized minimum 1 mm)
8.	Rain water pipe	I.S. 2527
9.	Construction joints	I.S. 3414
10.	Steel Window Frame	I.S. 1038/83
11	Steel Door Frame	I.S. 4351/75
12.	Fitting & Fixtures for joinery works	Conforming to I.S. 7452/82 strictly conform to I.S. specification and as per direction of Engineer-in-Charge

Note : For road work (Approach Road) specification as per road and bridges (latest edition) published by I.R.C & M.O.S.T. shall be followed. In case of any doubt and absence of provision, regarding specification I.S. shall be referred (Indian standard).

ITEM OF WORK

1. Concrete shall be with conformity to I.S.456.
2. Foundation shall be with conformity to I.S.1080
3. Stone masonry (R.R.) shall be with conformity to I.S 1597 (Part-I)
4. C.R. Masonry shall be with conformity to I.S 1597.
5. Brick masonry shall be with conformity to I.S.2212.
6. Cement plastering shall be with conformity to I.S.9103 & 6925.
7. Mortar shall be with conformity to I.S.2250
8. White and colour washing shall be with conformity to I.S.6278.
9. CC in foundation shall be with conformity to I.S.2571.
10. Anti-Termite Treatment shall be with conformity to I.S.6813. (Part – I & Part – II)
11. Painting to all surfaces shall be with conformity to I.S.2395 (Part – I & Part – II)
12. DPC shall be with conformity to I.S.3067
13. Tarfelt treatment shall be with conformity to I.S.1346
14. Mosaic flooring with conformity to I.S.2114
15. Steel painting shall be with conformity to I.S.1477 (Part – I & Part – II) I.S.1661

TECHNICAL SPECIFICATIONS OF P.H. PORTION OF WORK

A) WATER SUPPLY & SANITARY INSTALLATIONS:

Materials of following standard manufacturers are to be used in the work. The contractor shall indicate, in the offer, the brand or make of the materials, for which the rates are quoted.

(a)	**Sanitary fixtures:**	
	To be of best quality vitreous ware of porcelain.	
	(i) Indian water closet	
	(ii) Foot Rests	
	(iii) Wash Hand Basin	
	(iv) Kitchen Sink	Hindware/Parry Ware / Neycer/ ISI marked
	(v) Urinals	
	(vi) Drain Board	
	(vii) Odisha Closet	
	(viii) European Water Closet & Low Level Flushing Cistern.	
(b)	**C.I. High Level Flushing Cisterns :**	Sushila Industries Prabhat Iron Foundry/ East India Steel / I.S.I. marked.
(c)	**H.C.I. Soil Waste Pipes:**	Confirming to I.S.I. 1729-1954, having I.S.I. Mark.
(d)	**C.P. Bath Room Fittings:**	Plaza/ Jaquar I.S.I marked & confirming to-latest ISS
(e)	**Brass Fittings :**	Shakti/Anupama /Luster/I.S.I Marked.
(f)	**Gunmetal Valves :**	Anupama / Leader / B.S.I S.I. marked
(g)	**G.I. Pipes (Medium Class):**	Manufactured by TATA / JINDAL / B.ST having I.S.I. Mark.
(h)	**Galvanised Iron fittings :**	I.S.I. marked C/R brand.
(i)	**Paints:**	Asian / Berger / Jonson/Confirming to I.S.S
(j)	**Cast Iron Manhole cover frame:**	Sushila Industries / Prabhat Iron Foundry / East India Steel make confirming to ISS 7.26
(k)	**Stone Ware Pipes & Fittings :**	Manufactured by Odisha Ceramic Industries / Odisha industries / Keshab Ceramic confirming to I.S.S. Specification No 651 /1980 (Grade A)
(l)	**P.V.C. (S.W.R.) & P.V.C (Rigid.) Pipe/Fittings:**	Manufactured by the Supreme Industries Ltd., Bombay / Oriplast, Balasore Duroplast confirming to I.S. Specification No. 4985/81 (Class IV)

(B) BUILDING MATERIALS:

(a) Bricks:

Bricks shall be of locally available best quality kiln burnt. Bricks shall be well burnt, uniform deep red, cherry or copper colored, free from cracks and flows, well shaped, uniform in size, homogeneous in textures and shall omit a clear metallic sound when struck, bricks shall have a minimum crushing strength 75 Kg/Cm^2 and shall not absorb water more than 20% by weight.

(b) Cement Mortar:

Mortar shall be well mixed to a uniform colour and consisting in the proportion as specified in the items of work. Sand shall be measured on the basis of its dry volume and the quantity shall be adjusted for bulking of damp sand. Cement shall be mixed, taking 50 kg. or 0.035 Cum. in volume only required quantity that can be consumed within 30 minutes of adding water shall be

mixed at one time.

(c) Cement:

Cement should confirm to IS-269/IS-455.

(d) Sand:

Locally available best river sand medium size

(e) Coarse Aggregates:

The course aggregate shall be of hard granite stone and shall generally confirm to I.S. 389. Porous Course aggregate shall not be used. The aggregate shall be free from clay films and other adherent coatings. Aggregate containing clay films over the stone materials shall be thoroughly washed. The aggregate shall be from approved quarry and crusher broken. Course aggregates shall be composed of particles ranging between the sizes 2.36 to the maximum size as may be specified in the relevant item of work. within the range, the aggregates shall be well graded so as to produce a dense concrete.

(f) Reinforcements:

Mild steel Round Bars coiled twisted and deformed bars of steel of medium tensile strength will be usec as reinforcement as per drawing and design and directions.Mild steel bars shall confirm to I.S :226/1962 standard quality or IS:432/1966 - Grade-I. Black annealed wire (Not thinner than 24 gauge for tying the reinforcements shall be used).

TECHNICAL SPECIFICATION FOR SANITARY & PLUMBING WORKS

(A) Sanitary ware & allied fittings :

1. General:

All Sanitary fixtures and their allied fittings, should be of first quality. manufactured by Hindustan Sanitary Ware / Parryware / Nycer, These should be approved by the Engineer-in-charge of the G.P H. Wing before use.

2. Squatting Pattern W.C. (pan) (Odisha Pattern Closets):

The water closet shall be of vitreous China of specified size and pattern, with an integral flushing rim. It shall have the flushing inlet at the back. The Odisha closet should be of approved quality confirming to I.S.S.-2656 (Part-III)

The squatting type Indian Water Closet (Odisha Closet) shall be sunk in floor sloped towards the pan in a workmanship likemanner. The closet shall be fixed on a proper cement concrete base of 1.3.6 proportion taking care that the cushion is uniform andeven, without closet, to receive the specified thickness of the floor finishing. The joint between the Closet and the P.V.C. (S.W.R) trap shall be made with W.C. ring and rubber lubricant and shall be leak proof

3. Flushing Cistern :

The flushing of the Indian water closet (Odisha Closet) shal be done by C.I. or Polyaterne High Level low-level porcelain valve- less syphonic flushing cistern of approved brand and quality I.S.I. Marked and capacity as specified. The connection between the cistern and water closet shall be made by 32 dia O.I. flush pipe made from G.I. Pipe (Light Quality) or 32 dia P.V.C. Pipe as specified in the tender schedule. The flush pipe with an offset should be fixed to wall by using C.I. Holder Bat Clamps. The capacity of the cistern should be 10 Ltrs. as per I.S.S. 15 Ltrs. In case of low-level cisterns. The Cistern shall be fixed on cast Iron or Rolled Steel Cantiliver Brakets (Builtin type), which shall be firmly embedded in the wall, with C.C. 1.2.4. The Cistern shall be provided with 20mm dia P.V.C. Overflow Pipe with fittings, which shall terminate into mosquito proof coupling secured in a manner that will permit it to be readily cleaned orrenewed.

The 32mm dia Flush Pipe shall be connected to the Water Closet by means of approved type joint. The Flush Pipe shall be fixed to wall by using C.I. Holder Bat Clamps. The bend and the Offset as required in the Flush pipe shall be made cold. The inside of the Cistern shall be painted with two coats of approved black bitumen paint. The Outer face of the Cistern, Brackets Overflow pipe andFlush Pipe etc., shall be painted with two coats of any synthetic enamel paint of approved shade and make, over a coat of priming. The cost of the rate quoted for the flushing cistern The inlet connection to the Cistern shall be made with 450 mm 1 cmg 15 mm dia P.V.C. Heavy type connection Pipe.

4. Wash Hand Basin:

The Wash Hand Basin shall be of the White Vitreous China of approved quality, make and brand I.S.I. marked. It shall be one- piece construction with an integral combined overflow. The size of the basin shall be as specified. Each basin shall be provided with one 15 mm dia C.R Brass Pillar Tap. 32mm dia C.R Waste, C.R. Chain and Rubber Plug, Unions, Joints. C.P Bottletrap cast complete in all respects of approved quality.

The Basin shall be supported on a pair of R.S. or C.I. Cantilever brackets (built in type) embedded and fixed in wall with cement concrete, 1:2:4. These brackets shall be painted to the required shade with two coats of approved synthetic enamel paint

over a coat of priming.

The waste of the Basin shall discharge into a floor trap or Channel through bottle traps as specified. One 32mm dia C.P. Bottle Trap is to be fixed to the Waste of the Basin & the outlet of the bottle trap is to be connected to the waste pipe to discharge the waste to the Pipe. to discharge the waste to the aforesaid floor trap. The inlet connection to the Basin shall be made with 450mm Long 15mm dia Heavy type P.V.C. connection pipe.

5. Kitchen Sink:

Unless otherwise mentioned the Kitchen Sink and drain board (if used) shall be of white Vitreous China or fire clay as specified and approved quality, make a brand, confirming to T.S.S, It shall be of one piece construction with integral combined overflow. The size of the sink and Drain Board shall be as specified.

Each Sink shall be provided with one 15mm dia C.P. brass Bib Cock, long body 40mm C.P. Waste with overflow C.P. Chain & Rubber Plug, unions etc., complete in all respects as specified and of approved quality.

The sink shall be supported on a pair of M.S. or C.I. Cantilever Brackets (Built in type) embedded or fixed in position in the wall by Cement Concrete 1:2:4. The brackets shall be painted to required shade with two coats of approved synthetic enamel paint over a coat of priming. The waste should discharge into a floor Trap or Channel. The waste pipe should be 40mm dia P.V.C. Pipe jointed to the waste of the Sink with a Brass union nut.

6. Standing Urinals :

The Urinals shall be flat pattern lipped front basin of required dimension of White Vitreous China and one piece construction with internal flushing box rim of an approved make and brand as specified. It shall be fixed in the position by*using wooden plug embedded in the wall with screws of proper size. Each Urinal shall be connected to a 40mm dia RV.C. Waste Pipe, which shall discharge into a channel of floor trap. The lip of Urinals shall be kept at 525mm from floor level, while fixing the Urinal on wall.

Where no. of Urinals are fixed in a line, the distance between the centres to centre of each Urinal shall be kept 750mm and each Urinal should be separated from one to other by a partition plate. The centre to centre of partition plates shall be kept 750mm apart. The partition plate shall be of one-piece 25mm thick marble plates, cut to size and front corners rounded. The partition plates shall be embedded in wall with cement concrete and finished smooth. The bottom of the partition plate should be kept 350mm above floor level and top should be kept at 1250mm above floor level. The plates should project 600mm from wall surface. The width of the plates to be embedded inside the wall should not be less than 100mm. The thickness of the plates shall be minimum 25mm.

For flushing the Urinals each Urinals shall be connected with one 20mm dia G.I. Pipe (Medium Class). One of this pipe shall be inserted into the inlet of the Urinal and jointed with Jute and putty where as the other end is connected either with a Tee or Bend with the 25mm dia size Water Pipe Line fixed on the wall horizontal above the Urinals. In each 20mm dia flush pipe one 20mm dia cum-metal Gate value, the water will flow to thermal of Urinal through the inlet pipe and flush the Urinal. After flush, the valve can be closed to avoid wastage of water. One 40mm dia P.V.C. Waste Pipe shall be connected to the waste of each Urinal, to discharge the Waste into the Channel of Trap. One end of this Waste pipe shall be made a cup size to fit into the projected waste and tightened with screws.

7. Squatting Urinal Plates:

The Urinal Plates shall be of White Glazed Vitreous China with integral flushing rim of size 450 X 350mm of approved make and brand as specified. There shall be white vitreous channel with stop and outlet pieces in front. These plates shall be fixed on C.C. at 75mm to 100mm above floor level.

For flushing arrangement, one 25mm dia G.I. Common Water Pipeline (minimum size) shall be fixed on the wall parallel to floor. For each urinal one 20mm dia G.I. Branch Pipe shall be taken down up to t200mm from floor level just at the centre of each plate, in which one 20mm dia Gate Valves is fixed at 350mm above floor level. At 1200mm height, the 20mm dia flush pipe shall be divided into two branches shall be taken downward and connected to the inlets of the urinals plate at floor level. By operating the valve as above, the water will rush into the rims of the urinal plate and flush it.

Where there are number of urinals fixed in a line, each urinal should be separated by a partition plate fixed in the centre of two urinal plates. The centre-to-centre distance of the partition plates shall be kept 750mm.

The partition plates shall be of one-piece marble plate, 25mm thick, cut to sizes and front corners rounded. The plates are to be embedded in wall with cement concrete and finished smooth. The bottom of the partition plates shall be kept flushed to urinal top level and the top level of partition plate shall be kept at 1200mm from the urinal plate top and the projection from the wall shall be 600mm. The width of the plate to be embedded inside the wall should not be less than 100mm.

(B) Soil and waste pipes and fittings

1. H.C.I. Pipe Fittings

The Cast iron Soil. Waste and design pipes (spigot & socket joints) shall be of make and brand as specified (under specification of materials), confirming to I.S.S. 3989-1970 and ISI marked with approved clamps are to be used. The pipes and fittings shall be free from cracks, laps, pinholes, and other imperfection and carefully cited.The aSEss door fittings shall be designed and made so as toavoid dead space in which filth may accumulate and door shall be provided with 3mm thick rubber insertion packing when closed and bolted.

WEIGHT OF HCI PIPES

2. Dia of Pipe in mm	**Thickness in mm**	**Length of pipe & width piece**	
		1.8mtr. D/s	1.8mtr.
50 mm	5mm	16.00kg.	15.00 kg.
75 mm	5mm.	13.83kg.	16.52kg.
100 mm	8mm	24.00kg.	22.00kg.
150mm	8mm	26.70 kg.	31.82kg.

Tolerance 10%

3. The jointing should be done with pig lead confirming to I.S. 782-1966 - grade 99.94.The spigot and of Pipes and Fittings should enter into the socket end. The annular space shall be packed with spun yarn gasket, compacted so as to leave a depth for receiving required quantity of lead in a continuous pouring from ladder. After pouring lead in the joints in full, caulking is to be done three times round with the caulking chisels, so that the joints may be sealed with lead. The depth of lead in a point should be 35mm and the rest depth of the joint should be packed with spun yarn Gasket.

4. Requirement of lead and Gasket cement for jointing H.C.I. Pipes (Each Joint)

Dia of pipe in mm.	**Lead in kg. (same for lead & cement joint)**	**Gasket in kg.**	**Cement kg.**
100	1.2kg.	0.13kg.	0.12kg.
50	0.36 kg.	0.06 kg.	0.06 kg.

5. The inside of the pipes and fittings shall be well coated with special tar or bitumen solution of approved quality. Where the pipe and fittings are laid below the ground, the outer surface of the pipes and fittings shall also to be painted with two coats of black anticorrosive paint of approved quality.On completion of the work, the exposed pipes and fittings are to be painted with two coats of synthetic enamel paint of approved colour & quality over a coat of red oxide primer. The cost of paint should include in the rates.

6. Soil pipes for ventilation Is to be connected to the sewer at its floor and without a trap and be carried to such a height, at least above roof level, to prevent damage to health by commission of foul air, The pipe shall terminate as open and protected by a cowl.

7. The waste water pipe shall be connected with the nearest yard gully or a surface drain.

8. The traps should be of hard cast iron and should have a water seal at least 50mm deep.

9. All the soil and waste pipes and fittings, after laid and fixed shall be smoke tested. to the entire, satisfaction of the Engineer-in- charge. The Cost of testing is to be included in the offer. For smoke-test the materials usually burat greases cotton waste, which givesout a clear pungent smoke, which is easily detected by sight and small. Smoke shall be pumped to the drains from the lower end from a smoke machine, which consists of lower, and burner.

a) P.V.C (S.W.R.) & P.V.C. (Rigid) Pipes & Fittings

The P.V.C. (S.W.R.) and P.V.C. (Rigid), soil Waste & Vant Pipes (Spigot & Socket, & couples joints), shall be of make & brand as specified (Under Specification of materials) confirming to I.S.S., B.S.S. & DIN are tube used.

The main specification of P.V.C. Soil & Waste pipes and fitting are as below.

a) Materials – Un-plasticized Poly Vinyl-Chloride (UPVC).

b) Color - Grey

c) Dimensions -

(i) Diameter - Fittings - 75mm/110mm/63mm &

	63mm Pipes	- 75mm, 110mm, on lengths of 3.or 6 mtr
d)	Wall thickness	- Fittirgs - Minimum 3.2mm at any
	port Pipes -	As per application
	For Rainwater	- 75mm-1.8. to 2.2.mm, 11 Omm-2.5. to 3mm
	Waste & Soil	- 75mm -1 8 to 2.2mm. 110mm -2 5 to 3 mm.63mm –
	Underground drainage with light/NIL Traffics	- 110mm - 2.5 to 3mm
	Light/Nil in Heavy traffic	- 110mm 3.7 to 4.3mm

e) Standard Confirming to Attributes Confirms to Standard No.

i)	Fittings & Wall B S 4514, DIN 10531 Thickness	- DIN 19534 I.S.7834 - PVC (Rigid)
ii)	Pipe Wall thickness	- IS 4905
iii)	Rubber ring	- IS 5382
iv)	Fitting dimensions	- DIN 19531 - P.V.C.. DIN 19534-S.W.R IS - 7834 V.C. (Rigid)
v)	Pipe Dimensions	- IS 4985

b) Laying instructions & Jointing Procedure

1 Jointing of P.V.C. (S.W.R.) Pipes & Fittings

Clean the outside of the pipes spigot and the inside of the sealing groove of the fitting. Apply the rubber lubricant, to the spigot end, sealing ring and pass the spigot end into the socket, containing sealing ring, until fully homed. Mark and position of the Socket edge with pencil on the pipe. then withdraw the pipe from the socket by approx. 10mm towards thermal expansion gap.

2 Fixing of the Pipes and fittings on wall surface.

P.V.C. pipes both (S.W.R.) & (Rigid), fixed on wall surface, are to be supported by P.V.C. pipe clips, specially made for these pipes, with horizontal runs the pipe clips should be spaced at intervals of more than 10 times the outside diameter of the pines. Invertical lines the clips are to be spaced at intervals of one meter to a maximum of two meters according to pipe diameter. •

3 Jointing of P.V.C. (Right) Pipe Fittings

Clean the Outside of the pipes and inside of the socket of a fitting of the inside of the couplers (where 2 plain ended pipes are jointed) of Apply solvent cement solution. evenly and smoothly on the outer surface of the pipe end and inside surface of ei ther the coupler of the socket and pass the pipe end into the socket of the fittings. Up to full depth of socket. In case of jointing 2 plain-ended pipes 1st push the coupler up to half depth on the end of one pipe and the outer half of the coupler should be pushed to the end of other pipe and thus, both pipes are jointed.

4 Fixing of P.V.C. pipes and Fittings through holes of Walls or Chajja of roofs etc.

The Walt/concrete slots should allow for a stress free installation, Pipes and fittings to be inserted into the slots, without a cement base, have to be applied first with a thin coat of P V C Solvent cement, followed by sprinkling of dry sand (medium size). Allow it to dry. This process gives a sound base for cement concrete fixation, around the pipes/fittings while mending the damages

5 Anti-siphonage Pipes

All the anti siphonage pipes and fittings to be used are of 63mm. If these are not available under the items ot P.V.C. (S W R) materials 63mm pipes and fittings, manufactured under P V C.(right) materials can be used, since the raw materials for both is same.

6 All traps should have a minimum water seal of 50mm as per I S 5329 and IS 2556 (Part XIII). Where anti

siphonage connection is required, the traps to be supplied and used should have a 50mm anti siphonage gent horn on the outlet side. All the Traps used with the closets should be of the size 125mm X 110mm i.e. Inlet (Socket end) of 125mm & outlet (spirit end) of 110mm only

7 Installation of Water Closet

Determine the correct Location of the P/S Trap & set on a firm base, relative to the floor finish by pouring concrete on a slab. Bedding can be carried out by pouring concrete around the trap, ensuring that the traps outlet is left clear of concrete. Place the W.C. Connector ring to the socketed end of 125/110mm R/S trap. Apply rubber lubricant on W.C. Connector ring as well as outer side of water closet (connection point) and now complete the joint by pushing the W.C. to home of 125mm socket of the trap.

8 P.V.C. (Rigid) Pipes and Fittings

63mm (O.D.) P.V.C. Pipes to be used for these work either in anti siphonage system or elsewhere, should be of "Quick Fit" Pipes Class 2 (4kg. F/Cm^2), Quick Fit, Pipes have one end socketed. The P.V.C. (Rigid) fittings, such as 63mm elbow, 63mm equal Tees110mm x 63mm reducer etc. used in the work, should be of injection-molded fittings.

9 One -'jointing rubber ring will be available, with each P.V.C. (S.W.R.) pipe and fitting and hence, the cost of therein will not be added in the joint.

10. Measurement

All pipes shall be measured not/length as laid or fixed and shall be measured over all fittings such as bends, junctions, traps etc. The length shall be taken along the counter line of the pipes and fittings. Fittings will be counted extra over.

31 Before fixing and painting, the pipe shall be tested hydraulically to pressure Q.4Kg/Cm^2 for pipes under I.S.-1729/1964 and at a pressure 0.7 Kg/Cm^2 for pipes under I.S. 3989-1970 without showing any sign of leakage, sweating of or her defect of any kind. The pressure should be applied internally and shall be maintained for not less than 15 seconds.

c) Water Supply Pipes and Fittings:

1. Materials.

All galvanized Iron Pipes are to be of mild steel continuous welded, screwed tubes, medium quality confirming to I.S.S. and bearing ISI Marks manufactured by reputed Firms and approved brands as specified. The pipes shall confirm to I.S.1239 (Part-I) -1975. All G.I. Fittings shall be of 'R' Brand manufactured by M/s. R.M. Engineering Ltd., Ahemadabad and 'C' brand manufactured by Present Engineering works or equivalent best quality.

2. Laying of Pipes

The layout of the mains and service pipe set etc., will be done in accordance with the drawings. The contractor is to mark out the exact position of the pipes and fittings at site and take approval of the Engineer In-charge, before taking up the work.

3.

Where the Pipes are laid underground these must not be laid less than 450mm below ground level and coated with one coat of approved black bituminous paint. For laying the G.I. pipes and fittings below ground level, the width and the depth of the trenches for different dimensions for the pipes shall be given as below:

Dia of Pipe	Width of Trench	Depth of Trench
15mm to 50 mm	300 mm	600 mm
65mm to 100mm	450 mm	750 mm

The pipes shall be laid on a layer of 75mm thick sand and filled up with sand up to 75mm above pipes and the remaining portion of the trench shall then be filled up with proper ramming as described in "Excavation and refilling". The surplus earth shall be disposed of as directed.

Thrust or anchor blocks of cement concrete 1.2.4 in hard granite chips shall be constructed on all bends or branches to transmit the hydraulic pressure without impairing the ground and spreading it over a sufficient area. Pipes shall not be laid to pass through manholes, catch pit, drain, where, it is unavoidable the pipes shall be carried in sleeve pipe of M.S./G.I., as approved by the Engineer- in-charge. The rate should include such a situation.

4. Where Pipes run along walls, the same are to be fixed to the wall with holder bat clamps /M.S. Hooks as below:

Dia of pipe in mm	15	20	25	32	40	50
Horizontal line	2m	2.50m	2.50m	2.50m	3m	3m
Vertical line	2.5m	3m	3m	3m	3.5m	3.5m

Where the pipes are passing through the R.C C. / Masonry wall / Column / beam or pillars. these must pass through the appropriate higher sizes of C I/G.I Sleeve Pipes and are to be included in the rates.In case the pipes are embedded in walls and floors it should be painted with one coat of anticorrosive paint of approved quality.

All pipes should be fixed horizontal and vertical. For taking the pipes through the walls and floors & roof slabs etc. the holes shall be made by filling with chisels or jumper and not by dismantling the brickwork or concrete. After fixing. the holes shall be made good with cement concrete 1.2:4 and properly finished with C Plaster 1.4 to match the adjacent surface.Union Nuts are to be provided in each of the vertical riser or drop on and from G.I. Tank and near the Valve and as and where necessary.The long screw fittings of 3mtrs. for long horizontal lines and inside the lavatory / Kitchen etc.

5. After laying and jointing the pipes and fittings shall be inspected under working condition of pressure and flow. Any joint found leaking pipes should be removed and replaced without extra cost. The pipes and fittings after they are laid shall be tested tohydraulic pressure of 6 Kg/Cm^2. The test pressure should maintain without loss of for at least half an hour.

6. Painting

On completion of the test. the exposed pipes and fittings are to be painted with two costs of synthetic enamel paint of approved color and brand over a coat of priming.

7. Measurement

The length shall be measured in running meter. Correct to centimeter for the finished work, which shall include the pipes and fittings such as Bends, Tees. Elbows, etc., but excludes brass or Gun-metal fixture like tap, Cooks. Valves, PVC connection pipes etc.

8. Ball Valve

The ball valve shall be high or low pressure class as stipulated in the Tender Schedule and shall confirm to I.S. 1703-1968, The nominal size of ball valve shall be that corresponding to the size of Pipe for which it is used. The Bal valve shall be of brass or gun-metal and the float for low pressure polyethylene and for high pressure in copper.Each and every ball valve while in closed position shall withstand and internally applied hydraulic pressure of 20 Kg/Cm^2 for a minimum period of two minutes without leakage or sweating.

Every high pressure ball valve when assemble in working condition, with the float immersed to not more than half its volume shall remain closed against a test pressure of 10.5Kg/Cm^2 and a low pressure ball valve against a test pressure of 5.3 Kg/Cm^2

Polyethylene floats shall be watertight and non-absorbent and shall not contaminate water and with do jointing adhesive jointing parts The minimum thickness of the copper sheet used for making copper floats shall be of 0.45 mm. The thickness of materials of the float shall be uniform throughout.

9. Ferrule

The ferrules for connection with C.I. main shall generally confirm to I.S. 2692-1964 and shall be of nominal bore as specified. The ferrule shall be fitted with 3 screw and 1 plug or valve capable of complete cutting off the supply to the connected pipe as and when required. For fixing the ferrule, the C.I. main shall be drilled and tapped during non-supply hour at 45 to the connected Pipe as that when required. The ferrule must be so fitted, that no portion of the sunk shall be left projecting within the main on which it is fitted. After the ferrule is connected, one C.I. bell mouth cover or with bricks (as specified) shall be kept over the ferrule to cover the ferrule to protect it and the cost thereof is to be included in the item, even if there is no mention.

10. Non-return Valve (Check Valves)

The non-return valve shall be of Brass or Gunmetal and shall be of horizontal or vertical flow type and of the size as specified and confirm to I.S. 7810-1959 and I.S. 778-1957. The approximate weights of the valves are given below.

Dia in mm	Horizontal type (in kg)	Vertical type (in kg)
15	0.30	0.25
20	0.55	0.25
25	0.90	0.75
32	1.25	0.90
40	1.70	1.20
50	2.90	1.45
65	5.25	2.15
80	7.70	4.10
	±Tolerance 5%	

11. Foot Valve

Foot valve is generally placed at the lower end of the suction pipe of the centrifugal pump to prevent the suction pipe from empting. On vertical non-return valve may also be fixed in place of foot-valve The foot valve shall confirm tc I.S.038-1967.

12. Water meters (Domestic types)

Water meter up to 50m nominal size shall confirm to I.S.-779-1968.The meter body shall be of bronze/ Gun-metal and marked to read in liters complete with registration box and lid. The water meters shall be provided with Strainers. Strainers shall be of material, which is not susceptible to electrolyte, clean and shall be fitted on the inlet side of water meter. It shall be possible to remove and clean the strainer and not permit disturbing the registration box. The offer should include the same. The water meters shall bear ISI Mark.

13. Bibcock & Stopcock

These shall confirm to I.S 781-1967 and bear ISI Mark. The bibcock is a draw off tap with a horizontal inlet and free outlet and stopcock is a valve with a suitable means of connection for Insertion in a pipeline for controlling or stopping the flow. This shall be of screw down type. The cock shall open in anti-clockwise direction. The stopcocks should be of C.P open type/concealed type/anglevalves type as specified in tender schedule. Bibcock should be also C.P Brass bibcock.

14. Full way Valve (Brass)

Full way valve is a valve with suitable means of connection for insertion in a pipeline for controlling or stepping the flow. Thevalve shall be of brass fitted with a cast-iron wheel and shall be of gate valve type confirming to I S. 780-1960, opening Full way and of the size as specified.

Dia in mm	Flanged End Valves in kg	Screwed End Valve in kg
15	1.021	0.567
20	1.503	0.680
25	2.498	1.077
32	5.232	1.559
40	6.082	2.268
50	6.691	3.232
65	10.149	6.840
80	13.281	8.845

15. Gun Metal Full way Valve

This shall be of the Gun-Metal fitted with wheel and shall be of Gate-Valve type opening full way. This shall confirm to I S.

778- 1971. Class I. The Valves should bear ISI Mark.

TECHNICAL SPECIFICATION FOR STONEWARE PIPE ETC.

1. Stoneware Pipes (Materials)

The S W. pipes & fitting should be of Grade 'A' confirming to I.S 651/1965 The pipes shall be sound. free from visible defects such as fire crack or hair crack and flow or blister. The pipes shall give a sharp clear line when struk with a light hammer and should be perfectly salt glazed.

Internal dia of Pipe in m.m.	Thickness of the Barrel in m.m.	Weight of each pipe in kg.
100	12	14
150	16	23
200	17	33
230	19	44
250	20	52
300	25	79
350	30	100
400	35	125
450	38	147

The length of pipes is 600mm exclusive of the internal depth of socket.

2. Excavation of Trench for laying Sewer Pipes

The trenches for the pipes shall be excavated to the lines & level as directed. The bed of the trench shall have to be evenly dressed throughout from one change of grade to the next. The gradient is to stout by means of sight rails and boning rods and required depth be excavated at any point. The depth of the trench shall not less than one meter, measured from top of the pipe to the surface of the ground under roads and not less than 0.75mm elsewhere. The width of the trench shall be the nominal diameter of the pipe plus350m. The bed of the trench if in soft or made up earth, shall be well watered and rammed before laying the pipes and the depressions if any shall be properly filled with sand and consolidated in 200mm layers. Depending on soil condition piling may even be necessary if so desired by the Engineer In-charge. If rock is met with it shall be removed 150 mm below the level of the pipe and the trench will be refilled with sand and consolidated.

The excavated materials shall not be placed within One Mtr. or half of the depth of the trench whichever is greater from the edge of the trench. The trench shall be kept free from water. Shoring and shuttering shall be provided wherever required. Excavation below water label shall be done after dewatering the trenches.

After the excavation of the trench is completed, foundation of cement concrete 1.4.8 in hard granite metal (size 40mm) shall be laid with proper level all along under the length of the pipe with launching on all around concrete as per drawing.

3. Laying, Jointing, haunching of the Pipes and fittings.

Drain Pipes (S W pipe & other pipes used for drain and Sewer) shall be laid in straight lines and to the even gradients as shown in the layout drawings. The socket and of the pipes shall face stream. Adequate care shall be exercised in setting out and determining the level of the pipes and the contractor shall provide suitable instruments, templates, sight rails, boning rods and other equipments necessary for the purpose. In the case of pipes with joints to be made with loose collars, the collars shall be slipped on before the next pipe is laid. In those joints, a tight ring of twisted tarred jute soaked in cement mortar filling to ensure proper alignment and prevent. Cement entering the pipes. Cement compound joints is to be finished with proportion 1.1 with 45 beveling. The joints are to be kept wet with wet bag until the same are properly set with. The cement mortar joints shall be cured at least for 7 (Seven) days.

In the case of S.W. Pipe joints (socket & spigot), they should be caulked first with tarred jute (Spun) of required diameter, almost quarter depth of the socket. after which cement mortar 1:1 is pushed in with wooden chisel and finishing beveled at outside at 45 degree. Instead of jute of hump rubber gasket of proper size may also be used. The whole joint must be cured for not less than three days. In case of pipes less than 250m dia, joints should be made at ground level with three pipes at a time and for larger ones two pipes at a time and after curing they should be soiled in foundation with the help of the ropes. All pipes should be properly launched with cement concrete 1.3.6 with washed gravel where the pipes are crossing the drain or all round concrete 1.3.6 with washed gravel is to be done to 150 mm thick over the barrel of the pipe. The whole of the drain work shall be tested when laid, and at the completion of the contract, to the satisfaction of the Engineer-in-charge and shall be retested if necessary

until found satisfactory The test shall be made by means of water under pressure at the highest point of the Section under tes: and providing an air pipe at the lower and of the line Maximum head of 5 (five) fact (1.5m) must be maintained.

4. Excavation and refilling.

Excavation for drain and pipe trenches shall be straight and to correct depth and gradient. The trench bottom shall be of required width as per specification to allow working space for pipe jointing.

Excavated materials shall be dumped away from the site as directed by Engineer-in-charge. Suitable precautions are to be taken to prevent in flow of water into the excavated area. during construction.

The contractor at his own expense shall pump out or otherwise remove any or all water which during the continuance of contract may be found in the excavated trenches to keep the trench clear of water during the work under progress The pipeline shall not berefilled and covered, until the line therein has been passed and tested.

5. Burried Services

All pipes, cable mains and other services exposed by the excavations shall be effectively supported by timbering or other means for which no extra payment will be allowed The contractor shall be responsible for any damage occurring to burried services and make good the same at his own cost to the satisfaction of the Engineer-in-charge.

6. Trench condition :

Where a trench is excavated and refilled after laying the pipe, settlement of the earth in the refilled trench take place The filling above the top of pipe, settles relatively, more than the sides of the trench. thereby developing frictional resistance. The contractor is required to take specral precaution against this, while refilling the trenches. Procedure for backfilling as stipulated earlier should bestrictly followed.

7. Inspection Chambers/Manholes

At every change of alignment, gradient or diameter of a drain there shall be a manhole or Inspection Chamber. The maximum distance between man hole chamber shall be 30 metres for the linelaid straight.

All manhole and inspection chamber shall have internal dimension as shown in drawing and B.O.Q The depth of invert shall be fixed to the gradient.The foundation for Manhole shall be 175mm thick & with cement concrete 1.3.6 in hard stone metal / granite metal of 40mm size. The concrete shall project 150mm beyond the external faces of the brickwork.

The brick masonry shall be done in cement mortar in the proportion of 1.4 and thickness of the brick wall should be 250mm thick up to 1200mm depth from Ground Level and beyond that the wall thickness shall be maintained 375mm.The inside surface of the walls of the chamber, shall be finished with cement plaster 1.3 and outside with cement pointing 1.3. In addition to this. the inside surface should also be provided with cement punning.

On the top of base concrete channeling on C.C. 1.2.4 with granite chips is to be done keeping the diameter equal to the dia of drain pipe and depth equal to half of the dia of pipe. The channel. 'should[1] be done longitudinally at the centre, connecting both the ends of the pipe. The channel is to be hunched up with concrete 1.2.4 with hard granite chips of size 12mm sloping upwards from the edge of channel to meet the side of chamber at gradient of 1.6. The channel and benching are to be finished smooth and cement mortar
1.3 and punning unless it is unavoidable. The branch should deliver sewerage in the Manhole in the direction of main flow and thejunction must be made with care so that the flow in the main is not impeded. Channels for drains coming from the side of the Manhole Chamber, shall be curved to meet the main drainage channels.

The Manhole and Inspection Chambers shall be covered with R.C.C. cover slab of thickness 100mm to 150mm according to the requirement at site One C I Manhole cover of diameter and weight as stipulated in the tender schedule shall be fixed on the coverslab. Unless otherwise mentioned the C.I. Cover and Frames and shall confirm to I.S. 1726/1960 Heavy duty covers etc.. under heavy vehicular traffic condition and capable of bearing wheel loads up to 11.25 tons, are to be used and medium duty under light type wheel traffic loads and light duty for domestic premises are to be used. Covers and Frames shall be clearly cast, double water seal type and they shall be free from all and sand holes. The cover shall be gas tight and water tight with proper water-seal. The C.I. Cover and frame shall be coated with two coats of black bituminous paint. The frame of Manhole cover shall be fixed on the slab while the slab is cast.
R.C.C.M.H. covers of 50cm dia and 100mm thickness shall be fitted in line of C.I.M.H. cover if stipulated in the bill of quantity of the tender schedule.

8. Gully Trap Chamber

The size of chamber for 100mm HCI yard gully shall be of 250mm X 250mm (Inside) Foundation with 100mm thick

cementconcrete 1 3 6 with hard granite metal of size 40mm from outer surface of wall and Brick work in cement mortar 1.4 125rnm thick, depth up to 600mm maximum. The finishing of masonry wall both inside and outside should be done in cement mortar 1.4 cement punning should be provided on the inner surface the trap should be burried in cement concrete 1 2 4 in H.G. chips up to the mouth and one hinged C I Grating of size 300mm x 300mm are to be fixed on the top of mouth of Gully trap to arrest rubbishes shall be provided. The foundation, should project 75mm from outer.

9. Kota/Marble Stone flooring

The Kota/Marble stones shall be of thickness specified but not less than 20mm and of uniform with edges absolutely square & straight. They shall be laid in Cement Mortar (1.4) over masonry or concrete base. The sides of the stones shall be arranged to butt against each other truly so as to came the joints practically invisible and certainly not more than 0.8mm in width anywhere. The joints shall not be filled with mortar but may afterwards be grouted with neat white cement mixed with matching colour pigment. When the floor has completely set, it, should be polished with pumice stone and finally with pads of felt.

10. Glazed tile dado

The glazed porcelain tiles shall be of approved size and thickness 5mm to 6mm with edges absolutely straight & surfaceaccurately plain. They shall be fixed in 6mm. thick cement mortar 1.3 using cement slurry over pre-cement plastered base. The sides of the tiles shall be arranged to but against each other truly so as to make the joints practically invisible. However, the joints may be granted with white cement mixed with coloring materials to match the tiles and neatly cleaned leaving no trace of excess grouting materials. The tiled surface and edges should be perfectly vertical and straight. The corner points must be normally right angled unless the site condition demands otherwise,

ADDITIONAL APPENDIX TO BILL OF QUANTITY:

(For P.H. Items of Work)

1. The quantities of items mentioned in the tender schedule may increase or decrease during execution of works but the contractor will complete the work as per his tendered rates in accordance with the instruction of Engineer in charge of G.P.H wing.
2. **Specification:** The standard PHD and PWD specification will be followed for execution of work. During the course of execution of work. the instructions of the Engineer in charge shall be final and binding.
3. The Sales Tax element should not be added to the analysis of rates and the previous practice should be followed as per theWorks Department letter No.IIT.22-89-18170 dt.18.7.1989
4. There should be no clause either in the tender or in agreement for payment of any additional claim on account of Sales Tax on completed works which will be deemed to be recovered by existing omnibus stipulation as per the works Department letter No TIT 22/89-18170 dt.18.7.89.
5. It is the responsibility of the Contractor to arrange watch and ward to the installations until testing commissioning and handing over for which no extra payment towards watch and ward will be paid.
6. The contractor shall maintain a separate site order book for P H portion of work.
7. The P H portion of work shall be open for inspection by the authorities of P.H. DIVISION (R&B) Odisha Bhubaneswar and the higher authorities and instructions imparted during the course of Inspection should be binding on the contractor.
8. Materials not covered by any of the above categories of items in the bill of quantity have to be approved by the competent authorities before utilizing the 'same in works In such event, the payment of such item will be made as per actual on due approvalby the competent authority.
11. All materials required for the work shall be supplied by the contractor as per standard specifications appended with due approval by the Engineer in charge of G P H Wing. In case the materials as per make specified are not available the materials of equivalent make and as per I.S. Specifications or of best quality when not covered by I.S. Specifications can be utilized on prior approval of concerned S E / E.E., GPHD (R&B) DIVISION/Division or the officers duly authorized. It is binding on the part of the contractor to use such items of materials which are available in the Departmental store and in such case the deduction from the bills will be made at stock issue rates.

TECHNICAL SPECIFICATION OF INTERNAL ELECTRIFICATION WORKS

The details of internal wiring, the position of fittings, fans, switches and plug sockets etc. are indicated in the layout drawings. The position of light fittings, fans, switchboards etc indicated n these drawings are only for the guidance of the supplier and the actual position of these shall be mutually decided between the supplier and the purchaser. The supplier shall submit

7. The officer-in-change has reserve the right to inspect and tested the quality in Govt. laboratory to ensure technical qualifications to meet the requirements.

8. LED lights no toxic materials U V and IR spectrum protects insect life.

9. It should be manufacture with dia-cast aluminium with required colour as per manufacture for released months.

10 The LED lights Should function 90 to 380V. 50/60 Hz. PF-Z0.9 (230V AC). Copper temp-3000K/4000K/ 6000K/ operationtemperature - 20°C + 50°C in-gross protection-IP 20. lifespan 30000hrs.

Firefighting

1. No advance payment will be made by the Department. However Part / full Payment shall be made by the Executive Engineer, General Electrical Division No.II. Cuttack after completion of supply, erection testing and commissioning, inspection and satisfactory operation.

2. In the event of failure or refused to execute the order the ISD will be forfeited and the order will be cancelled after the completion time period from the date of issue of the order. In the event of delay in supply erection, testing and commissioning of the materials with work pertaining to order, penalty @ 0.5% of the order value per month delay will be imposed subject to a maximum of 5% (Five percent) along with the EMD.

3. All the materials should be ISI marked and duly approved by the fire Deptt. Govt. of Odisha.

4. 3rd Party Audit should be done by registred agency of Fire Deptt. Govt. of Odisha by the firm.

5. Drawing and designed duly approved by the Fire Deptt. Govt. of Odisha should be submitted before execution of work.

6. If addition alternation required as per guide line of Fire Deptt., the fire will execute the same with due approval of the authority.

7. After completion of the work the firm should made a mock fire drill demonstration in presence of Engineer-in-Charge, authorized officer of the Fire Deptt. and building authority.

A.C. Machine

The tenders should furnish following documents in cover-1.

1. Detail drawing and design.

2. Technical specification as per manufactures norms supp.

3. Detail of equipment's and material supplied.

4. Make, model with individual price may be furnished.

5. All the materials and equipment's must be confirming to ISI.

Lighting arrester

Supply, Installation, Testing and Commissioning of Copper Plate Earthing (600x600x3mm)with running Copper Flat 25x5mm from coper plate to funel of 40mm dia GI PIPE heavy duty with including all Accessories, excavation of earth and providing masonary work with cover plate having locking arrangement and and , charcoal, salt , funnel , tinned brass bolt, check nut and washer complete in all respect as per Direction of Engineering -in-Charge.

ABB optimized pulse rod 30 ESE Terminal & mounting mast or pole (2meter) mounting MAST (3Meter) with gay wire and base plate.

D.G. Set

DG set should be capable of running continuously for unlimited hours in a year, stopping required only for service duration.

Diesel Engine

Duty : Continuous runn ng

Type: 4Stroke, Turbo Charged, after

cooledCapacity: 32 Liter

Cooling: Radiator

Governing: Full

electronic

Fuel injection: Electronic Unit injectors

Alternator :

Rating: 1010 KVA/808 KW at 415 volt, 0.8pf, 50Hz, 3phase,

4wire@1500rpm Duty: Continuous running

Type: Self excited, self regulated, single bearing, IP-23

Efficiency:92%

- Above engine alternator should be assembled on a steel fabricated common base frame.
- Five sided Acoustic enclosure would be required to reduce noise.
- 990 L fule tank would be placed outside acoustic enclosure
- 2Nos. 12Volt, 180AH reputed make batteries
- Set of Antivibration mountings.
- First fill of engine oil
- Heavy duty silencer.

Design Criteria

The generator asset meets transient response and block loading steps as per ISO 8528-5

Single-Source Supplier

Fully prototype testes with torsional analysis

A

SEPTABLE MAKES FOR FIRE FIGHTING

S.NO	ITEM	ASEPTABLE MAKE
1	Pump	Kirloskar / Crompton / ABB /Siemens
2	Motor	Kirloskar / Crompton / ABB /Siemens
3	Diesel Engineen	Kirloskar / Cummins
4	M S. Pipe	Tata /Jindal / Sail/Nizon/ (ISI Marked)
5	C.I. Pipe	IS :1537
6	G.I. Pipe	Tata /Jindal / Sail/Nizon /(ISI Marked)
7	C.I. Pipe Fitting	IS :1537
8	Sluice Valve	Kirloskar / Leader /Sant/Zolta /(ISI Marked)
9	Gun Metal Valve	-Do-
10	Butterfly Valve	-Do-
11	Water Solenoid Valve	-Do-
12	Cushy Foot Mountings	ISI Marked
13	Pressure Switch	ISI Marked
14	Pressure Gauge	ISI Marked
15	Water Level Controller	ISI Marked
16	Batteries	OEM/OEA
17	Flow Switch	
18	Internal/External Hydrant (Landing Valve)	Cosmos/ Newage / Jayshree / GETECH
19	Hose Reel 20 mm Dia	-Do-
20	Installation Control Valve	-Do-
21	Fire Bridge Intel / Connection	-Do-
22	Sprinkler Head	-Do-
23	RRL Hose pipe 63 mm Dia	-Do-
24	GM Branch Pipe 63mm x 20mm dia	-Do-
25	First Aid Hose Reel Drum	-Do-
26	Power Cables	Havell.s /Finolex / Mescab/Polycab
27	Control Cables	-Do-

28	Single Phase Preventor	L&T /GE /Siemens
29	SDFU / SFU with HRC Fuses	-Do-
30	Starters / Control	-Do-
31	Electrical Panel / System Controller & Control Console	From CPRI approved panel manufacture
	ADRESSABLE FIRE ALARM SYSTEM	
01	Microprocessor based Photo electric smoke / Heat Detector	Appolo / Cooper / Honeywell / Edward/L&T
02	Microprocessor based Manual call Box	-Do-
03	Microprocessor based Control Module	-Do-
04	Fire Alarm Control Panel	-Do-
05	Steel Conduit	AKG / BEC/RMCON
06	FRLS and Twisted Cables	Finolex /Havell's /RR Kable

Conduit wiring

For recessed conduit wiring system the conduit shall be placed in the ceiling / columns etc. before the casting of the slab or column. The conduit pipes shall be properly positioned and fixed so that it will not be displaced at the time of concreting. The junction boxes provided shall be so arranged that its cover will be flushed with the finished surface of the ceiling or column.

For placing the conduits in the walls. chases of ample dimension shall be made neatly to fix the conduit in a desired manner. The conduit pipe shall be fixed by means of staple or saddles not more than 600mm apart. Fixing of standard bends or elbows shall be avoided and all curves maintained by bending the conduit itself with a long radius will permit easy drawing of the conductors. Suitable inspection boxes shall be provided to permit periodical inspection and removal or replacement of wires if necessary. There shall be mounted flush with the wall with holes in the cover of the box.

The switch or regulator box shall be made of metal on all sides except on the front where backlight sheet or Perspex cover painted to match the colours of the wall shall be used I case of surface wiring system. For recessed wiring system, these boxes shall be made flush with the conduit of each conduit or section shall be completed before conductors are drawn in. The entire system of conduit after installation shall be tested or mechanical strength and electrical continuity throughout the earthing of the entire installation shall be carried out in accordance with I E Rules and standards. The number of wires drawn in the conduits shall not exceed the numbers those specified in Indian standard specification No.732.

Main and Sub distribution Boards:

The position of main boards for lighting and sub distribution board for different buildings are approximate and the exact location shall be given to the Successful tenderer at the time of installation. The scope of this specification includes installation of the panelboards and distribution boards and making necessary connections. The installation of the boards shall be done strictly in accordance with the details supplied with the specifications; the instructions supplied by the switchgear manufacturer, Indian standard specifications and H.E. rules. The supplier shall submit the details of installations to the purchaser for his consideration and approval, prior to installation.

When the switchboards are wall / column mounted top. they shall, be mounted on a suitable angle iron framework. All themetal supports etc. shall be protected against corrosion. The mounting height for such switchboards shall be such that it can be conveniently operated.

Earthing

Earthing shall generally be carried out in accordance with the requirements of Indian Electricity Rules and the relevant rules and regulations of electrical supply authorities. The complete earthing work for the installation covered by this specifications shall alsobe provided taking into account Indian Standard Specification No.IS:732 and IS:3043. The earthing system adopted shall also haveadequate mechanical strength.

The work shall include earthing o non-current carrying metallic parts of all the equipment, light fittings, conduit pipes, cable and cable supports and earth strips (the design to be approved by the purchaser) and all the inter connection between the earthingsystem to a value mutually agreed upon\ between the purchasers and the supplier.

Installation, testing and Commissioning:

The supplier shall be responsible for the installation testing the commissioning of all the equipment and materials supplied

by him against this specification. This shall also include the provision of miscellaneous wiring and supports and earthing in compliance with Indian Electricity rules and to he full satisfaction of the Government Electrical Inspector. All small items such as clamps. bolts. nuts, racks, supports. miscellaneous wiring etc. required to make the installation complete. shall constitute the part of major items specified in the bill of quantities and the tenderer should quote for each item taking these into consideration.

The responsibility of the supplier shall include receiving all the equipment and materials at site, storage for required period. handling the same at the site of erection, final execution , erections, revisions of equipment. if any, testing and commissioning and handing over the installation complete in all respect to the entire satisfaction of the purchaser's authorized representative. The supplier shall make good of all the damaged equipment and materials during this period at his own expense. The supplier shall submit sample of each and every equipment and materials for the final approval of the purchaser's representatives immediately after the aSEptance of offer. All the equipment s and materials shall be supplied exactly as per to the approved samples. If at any stage the purchaser brings to the notice of the supplier any discrepancy or defect the supplier shall replace the same at his own expense.

The supplier shall render all reasonable assistance to the purchaser in getting the installation approved by the Government Electrical Inspector prior to the energization and supply necessary drawings. test certificates and both for tests carried out at the factory and site as well as the tests which the inspector may demand. In case any addition of alternations are required to be made in the installation or in the equipment as per he directive of the Government Electrical Inspector / Local Authorities he same will have to be carried out by the supplier . at his own expense.

The position of light fittings. main board, switches. sockets and routes of pipes and cables shown in the drawings are onlyindicative. The actual position of these shall be decided at site at the time of execution joints by the supplier and the purchaser's authorized representative. The position of light fittings, pipes and board if required, to be changed / shifted due to the change in the building design etc by the purchaser's authorized representative, the same shall be carried out at no extra cost.

All the materials supplied to the contractor according to the Contract condition will be subject to inspection and approval of the officer or his representative from time to time. The contractor will provide all facilities of such inspections free of cost. At the time ofinspection, the owner of his representative will have full liberty to reject any such materials which does not conform to the specification
/ requirement. No claim for any rejected materials will be entertained by the owner. The contractor will remove all rejected materials from site at his own cost. No surplus materials procured by the contractor will be Accepted by the owner. The contractor will be responsible to get the Electric installations cleared by the Electrical Inspector of Odisha Government. Only the inspection fee will be reimbursed by Department on production of challan copy.

Installation and Maintenance Tools:

The supplier along with the tender shall furnish a complete list of tools, appliances and Accessories required for the installationsof switch grass, light fittings, pipes cables and wires.

Drawings:

All drawings, test certificates instructions manuals etc. shall be in English Language and all dimensions and weights shall be in metric units.

The tenderer shall submit with the tender general arrangement drawings for the installations work. typical methods and cabling and cables supports pipe work and pipe supports, typical methods of earthing and fixing of light fittings earthing etc. as offered by him in the tender.

The contractor shall submit for he purchaser's approval all layout, the general arrangement drawings as well as the typical details of all types of installation work in three sets before commencing the manufacture and the site installations work well in advance so that the site work shall not suffer.

After obtaining approval of the above drawings the contractor shall supply three sets of the following drawings:

(a) The arrangement and support of conduit pipe

(b) The position of light fittings, switches / plug socket and switch boards

(c) Earthing installations

(d) Layout plan showing the entire cable network

On completion of work. the Successful tenderer shall supply one set of tracing in transparent linen and five sets of prints of all drawings incorporating all the changes / modifications affected during the execution of the contact. All wiring diagrams shall indicateclearly the switch board, the runs of main and sub main wiring and the position of all the points with their controls. All the circuits shall be clearly ndicated and numbered in a accordance with IS:375. The technical literatures and operating instructions and the maintenance manuals shall also be supplied in triplicate to the purchasers after the completion of the installations work.

Test:

Manufactures standard tests in accordance with Indian Standard and other standards, adopted shall be carried out on all the equipment and Accessories covered by this specification so as to ensure efficient and satisfactory performances of all the components and also the equipment as a whole under working conditions at site. The tenderer shall submit a complete list of all such tests. If the purchaser, if so desired for special tests, to be carried out, under certain conditions the same shall be made by the suSEssful tenderer at his own expenses. All equipment shall be tested at site before the commissioning in accordance with the adoptec standard and Indian Electricity Rules. Voltage test shall be carried out on each circuit on completion of wiring and cabling.

Technical Data:

The tenderers shall submit with their tender all such technical data, which are required for complete evaluation of the equipment offered. The suppliers shall give complete technical information of the equipment as detailed in Annexure and relevantIndian standards. The tenderer should supply such details of all equipment and materials offered specially with regard to the following.

a) Fuse switch board and distribution boards

b) Light fittings

c) Conduits and the Accessories for them

d) Switches / plug sockets

e) Cable and wires

The tender shall give along with his tender the following details.

a) Complete details of earthing electrodes, earthing station and earthing conductors

b) Details of conduit supports

c) Details of all the equipment and Accessories to be supplied

Exception to Specifications:

The object of this specification is to have all tenderers quote for equivalent materials and workmanship. It is, however, understood the certain manufacturers may not be able to offer as specified in every case, where the tenderer may find it necessary to deviate from the exact letter and not the intent of the specification, he must specifically state what these deviations may be at the time he submits the tender. All deviations must be grouped in one statement. No deviations other than those includes in the tender will be permitted.

PVC insulated Cables and Wires:

For 415V Distribution system, cables of voltage grade not less than 1000V shall be used. These cables shall be heavy-duty class. PVC insulated and PVC sheathed with aluminium/ copper conductors. The wires used in the lighting installation shall be PVC insulated and PVC sheathed copper / aluminium wire in case of conduits wiring and of 660V grade. Wires of different colours shall be made use of for quick\ identification of phase wire / neutral wire etc. All cable of wires shall comply with the requirements regarding the manufacture and testing etc as specified in India Standard Specification IS: 1554 and IS:694. The length of cables indicated in the bill of quantities and drawings are only indicative and the Successful tenderer will be paid for the exact length of cables laid at site. No joint shall be allowed in a run of cables, which can be covered by a possible drum length of cables.

Fuse switch / switch fuse shall be metal clad dust and vermin proof suitable for use under climatic conditions prevailing at site. Switch fuse / fuse switch units shall comply in general to IS:1567/4064 with regard to design and constructional / features.

The 'ON' and 'OFF' position of the switch handles shall be distinctly indicated and interlocks shall be provided to ensure that the switch cover cannot be opened unless the switch is in the 'OFF' position. Means shall, however, be provided for releasing the interlock to permit closing of switch with cover open for testing purposes. Designs with normal conventional position of switch handles,
i.e. with switch handle up in the 'ON' position and down I the 'OFF' position shall be preferred. All live parts inside the switch shall be properly surrounded and inter phase barrier shall be provided.

Switch fuse / fuse switch units, distribution boards shall be provided with necessary metal fame work so that they can bemounted on wall / columns structure etc as desired. The panel boards, shall be wall mounted type or floor mounted type as specified in the bill of quantities or drawings. Necessary supporting metal frame of approved design shall be provided for all panel boards

The arrangements of work boards shall be such that the operational handle of the top mounted switches are within the convenient of operators (about 1.2 M from the finished floor level) and proper space shall be provided for the termination of the

cable in the switches provided below the bus-bars.

The bus-bars within the bus-bar chamber shall be liberally spaced for taking the riser connection. The bus bars with aluminium conductors shall be provided and PVC sleeves of different colour shall be mounted on them for easy identification. Clamped joints for taking the riser connections, instead of bolted type shall be preferred.

Two bolted type earthing terminals shall be provided on the switch boards. All individual switches shall be connected with suitable size earth wire to the main earthing terminals of the switchboard. Hanger Board and shock treatment / charts shall be supplied wherever required. At the incoming side of each pen phase, 3-neon type indicating lamps should be provided at the main board.

Switches and Plug Sockets

Switches provided for control of light points shall conform to IS:1087 and shall be rated for 5A/15A 250V

Ceiling Fans and Exhaust Fans:

Ceiling fans shall conform to Indian standard specification IS: 374-1960. The fans shall be supplied with all standard Accessories like regulator and capacitors etc.

The performances rating of the propeller fans shall in accordance with stipulations of IS.2312. All fans shall be robust in design and construction and shall be supplied complete with wall brackets / clamps etc

Fluorescent Fittings:

All fluorescent fittings supplied shall confirm in general to IS:1913 and shall be complete with all standard Accessories likechoke, starter and capacitor etc. The type of enclosure provided for the fittings shall be of that specified in the bill of quantities and the working drawings. The materials of construction for fittings used for outdoor installations and for use in the work anodes shall be such that they shall withstand the atmospheric condition in that area. Lamp holders used shall be fully shock proof, spring-loaded rotary type to ensure positive lamp locking. It should also be not possible to touch live parts of the lamp holder both after the lamp has been taken out and during the insertion or removal of the lamp. The starters shall be designed to give designed starting characteristics that shall promote full lamp life. Starter shall have high mechanical strength and topic proof construction. It should be incorporated with radiosuppression capacitor o adequate rating and\ capacity. Power factor improvement capacitors are provided with hermetically sealedhousing to ensure long and trouble fee service. Terminal soldering tango shall be provided for easy electrical connections. The capacitors in general shall confirm to IS:1569-1963 and P.F improvement up to 0.95 for twin fluorescent light fittings and 0.9 for single fluorescent light fittings is to be maintained.

The ballast provided in the fluorescent fittings shall generally be in accordance to IS:1534 The ballast should incorporate the following design features.

i) Low working temperature

ii) Correct pre heating current for the electrodes

iii) Proper wave foam

iv) Small in dimensions

v) Correct power supply to the lamp

vi) No hum

vii) Easy connection leads.

All the metal construction of the fittings shall be such that they snall:

1) Withstand the atmospheric condition prevailing in the area

2) Provide maximum mechanical protection to the tubes and fittings Accessories Assists in maximum and uniform lightdistribution. All fittings shall be provided complete with florescent lamps. All lamps shall confirm to IS:2418.

Incandescent Fittings:

The incandescent fittings shall be supplied strictly as per the details given in the enclosed annexure and bill of quantities. deviation if any regarding design, construction of materials should be specified clearly. All the metal parts used in construction of the fittings shall have no effect due to dust / fumes / gases likely to exist in the atmosphere. All the bolts, clamps, nuts and guard wire etc shall be galvanized. The wall fittings shall be provided with necessary hooks / clamps / supports etc for fixing the light fittings on wall / ceiling etc as detailed in the bill of quantities and the working drawings. Light fittings shall be suitable for connection with 19mm dia. Conduit pipe as required. If fittings are to be connected through PVC cables, glands of adequate size and capacity shall be provided. The lamp holders provided in the fittings shall confirm to IS:1528.

CODES

Codes shall mean the following including the latest ascendants and / or replacement if any.

a) Indian Boiler Act, 1923 and Rules and Regulations made their under

b) Indian Electricity Act, 1923 and Rules and Regulations made there under

c) Indian Factories Act, 1948 and Rules and Regulations made there under

d) The minimum wages Act

e) The Women's Compensation Act

f) The Payment of Wages Act

g) The Fatal Accident Act

h) The Industrial Employment Act

i) The Employment provident Fund Act

j) Indian Explosive Act 1984 the Rules and Regulations made there under

k) Indian Petroleum Act 1934 and Rules and Regulations made there under

l) A S M E Test Codes

m) AIRE Test, Codes

n) American Society of Materials Testing Codes

o) Standards of the Indian Standards Institution

1)	Low Tension Circuit Breakers :	IS 2516-1955 Part I Sec 1
2)	Switchgear Bus Bars	IS 375-1963
3)	HRC fuse links	IS 2208-1962
4)	Distribution fuse boards	IS2675-1966
5)	Enclosure for Low Voltage switchgear	IS214701962
6)	PVC Cables	IS1554-1975
7)	Tabular fluorescent lamps for Cameral lighting service	IS2418-1963
8)	Tungsten Filament Lamps for cameral service	IS415-1963
9)	Ceiling Fans	IS274-1966
10)	Flood lights	IS1947-1961
11)	Wall Glass flame-proof electric light fittings	IS2206-1962 (Part 1)
12)	Water Tight Electric Light Fittings	IS3553-1956
13)	Steel Boxes for Enclosure of Electrical ASEssories	IS5133-1969
14)	Fittings for Rigid Steel conduit	IS2667-1979
15)	Rigid steel circuits for electrical wiring	IS3837-1966
16)	ASEssories for Rigid Steel Conduits for Electrical Wiring	IS3837-1966
17)	Switch Socket Outlets	IS3837-1966
18)	PVC Wiring	IS694-1977
19)	Switches for domestic and similar purpose	IS3854-1966
20)	PVC wiring	IS694-1977
21)	Call Bell and Buzzers	IS2268-1966
22)	Straight through joint boxes and leads sleeves or paper insulated cables-	EID-0032-1964
23)	Earthing	IS3043-1966
24)	Electrical Wiring installations	IS732-1963

25)	Switchgear	IS3072-1965 (Part I)
26)	Lighting protection	IS2309 –1969
27)	Public Address system	IS1882-1962
28)	Low Tension switch use units	IS4064-1978
29)	Code of Practice for Automatic FIRE ALAM system	IS2189-1970
30)	Specification for Heat Sensitive Fire Detectors	IS2175-1977
31)	Guide for Safety procedure in Electric work	IS5216-1969
32)	Rubber Mats for Electric works	IS5424-1969

p) Other internationally approved standards and / or Rules and Regulations touching the subject matter of the contract

NAME OF WORK :- Design, manufacturing, supply, installation, testing and commissioning of electric Traction elevator (G+7) 13 passenger.

Technical Specification

1.	Load (Kgs.)	68 x 13 = 884 Kg. (13 passenger)
2.	Speed – mps	1.75 mps
3.	Travel – mtrs	Ground floor to 7th floor, About 24.00 Mtr. (G+7)
4.	Stops & Openings	8 Stops, 8 Openings (All openings on the same side)
5.	Power Supply	400 Volts 3 Phase 50 Hertz. Alternating Current.
6.	Control	A.C. Variable Voltage Variable Frequency (with close loop)
7.	Operation	Simplex full Collective (with / without Attendant)
8.	Machine	Compact permanent magnet Gearless machine.
9.	Car Size (inside Dimension)	About 1100 mm wide X 2000 mm depth.
10.	Hoistway Required	About 1850 mm wide X 2350 mm depth – Finished with plaster.
11.	Car Enclosure	IND – 160
12.	Car Panels	Stainless steel mirror finish
13.	Handrails on three sides	Stainless steel mirror finish.
14.	False Ceiling	CD – 35 (powder painted)
15.	Flooring	Vinyle tiles.
16.	Car Entrance	Protected by centre opening sliding steel door stainless steel mirror finish(800mm wide x 2000mm hight).
17.	Size (W x H) – mm	800 mm x 2000 mm
18.	Hoist way Entrance	Protected by centre opening sliding steel doors finish.
19.	Door operation	Automatic with ACVVF Door Operator & Multi-Ray Electronic Door Detector System.
20.	Signals (Design)	S – 60
21.	Details	a) Combined luminous hall button with seven segment digital hall position indicator at all floors.
		b) Car operating panel with luminous buttons, seven segment digital car position indicator combined with direction arrows, overload warning indicator. c) Battery Operated Alarm Bell & Emergency Light. d) Firemen's switch at main lobby.

22.	Face Plate Finish	Stainless Steel in hairline.
23.	Face Plate Shape	Rectangular.
24.	Pit depth required	2000 mm
25.	Fan	Cabin Fan
26.	Fire Extinguisher with fire alarm	CO_2 5Kg, Capacity manually operator container should be provided in the machine room & car cabin with lalarm
27.	Belt	Flexible coated steel belts
28.	Automatic rescue device	Essential

Note : One year maintenance warranty by the manufacturer through the contractor is binding.

N.B. : Before quoting of the rates, the bidder may contact the Engineer-in-Charge of the workfor inspection of site.

NAME OF WORK :- Design, manufacturing, supply, installation, testing and commissioning of electric Traction elevator (G+7) 13 passenger.

Technical Specification

1.	Load (Kgs.)	68 x 13 = 884 Kg. (13 passenger)
2.	Speed – mps	1.75 mps
3.	Travel – mtrs	Ground floor to 3rd floor, About 12.00 Mtr. (G+3)
4.	Stops & Openings	4 Stops, 4 Openings (All openings on the same side)
5.	Power Supply	400 Volts 3 Phase 50 Hertz. Alternating Current.
6.	Control	A.C. Variable Voltage Variable Frequency (with close loop)
7.	Operation	Simplex full Collective (with / without Attendant)
8.	Machine	Compact permanent magnet Gearless machine .
9.	Car Size (inside Dimension)	About 1100 mm wide X 2000 mm depth.
10.	Hoistway Required	About 1850 mm wide X 2350 mm depth – Finished with plaster.
11.	Car Enclosure	IND – 160
12.	Car Panels	Stainless steel mirror finish
13.	Handrails on three sides	Stainless steel mirror finish.
14.	False Ceiling	CD – 35 (powder painted)
15.	Flooring	Vinyle tiles.
16.	Car Entrance	Protected by centre opening sliding steel door stainless steel mirror finish(800mm wide x 2000mm hight).
17.	Size (W x H) – mm	800 mm x 2000 mm
18.	Hoist way Entrance	Protected by centre opening sliding steel doors finish.
19.	Door operation	Automatic with ACVVF Door Operator & Multi-Ray Electronic Door Detector System.
20.	Signals (Design)	S – 60
21.	Details	a. Combined luminous hall button with seven segment digital hall position indicator at all floors. b) Car operating panel with luminous buttons, seven segment digital car position indicator combined with direction arrows, overload warning indicator. c.) Battery Operated Alarm Bell & Emergency Light.

		d.) Firemen's switch at main lobby.
22.	Face Plate Finish	Stainless Steel in hairline.
23.	Face Plate Shape	Rectangular.
24.	Pit depth required	2000 mm
25.	Fan	Cabin Fan
26.	Fire Extinguisher with fire alarm	CO_2 5Kg, Capacity manually operator container should be provided in the machine room & car cabin with lalarm
27.	Belt	Flexible coated steel belts
28.	Automatic rescue device	Essential

Note : One year maintenance warranty by the manufacturer through the contractor is binding.

N.B. : Before quoting of the rates, the bidder may contact the Engineer-in-Charge of the work for inspection of site.

Annexure: I

(List of Plants & Equipment's to be deployed on contract work)

Sl.No	Types of Equipments	No. of Machines Required	Marks
01	Concrete Mixer with integral weigh batching facility	2 Nos.	30
02	Concrete Vibrator Plate type	2 Nos.	10
03	Concrete Vibrator Needle type	2 Nos.	10
04	Water Tanker	2 Nos.	10
05	Water pump	2 No.	10
06	Truck/ Tipper	2 No.	10
07	Centering & Shuttering (Steel or Iron)	5000 Sft.	20
	Minimum Qualifying marks - 80	Total	100 Marks

Annexure: II

As per Finance Department Government of Odisha Vide Letter No- 8943 Date-18.03.2021 I/We understand that, according to your conditions, bids must be supported by a Bid Security Declaration I/We_____(Insert Name and Address of Bidder) am / are submitting this declaration in lieu of Bid Security/ Earnest Money Deposit for the Tender for _____

_____(Insert title of the Tender) (Tender No) _____there by fully accepting that I/We will be suspended and shall not be eligible to participate in the Tenders invited by you for a period of two years from the date of such suspension order under the following circumstances:

i) If after the opening of Tender. I/We withdraw or modify my/our Tender during the period of validity specified in the Bid documents

ii) If after the award work, I/we fail to submit ISD @ 2% of the quoted amount before execution of Agreement or sign the contract within the time limits specified in the Departmental Document.

Signature of Contractor /

Authorized Signatory

Tenderer(s)is/are required to submit the information in the following Schedules

SCHEDULE – A

CERTIFICATE OF NO RELATIONSHIP

I/We hereby certify that I/We* am/are* **related / not related**(*) to any officer of P.W.D of the rank of Assistant Engineer &above and any officer of the rank of Assistant / Under Secretary and above of the Works Department, Govt. of Odisha 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 and security deposit and I/We* shall be liable to make good the loss or damage resulting from such cancellation

(*) - Strike out which is not applicable.

Signature of the
TendererDate:-

SCHEDULE - B

EXISTING COMMITMENTS AND ON-GOING WORKS :

Description of works	Place & State	Contract No.	Name & Address of Employer	Value of Contract (` In lakh)	Stipulated Period of Completion	Value of works* remaining to be completed (` In lakh)	Anticipated date of completion
1	2	3	4	5	6	7	8

* The above information is to be certified by the Engineer in Charge / Employer not below the rank of Executive Engineer or equivalent. In case of there is no existing commitment and ongoing works, the bidder shall declare as nil in schedule B.
This information is only required if the Bid value is Equal & Above 300 Lakh

Signature of the Tenderer

Date.....

SCHEUDLE – C

CERTIFICATE OF TOOLS AND PLANTS

I/We hereby certify that the following tools and plants, machineries and vehicles are in my /our possession and in working order.

Sl. No	Type of Equipments	No. of machines required	No. of machines owned / leased/hired
01.	Concrete Mixer with integral weigh batching facility	2 Nos.	
02.	Concrete Vibrator : Plate type	2 Nos.	
03.	Concrete Vibrator : Needle type	2 Nos.	
04.	Water Tanker	2 Nos.	
05.	Water pump	2 No.	
06.	Truck/ Tipper	2 No.	
07.	Centering & Shuttering (Steel or Iron)	5000 Sft.	

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

Signature of the
TendererDate.

SCHEUDLE – D

WORK EXPERIENCE

LIST OF SIMILAR NATURE OF PROJECTS EXECUTED

Name of Employer	Name of location and name of work	Contract price in Indian Rupees/ Agreement no.	Major Items of works	Stipulated date of commencement / completion of the work as per Agreement	Actual date of completion of the work	Value of work actually executed during last 5 financial years		Reasons for delay in starting/ completion if any
						Financial year	Value	
1	2	3	4	5	6	7	8	9

Note: The above information is to be certified by the Engineer in Charge / Employer not below the rank of Executive Engineer.

Signature of the
TendererDate.

SCHEDULE - E

INFORMATION REGARDING CURRENT LITIGATION, DEBARRING EXPELLING OF TENDERER OR ABANDONMENT OF WORK BY THE TENDERER

1.	a)	Is the tenderer currently involved in any litigation relating to the works.	Yes / No
	b)	If yes: give details.	
2.		Has the tenderer or any of its constituent partners been debarred/ expelled by any agency in India during the last 5 years.	Yes / No
3.	a)	Has the tenderer or any of its constituent partners failed to perform on any contract work in India during the last 5 years.	Yes / No
	b)	If yes, give details:	

Note:

If any information in this schedule is found to be incorrect or concealed, qualification application will summarily be rejected.

Signature of Tenderer

SCHEDULE – F

AFFIDAVIT

1. The undersigned do hereby certify that all the statements made in the required attachments are true and correct.
2. The undersigned also hereby certifies that neither my / our firm / company / individuals_____nor any of its constituent partners have abandoned any road/ bridge/Irrigation /Buildings or other project work in India nor any contract awarded to us for such works have been rescinded during the last five years prior to the date of this bid.
3. The undersigned hereby authorize(s) and request(s) any bank, person, firm or Corporation to furnish pertinent information as deemed necessary and as requested by the Department to verify this statement or regarding my (our) competency and general reputation.
4. The undersigned understands and agrees that further qualifying information may be requested and agree to furnish any such information at the request of the Department.

{Signature of Tenderer}Title of Officer
Name of Firm
Date:

SCHEDULE - G

CERTIFICATE OF EMPLOYMENT OF UNEMPLOYED GRADUATE ENGINEER / DIPLOMA HOLDERS
(For Super Class / Special Class / 'A' Class Contractors only)

I / We hereby certify that at present, the following Engineering personnel are working with me / in our firm / company and their bio-data are furnished below.

Sl. No.	Name of Engineering personnel appointed for supervising contractor's work with address	Qualification	Date of Appointment	Monthly emolument	Whether full time engagement and continuous	If they are superannuated / retired / dismissed or removed personnel from state Govt./ Central Govt. / Public Sector Undertaking / private Companies and s or any one ineligible for Government service
1	2	3	4	5	6	7

Signature of the
Tenderer.Date:-

SCHEDULE – H

SAMPLE FORMATS

UNDER TAKING

This is to certify that

1. My firm has neither been associated, directly or indirectly. with the Consultant or with any other entity that has prepared the design, specifications, and other documents for the Project nor has any person associated with been proposed as Project Manager for the Contract.

2. My firm has not engaged any agency and any of its affiliates engaged by the Engineer-in-Charge to provide consulting services for the preparation or supervision of this work.

3. My firm has not engaged any Engineer of gazetted rank employed in Engineering or Administrative duties in an Engineering Department of the Government of Odisha or other gazetted officer retired from Government service during last two years without prior permission of the Government of Odisha in writing on or before submission of this tender. I am aware that my contract is liable to be cancelled if either I or any of my employees is found any time to be such a person who had not obtained the permission of the Government of Odisha as aforesaid.

Signature of the
Tenderer. Date:-

Note: i. Strike out whichever is not applicable
ii. In case any person is under his employment with due permission from Government, the same may be cited in a separate letter.

SCHEDULE – I

RELATIONSHIP DECLARATION

To

, The Tender Inviting Officer,

Subject: (Name of the Work)

Reference : (Bid reference number)

Sir

,

Pursuant to clause 2of the ITB, it is to inform that I have relative(s) employed as an Officer in the rank of an AssistantEngineer/Under Secretary under the____Department. His (Their) details are as follows.

Relationship:

Name:

Designati

onOffice

Address

Pursuant to clause 2 of the ITB, I am to submit herewith the names of persons who are working under my firm having near relatives to any gazetted officer in the rank of an Assistant Engineer/Under Secretary in the_____Department.

Sl No	Name of the my employee and his designation in the firm	Presently working at	Details of his relatives working in the Department
			Relationship Name: Designation Office Address
			Relationship Name: Designation Office Address

I am also duty bound to inform the relationship of any subsequent employment with any gazetted officer in the rank of anAssistant Engineer/Under Secretary in the_____Department. I **am awarethat** any breach of this condition would render my firm liable for penal action for suppression of facts.

Yours Sincerely

Signature of the Tenderer.
Date:-

SCHEDULE – J

MEMORANDUM OF UNDERSTANDING

First Party I Sri/Smt....., Aged .... years. S/O- ..... At / P.O. / Dist-.....
(hereinafter called the First Part)

AND

Second Party I Sri/Smt....., Aged ... years, S/O- ..... At / P.O / Dist- .....
(hereinafter called the Second Part) having H.T. / L.T. license registration No. ... . valid upto .....

AND WHEREAS the First Party of 1st part is the managing partner of .....

AND WHEREAS the First Party willing to appoint the Second Party to execute the E.I. portion for the tender work,"..... "

AND WHEREAS the Second Party aSEpted the offer of First Party.

NOW THIS DEED OF AGREEMENT WITNESSES AS FOLLOWS;

1) That, the Second Party shall do all E.I. works, if the tender is awarded to First Party.
2) That, the Second Party shall fulfill all the E.I. works as per the tender schedule by instruction of Engineer-in-Charge.
3) That, the First Party shall receive payment, signing the bill the document for the concerned work.
4) That, the Second Party shall abide the rules, regulations and specification of E.I. works of above said matter. In witness where of Both the party have signed in presence of

WITNESS

W_1 -

W_2 -

BILL OF QUANTITIES

NAME OF WORK:"IMPLEMENTATION OF AMA HOSPITAL PROGRAMME UNDER 5T AT CHC LOISINGHA."

COMBINED BOQ

Description of items	Main Gate	C-Wall	Drain	Reg Shed	Shed OPD	Drying area	Parking Shed	Road	Ramp	Repair	Qnty	Unit	Rate (Rs.)	Amount (Rs.)
MANTLING WORKS														
nantling brick or stone masonry in lime or cement mortar under 3m height ding stacking the useful materials for reuse and removing the debris within 50mtr														
Ground Floor										**14.17**	14.17	Cum	**1203.57**	17,054.59
nantling and removing R.C.C. columns beams slab staircase landing, lintels ding stacking the useful materials for reuse and removing the debris within 50m														
Ground Floor										**3.81**	3.81	Cum	**1271.85**	4,845.76
nantling and removing R.C.C. Chajja, Shelves, fins and parapet including stacking seful materials for reuse and removing the debris within 50m lead														
Ground Floor										**7.88**	7.88	Sqm	**150.80**	1,188.33
nantling and removing doors, windows and ventilators including removal of e, hinges, fastening and stacking the same for reuse and removing the debris within lead														
Ground Floor										**125.23**	125.23	Sqm	**343.75**	43,048.25
oving old lime or cement plaster from walls including raking out joints 12 mm and removing the debris within 50m lead														
Ground Floor										**596.76**	596.76	Sqm	**43.09**	25,712.36
First Floor										**301.70**	301.70	Sqm	**45.20**	13,636.84
nantling and removing old tiled flooring including removing the base course and king the useful materials for reuse and removing the debris within 50m lead														
Ground Floor										**349.94**	349.94	Sqm	**107.72**	37,694.31
nantling and removing old tiled cladding from walls including racking out joints m deep stacking the useful materials for reuse and removing the debris within 50m														
Ground Floor										**350.06**	350.06	Sqm	**56.01**	19,608.47
nantling G.C.I or A.C sheet roofing after carefully removing the bolts and nuts ding stacking of the materials for reuse and removing the debris within 50m lead														
Ground Floor										**42.13**	42.13	Sqm	**78.21**	3,295.17
nantling Steel Work in all types of sections upto a height of 5 m above plinth level ding T&P and scaffolding wherever necessary, sorting the dismantled material, osal of unserviceable material and stacking the serviceable material with all bits and of 1000 metres excluding cutting of rivet bolt including dismembering														
Ground Floor										**1.69**	1.69	Tonne	**1857.94**	3,130.99
a for cutting rivets										**30.00**	30.00	Nos	**13.30**	399.00
Ground Floor														
posal of moorum/building rubbish/ malba/ similar unserviceable, dismantled vaste material by mechanical transport including loading, transporting unloading to roved municipal dumping ground for lead upto 10 km for all lifts, complete as per ctions of Engineer-in-charge.														
All Floor										**38.44**	38.44	Cum	**225.60**	8,672.06
L WORK														
ring and grubbing roads and land including uprooting rank vegetation, grass, nes, shrubs, saplings and trees girth up to 300 mm, removal of stumps of trees cut ter and disposal of unserviceable materials and stacking of serviceable material to be d or auctioned, up to a lead of 1000 metres including removal and disposal of top anic soil not exceeding 150 mm in thickness	58.26			126.00			32.00				216.26	Sqm	6.32	1,366.76

Block Dev. Officer, Loisingha

Description of items	Main Gate	C-Wall	Drain	Reg Shed	Shed OPD	Drying area	Parking Shed	Road	Ramp	Repair	Qnty	Unit	Rate (Rs.)	Amount (Rs.)
th Work														
th work in excavation in foundation trenches, column foundation, pit, etc in all d of soil including moorum stony earth and earth mixed with boulders except sheet and boulders not requiring blasting including dressing of sides and levelling the bed o the required depth and depositing the excavated materials away from the work site initial lead of 50 mtr and all lifts, including shoring, shuttering & dewatering (if uired) with cost of labour, labour cess, hire & running charges of all machineries, ls & T&P required for the work complete as directed by the Engineer in charge														
Upto 1.5mtr Depth	73.04	82.30	149.85	37.95			21.94		23.18	20.07	107.63	Cum	222.70	92,817.35
Beyond 1.5mtr to 3.00 mtr Depth	5.86			3.92			2.35			7.35	11.48	Cum	244.10	3,534.57
ng the Foundation and Plinth, Sides of Foundation, etc. with excavated materials luding rock), in layers not exceeding 0.225 m in depth including cost of watering, mming, dressing and levelling the top to proper level & gradient, cost of labour, veyance, loading, unloading, T&P, etc, all complete as per the direction of Engineer-in-rge.														
Ground Floor	71.56	62.13	49.95	27.91			15.73		15.62	19.15	262.05	Cum	126.50	33,149.33
posal of surplus/ excavated materials by mechanical means within 5km. Lead away n the site including cost of all labour , T&P complete as per the direction of the gineer in charge														
Ground Floor	13.20	20.17	99.90	13.96			7.86		7.56	3.27	165.92	Cum	278.80	46,258.50
plying, diluting and preparing chemical emulsion like Imidacloprid 30.5 % SC or other micals approved by Central Insecticides Board or as directed by the manufacturer and aying the mixture uniformly by sprayer as Pre-Constructional Anti termite Treatment rforming to IS 6313 (Part-II) and creating a chemical barrier under and around the umn pits, wall trenches, basement excavation, top surface of plinth filling, junction of lls and floors along with external perimeter of the building, expansion joints, rrounding the pipes and conduits etc. at the rate of 7.5 liters per sqm on vertical surface 5.0 liters per sqm on horizontal surfaces. 50% of the emulsion to be filled in the holes de in trenches at 150mm centr to center (or as directed by the manufacturer) luding the cost of all materials, cost of all labour, conveyance loading, unloading, T&P, all complete as per the direction of Engineer in Charge.														
he payment shall be made on the basis of actual plinth area of the building at ground or and vertical faces will not be measured for payment) Note- The contractor shall re to furnish Ten (10) years guarantees to maintain the anti-termite treated area / ucture free from termite. In addition to the 10 years guarantee furnished as above, the tractor shall have to furnish ten years (after certificate of final completion) Bank arantee Bond issued by any Nationalized Bank executed in favour of the client as ected in the prescribed proforma available in the tender document for an amount of % (ten percent) of cost of this item of work.	62.79									19.86	82.65	Sqm	104.50	8,636.93
pplying and Filling with Sand in Foundation and Plinth in layers not exceeding 20 in depth, well watered and compact , top surface dressed and levelled to proper level d gradient including cost of all materials , conveyance taxes, royalties, loading, loading, cost of all labour, T&P, etc.All complete as per the direction of Engineer-in-rge.														
Ground Floor	9.06	7.78	19.98	41.47			8.30	180.90	13.00	**2.80**	283.29	Cum	653.90	1,85,243.33
C WORK														
oviding and lying Plain Cement Concrete of proportion (1:3:6) in foundation & or using 40 mm & down grade black hard crusher broken granite stone metal, washed d screened sharp sand of approved quality from approved quarry including hoisting, vering, laying the concrete, ramming watering and curing etc. complete to required kness including cost of all materials, conveyance, loading, unloading, royalties, cost of urs, T&P, hire & running charges of concrete mixer etc all complete as per the ection of the Engineer -in-charge														

OR

Block Development Officer, Lalsingha

Description of items	Main Gate	C-Wall	Drain	Reg Shed	Shed OPD	Drying area	Parking Shed	Road	Ramp	Repair	Qnty	Unit	Rate (Rs.)	Amount (Rs.)
Ground Floor	6.29	7.23	14.99	16.27	10.68		5.10	18.00	28.38	1.99	108.93	Cum	5116.90	5,57,358.33
C WORK														-
viding, lifting, hoisting and laying in position Machine Batched , Machine Mixed and chine Vibrated **Design mix Cement Concrete of M-25 Including the cost of ttering and Shuttering (minimum cement content not less than 403Kg/Cum)** de in reinforced cement concrete structural elements using black hard crusher broken nite chips of approved quality from approved quarry including mixing and compacting proper shape and size, level and plumbs and finishing the exposed surfaces smooth uding the cost of all materials, cost of labour conveyance, loading, unloading, royalties, ering and curing for the required period, T&P , hire & running charges of concrete er and vibrator, cost of Admixtures in recommended proportions (as per IS 9103) to elerate, retard setting of concrete, improve workability without impairing strength and ability etc. complete as per the direction of the Engineer-in-charge but excluding the t of steel reinforcement.														-
R.C.C. foundation and footing bases of columns mass concrete pre-cast slab etc.														-
Ground Floor	11.43	10.96	32.76	6.88			4.13		7.56	2.39	76.31	Cum	6200.10	4,73,129.63
R.C.C. Plinth Beam														-
Ground Floor	4.09	6.18		4.41			1.65			1.23	17.56	Cum	7018.80	1,23,250.13
R.C.C. Beams, columns, grider and bressmer etc.														-
Ground Floor	10.46	14.47								2.14	27.07	Cum	13939.80	3,77,350.39
First Floor	12.00										12.00	Cum	15649.50	1,87,794.00
R.C.C. Floor and Roof slab, landing, balconies,Projecting sun shades and chajjas to 4.3Mtr. Height.														-
Ground Floor	2.32									1.01	3.33	Cum	12568.80	41,854.10
First Floor	3.45										3.45	Cum	14004.20	48,314.49
R.C.C. Lintel														-
Ground Floor	0.30									0.91	1.21	Cum	13223.70	16,000.68
R.C.C. Grade Slab														-
Ground Floor									20.43		20.43	Cum	6200.10	1,26,668.04
R.C.C. walls and fins including attached pillasters.														-
Ground Floor									4.46		4.46	Cum	12203.70	54,428.50
viding & fixing **TOR Fe-500 HYSD Reinforcement bars (SAIL /TATA NL/JINDAL/SHYAM)** of required diameter and approved quality for Reinforced ent Concrete work including straightening, cutting, bending, binding, welding(if roved) , joining (if necessary), tying the grills, hoisting, lowering and placing in ition as per the approved design & drawings (BBS) with provision of standard lan ks including the cost of all materials, cost of all labour, conveyance, loading unloading, t of binding wires of 18 to 20 gauge, T&P, etc. all complete as per the direction of gineer in Charge e: (Linear measurements will be taken & quantity will be calculated on standard ght. Lap length of bars & Weight of binding wire will not be considered for asurement and payment).														-
Ground Floor	37.43	24.06	29.48	10.73			4.96		21.26	9.76	137.70	Qntl	8985.90	12,37,358.43
First Floor	29.32										29.32	Qntl	9011.60	2,64,220.11
CK WORK														-
viding and laying Brick Masonry work in Foundation & Plinth using Fly ash cks of 23 Cm. x 11 Cm. x 8 Cm. size having crushing strength not less than 75 /Cm2 with dimensional tolerance + 2 % confirming to IS 12894 and IS 2212 in cement tar (1:4) affter immersing the bricks for minimum 6 hours in water before use. h all necessary projections, splays cutting, circular moulding, corbelling, etc. as per the wings including the cost of all materials, cost of all labour, conveyance, royalties, ding, unloading, scaffolding, staging, watering and curing, sundries, T&P, etc. complete er the direction of the Engineer-in-charge	1.83		39.12	4.04			1.66				46.65	Cum	5092.60	2,37,585.07

Block Dev. Officer Lalsingha

Description of items	Main Gate	C-Wall	Drain	Reg Shed	Shed OPD	Drying area	Parking Shed	Road	Ramp	Repair	Qnty	Unit	Rate (Rs.)	Amount (Rs.)
viding and laying Brick masonry work in Superstructure using Fly ash bricks of 23 x 11 Cm. x 8 Cm. size having crushing strength not less than 75 Kg./Cm2 with ensional tolerance + 2 % confirming to IS 12894 and IS 2212 in cement mortar (1:4) Half Brick Masonry Wall with provisions for 2 nos 6mm dia MS bar at each 4th layer r immersing the bricks for minimum 6 hours in water before use, with all essary projections, splays cutting, circular moulding, corbelling etc as per the wings including the cost of all materials, cost of all labour, conveyance, royalties, ding, unloading, scaffolding, staging, watering and curing, sundries, T&P, etc complete er the direction of the Engineer in-charge														
Ground Floor	6.47						1.85				2.32	Cum	5125.00	11,892.09
viding and laying of Full Brick Masonry work in Superstructure using Fly ash ks of 23 Cm. x 11 Cm. x 8 Cm. size having crushing strength not less than 75 Kg./Cm2 n dimensional tolerance + 2 % confirming to IS 12894 and IS 2212 in cement mortar) affter immersing the bricks for minimum 6 hours in water before use, with all essary projections, splays cutting, circular moulding, corbelling, etc as per the wings including the cost of all materials, cost of all labour, conveyance, royalties, ding, unloading, scaffolding, staging, watering and curing, sundries, T&P, etc complete er the direction of the Engineer-in charge														
Ground Floor	20.75	33.70		14.72						8.98	78.15	Cum	4927.30	3,85,068.50
First Floor	15.61										15.61	Cum	5215.00	81,406.15
ISHING WORK														
viding 6 mm thick Cement Plaster in Cement Mortar of (1:4) to Ceilings of Roof os, Stairs, Landings, Chajja, Shelves, Columns, Beams and Lofts etc. including ghening, scraping and cleaning and finishing the plastered surface smooth using oden floats only to proper plumbs and level, making grooves, beads and drip coarse to required ornamental finish as per drawings including cost of all materials, veyance, loading and unloading and royalties, all labour, scaffolding, watering and ing , sundries, T&P etc. complete as per direction of the Engineer in charge														
Ground Floor	13.85									8.10	21.95	Sqm	166.00	3,643.70
First Floor	47.28										47.28	Sqm	170.20	8,047.06
viding 12mm thick cement plaster in cement mortar (1:4) to the surface of brick sonry wall including racking out joints, scraping and cleaning the surface and finishing plaster surface smooth using wooden floats, bars etc only to proper plumbs and level making grooves, beads and drip coarse to give required ornamental finish as per wings including cost of all materials, conveyance, loading and unloading,royalties, cost abour, scaffolding, staging, watering before plastering and curing, sundries and T&P, complete as per direction of the Engineer-in-charge.														
Ground Floor	6.41										6.41	Sqm	161.00	1,032.01
viding 12mm thick cement plaster in cement mortar (1:6) to the surface of brick sonry wall including racking out joints, scraping and cleaning the surface and finishing plaster surface smooth using wooden floats, bars, etc only to proper plumbs and level making grooves, beads and drip coarse to give required ornamental finish as per wings including cost of all materials, conveyance, loading and unloading,royalties, cost abour, scaffolding, staging, watering before plastering and curing, sundries and T&P, complete as per direction of the Engineer in charge.														
Ground Floor	68.24	161.17		64.00			14.40			300.25	608.06	Sqm	149.80	91,087.39
First Floor	64.65										64.65	Sqm	153.40	9,917.31

OR

Block Dev. Officer, Kotlingha

Description of items	Main Gate	C-Wall	Drain	Reg Shed	Shed OPD	Drying area	Parking Shed	Road	Ramp	Repair	Qnty	Unit	Rate (Rs.)	Amount (Rs.)
viding 16mm thick cement plaster in cement mortar (1:6) to the surfaces of brick sonry wall including racking out joints, scraping and cleaning the surface and finishing plaster surface smooth using wooden floats, bars, etc only to proper plumbs and level making grooves, beads and drip coarse to give required ornamental finish as per wings including cost of all materials, conveyance, loading and unloading, royalties, cost abour, scaffolding, staging, watering before plastering and curing, sundries and T&P, complete as per direction of the Engineer-in-charge.														-
Ground Floor	125.97	183.56	519.75	64.00			19.92			362.36	1275.56		214.20	2,73,224.95
First Floor	64.65									217.04	281.69		223.10	62,845.04
viding average 25mm thick grading Concrete in C.C (1:2:2) using 6mm size sher broken black hard granite chips using 2% water proofing cement compound ke: Sika / Fosroc / Equivalent) after scraping and cleaning the roof surface and shing smooth to proper slope and gradient including cost of all materials, conveyance, dries,T&P watering and curing by ponding water over terrace slab etc. complete as per direction of the Engineer-in charge.														-
First Floor	42.25										42.25	Sqm	343.40	14,508.65
king plinth protection 50mm thick of cement concrete 1:3 6 (1 cement : 3 coarse sand : raded stone aggregate 20 mm nominal size) over 75mm thick bed of dry brick ballast mm nominal size, well rammed and consolidated and grouted with fine sand, including essary excavation, levelling & dressing & finishing the top smooth.	12.75									11.48	24.23	Sqm	351.90	8,526.54
rrace Water Proofing														-
terproofing application:- Providing and application of two component polymer dified flexible cementitious waterproofing coating at a thickness of 1.5 2.5 mm The mbrane should have Elongation equal or more than: 30% ck Bridging ability : Up to 1 mm nesive strength: 1.0 N/mm^2 @ 28d sile elongation: 60% @ 20°C re A Hardness >85 (between 3 - 7 days) as per direction of E.I.C ake MYK / Fosroc /Tremco Pvt.Ltd./ Sika / Sunanda/Asian/ Pidilite)														-
First Floor	42.25										42.25	Sqm	569.10	24,044.48
pplying and finishing the plastered surface of wall using Cement Based Wall Putty ater Based) of approved make and quality and finished smooth and even surface to eive the paint including the cost of all materials, cost of all labour, conveyance, taxes, ding, unloading, scaffolding, T&P, etc, all complete as per the direction of Engineer-in-rge. ***ake: Birla White/J K Wall Putty)***														-
Ground Floor	125.97										125.97	Sqm	76.00	9,573.72
First Floor	176.58										176.58	Sqm	77.40	13,667.29
viding and applying 2 coats plastic emulsion paint of approved quality and shade over oat of wall primer of approved quality to surfaces (interior) including throughly shing the surface free from foreign materials, sand papering smooth the intermediate ts providing necessary putty & primer including of all materials, labour, veyance,royalties, scaffolding, watering, curing, sundries, tools and plants etc as per direction of Engineer-in-charge. (colour & shade to be approved before procurment &)(Make Dulux,/Nerolac,/Berger/Asian Paint)														-
Ground Floor	29.54			64.00						1050.52	1144.06	Sqm	160.90	1,84,079.25

OR

Block Dev. Officer, Lonngha

Description of items	Main Gate	C-Wall	Drain	Reg Shed	Shed OPD	Drying area	Parking Shed	Road	Ramp	Repair	Qnty	Unit	Rate (Rs.)	Amount (Rs.)
viding & Painting two coats with Premium Acrylic Smooth Exterior Paint over on Additives of required shade after preparation of surfaces including brushing the ce to make free from foreign materials, sand papering, Priming, etc. including the cost, veyance of all materials, cost of all materials, T&P, etc. all complete as per the direction ngineer-in-Charge. (Note: Colour & shade to be approved before procurment & ***(Make:Dulux/Nerolac/Berger/Asian Paint)***														
round Floor	160.33	344.73		64.00			84.32			833.60	1484.98	Sqm	147.50	2,11,659.55
rst Floor	176.58									740.08	916.66	Sqm	152.90	1,40,157.31
ding and painting **Two Coats of Synthetic Enamel Paint** of approved quality, brand shade over a coat of red oxide primer to iron Work including cost conveyance, lties cost of all labour, labour cess, T&P etc. required for the work complete as cted by the Engineer in Charge. (Note: Colour & de to be approved before procurment & use).***(Make:Dulux/Nerolac/Berger/Asian nt)***														
round Floor	59.40	39.60								102.00	201.00	Sqm	154.50	31,054.50
plying, fitting & fixing of M.S. Grill made out of M.S. flats/square bars as per wing and design fixed in position to proper plumb, including a coat of priming with roved quality metallic primer materials including cost, conveyance, taxes, sportation of all materials, cost of all labour, sundries, T&P etc. complete as per ction of Engineer in charge														
round Floor	1039.50	432.00								1530.00	3001.50	Kg	67.10	2,01,400.65
viding and laying 600 mm x 1200 mm Industrial Mat Vitrified Floor Tiles confirming S : 15622 of approved make, quality and colour without any warpage laid over an er layer of 20 mm thick base of cement mortar (1:4) (1 cement : 4 coarse sand) ding cutting to size, laying and filling the joints with white cement slurry mixed with uring pigment to match the shade and colour, cleaning the surfaces with oxlaic acid, hine grinding, mirror polishing including the cost of all materials, cost of all labour, veyance, royalties, loading, unloading, sundries, watering and curing, T&P, etc. plete as per the direction of the Engineer-in-Charge. te- Sample of tiles shall be approved before procurement and use.) ke:Somany/Jhonson/RAK/kajaria)														
Ground Floor	11.25			126.00	89.40					221.24	447.89	Sqm	1077.00	4,82,377.53
First Floor						96.25					96.25	Sqm	1087.50	1,04,671.88
viding and laying 600 mm x 600 mm Matt Finished Vitrified Floor Tiles confirming to 15622 of approved make, quality and colour without any warpage laid over an under r of 20 mm thick base of cement mortar (1:4) (1 cement: 4 coarse sand) including ing to size, laying and filling the joints with white cement slurry mixed with colouring ment to match the shade and colour, cleaning the surfaces with oxlaic acid, machine ding, mirror polishing including the cost of all materials, cost of all labour, veyance, royalties, loading unloading, sundries, watering and curing, T&P, etc. plete as per the direction of the Engineer in Charge te Sample of tiles shall be approved before procurement and use.) ke:Somany/Jhonson/RAK/Kajaria)														
round Floor										127.24	127.24	Sqm	1106.60	1,40,803.78
viding and laying of Glazed Vitrified Tiles in dado/skirting confirming to IS : 15622 of roved make, quality, colour and size 600mm x 600mm upto required height from floor l fixed over an under layer of 12mm thick bed of cement mortar (1:3) (1 Cement : 3 rse sand) including cutting to size, laying and filling the joints with Epoxy grout with uring pigment to match the shade and colour, cleaning the surfaces including the cost ll materials, cost of all labour, conveyance, taxes, royalties, loading, unloading, dries, watering and curing, T&P, etc. complete as per the direction of the Engineer-in-rge. te- Sample of tiles shall be approved before procurement and use.) [Excluding cost of xy Grout]														

OR

Block Dev. Officer, Lahaingha

Description of Items	Main Gate	C-Wall	Drain	Reg Shed	Shed OPD	Drying area	Parking Shed	Road	Ramp	Repair	Qnty	Unit	Rate (Rs.)	Amount (Rs.)
und Floor	27.00			45.80						386.93	459.73	Sqm	1187.50	5,45,929.38
ply, installation of pressed Steel door of the specified dimensions and accessories such inges, door stopper, tower bolt, door handle, door closer, dead lock, consealed flush r, shaft lock, martise lock and vision panel etc. complete as mentioned along with rranty coverage and after sales services etc inclusive of all costs, taxes, GST, cost of very charges, fixing, fitting and any other invidential charges etc complete. ings:4 Nos Binges,1 No Door stopper,1 no Tower Bolt,1 No Mortice Lock) ike(Tata Pravesh/Navair/Shakti Harmann)	1.00										1.00	No	18351.70	18,351.70
viding and fixing factory made 3 track 2 panel with mesh nmerling/Fenesta/Duroplast uPVC white colour sliding window comprising of uPVC ti chambered frame having section Frame 109 x 52 mm, Window sash 42 x 66 mm de out of lead free green profiles with corners fusion welded, fully reinforced with vanized steel 1.2/1.5 mm. The windows profile should fulfill the requirements of Vmy 0. The physical properties of the profiles like Vicat softening temperature, density, sile strength, hardness, weatherability, impact strength and Modulus of Elasticity uld be tested in accordance with ASTM/DIN-ISO standards and the thermal nductivity as per IS standards.														
window comprising of uPVC extruded glazing beads of appropriate dimension, EPDM xet, GI fasteners 100 x 8 mm size for fixing frame to finished wall, plastic packers, stic caps and necessary stainless steel screws etc. After fixing frame the gap between me and adjacent finished wall shall be filled with weather proof silicon sealant over cker rod of required size. The sash will be fitted with 5mm toughened reflective glass	2.25										2.25	Sqm	9179.30	20,653.13
viding and fixing factory made Louvers with exhaust fan provision nmerling/Fenesta/Duroplast uPVC white colour window comprising of uPVC multi-mbered frame having section Window frame 60mm x 58mm made out of lead free en profiles with corners fusion welded, fully reinforced with Galvanized steel 1.2/1.5 . The windows profile should fulfill the requirements of Vmy 2010. The physical perties of the profiles like Vicat softening temperature, density tensile strength, dness, weatherability, impact strength and Modulus of Elasticity should be tested in ordance with ASTM/DIN-ISO standards and the thermal conductivity as per IS ndards. The window comprising of uPVC extruded glazing beads of appropriate ension, EPDM gasket, GI fasteners 100 x 8 mm size for fixing frame to finished wall, stic packers, plastic caps and necessary stainless steel screws etc. After fixing frame the between frame and adjacent finished wall shall be filled with weather proof silicon ant over backer rod of required size. The sash will be fitted with 3.5mm pinhead glass.	0.36										0.36	Sqm	7873.70	2,834.53
ewing Wrought iron or M.S. Wheel or roller of steel door or gate and fitting and fixing same with necessary clamps, nuts and bolts/welding and erection etc. complete	4.00										4.00	Nos	196.70	786.80
Catcher														
plying ,fitting and fixing of ISMB Sections for cow catcher (6.4m x 2m) including our for lifting,hoisting and placing in position to required size and length ,pre ricating by cutting to sizes,priming including cost of all materials,cost of all our,loading,unloading at site,all accessories,T&P required for the work complete in all pect as directed by Engineer in Charge.	335.70										335.70	Kg	82.90	27,829.53
viding ,Supplying & Fixing of 80mm dia heavy gauge G.I. Pipe for cow catcher -mX1.5m) including labour for lifting,and placing in position to required length,pre ricating by cutting to required length,priming including cost of all materials, cost of all our,loading,unloading at site ,all accessories,T&P required for the work complete in all pect as directed by Engineer in Charge.	96.00										96.00	Rmt	609.80	58,540.80
plying ,fitting and fixing of 25x6 MS Flat including labour for lifting and placing in ition to required length, pre fabricating by cutting to require length ,priming including of all materials,cost of all labour,loading unloading at site,all accessories,T&P uired for the work complete in all respect as directed by Engineer in Charge.	26.00										26.00	Kg	67.10	1,744.60

OR

Block Dev. Officer, Loisingha

Description of items	Main Gate	C-Wall	Drain	Reg Shed	Shed OPD	Drying area	Parking Shed	Road	Ramp	Repair	Qnty	Unit	Rate (Rs,)	Amount (Rs.)
viding and fixing concertina coil fencing with punched tape concertina coil 600 mm 10 metre openable length (total length 90 m), having 50 nos rounds per 6 metre gth, upto 3 m height of wall with existing angle iron 'Y' shaped placed 2.4m or 3.00 m rt and with 9 horizontal R.B.T. reinforced barbed wire, stud tied with G.I. staples and clips to retain horizontal, including necessary bolts or G.I. barbed wire tied to angle n, all complete as per direction of Engineer-in-charge. with reinforced barbed e(R.B.T.) / Spring core (2.5mm thick) wire of high tensile strength of 165 kg/ sq.mm h tape (0.52 mm thick) and weight 43.478 gm/ metre		100.00									100.00	Rmt	241.00	24,100.00
uctural steel work riveted, bolted or welded in built up sections, trusses and framed rk, including cutting, hoisting, fixing in position and applying a priming coat of roved steel primer all complete.		270.00		5040.00	3780.30	3368.75	1120.50				13536.75	Kg	92.30	12,49,447.03
viding and applying of Cement Pointing including cost of all materials, all Labours, T&P complete as per direction of E.I.C			519.75								519.75	Sqm	33.00	17,151.75
viding and laying tactile tile (for vision impaired persons as per standards) of size 0x300x9.8mm having with water absorption less than 0.5% and conforming to 5622 of approved make in all colours and shades in for outdoor floors such as tpath, court yard, multi modals location etc., laid on 20mm thick base of cement mortar (1 cement : 4 coarse sand) in all shapes & patterns excluding grouting the joints with ite cement mixed with matching pigments etc complete as per direction of Engineer-in rge. (Excluding cost of epoxy Grout)														
ound Floor				19.20	17.40						36.60	Sqm	1227.70	44,933.82
outing the joints of flooring tiles having joints of 3 mm width, using epoxy grout mix of 0 kg of organic coated filler of desired shade (0.10 kg of hardener and 0.20 kg of resin kg), including filling / grouting and finishing complete as per direction of Engineer in rge.														
1000x1000mm Tile/1200x600mm Tile				126.00	89.40	96.25				221.24	532.89	Sqm	145.40	77,482.21
600x600mm Tile/600x300mm Tile/Tactile				65.00	17.40					514.17	596.57	Sqm	244.30	1,45,742.05
pplying, fabricating & fixing of polished stainless steel (304 grade) Items made out of es, angles, flats, plates, hollow tube, square pipe bracing as per approved design and cification, buffing, polishing etc. with cost, conveyance, labour in railing, parapet, ircase, space frame etc required for the work complete in all respect as per direction of gineer-in-charge				270.00					486.00	120.00	876.00	Kg	332.50	2,91,270.00
ishing with Epoxy paint (two or more coats) on steel work at all locations prepared d applied as per manufacturer's certifications including appropriate priming coat, paration of surface, etc. complete as per Direction of E.I.C														
First Floor						134.75					134.75	Sqm	221.20	29,806.70
ound Floor				201.60	149.52		57.60				408.72	Sqm	215.90	88,242.65
oviding and fixing precoated galvanised iron profile sheets (size, shape and patch of rrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated ckness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 rons epoxy primer on both side of the sheet and polyester top coat 15-18 microns. eet should have protective guard film of 25 microns minimum to avoid scratches during nsportation and should be supplied in single length upto 12 metre or as desired by gineer-in-charge. The sheet shall be fixed using self drilling / self tapping screws of size x 25 mm) with EPDM seal, complete upto any pitch in horizontal, vertical or curved faces, excluding the cost of purlins, rafters and trusses and including cutting to size and ape wherever required.				151.20	128.16	115.50	38.40				433.26	Sqm	550.30	2,38,422.98
oviding and fixing 15 cm wide, 45 cm overall semi circular plain G.S. sheet gutter with n brackets 40x3mm size, bolts, nuts and washers etc., including making necessary nnections with rain water pipes complete.				38.40	87.60	52.66					178.66	Rmt	575.30	1,02,818.83
nstruction of granular sub base by providing Grading VI close graded Material, reading in uniform layers with motor grader on prepared surface, mixing by place in thod rotavator at OMC, and compacting with vibratory power roller to achieve the uired density, complete as per clause 401							8.00	36.00			44.00	Cum	2,325.30	1,02,313.20

Block De... Singha

Description of items	Main Gate	C-Wall	Drain	Reg Shed	Shed OPD	Drying area	Parking Shed	Road	Ramp	Repair	Qnty	Unit	Rate (Rs,)	Amount (Rs.)
pplying and fixing of 80mm thick cement concrete interlocking paver block of M-40 de of approved make design colour and size made by Block making machine with per compaction laid in required pattern etc. complete in all respect conforming to IRC - 63:2018.							38.40	1296.00			1334.40	Sqm	608.40	8,11,848.96
oviding, laying, spreading and compacting graded stone aggregate to wet mix macadam ecification including premixing the Material with water at OMC in mechanical mix plant rriage of mixed Material by tipper to site, laying in uniform layers with paver in sub se / base course on well prepared surface and comparting with vibratory roller to ieve the desired density.								27.00			27.00	Cum	2270.63	61,307.01
pplying and fixing of Pre cast kerb stone of size 600mm x 300mm x 150mm of M 30 de of approved make, design, colour and size made by Block making machine with per compaction fixed in required pattern etc. complete in all respect conforming to IS 58:1984.								720.00			720.00	Each	249.53	1,79,676.00
nting two coats after filling the surface with synthetic enamel paint in all shades on w plastered concrete surfaces as per section 800 of MoRTH specifications for Road & dge works (5th revision) and instruction of Engineer in charge								396.00			396.00	Sqm	75.56	29,921.76
equerred precast cement concrete tiles 22 mm thick in footpath & courtyard, jointed h neat cement slurry mixed with pigment to match the shade of tiles, including rubbing d cleaning etc. complete, on 20 mm thick bed of cement mortar 1:4 (1 cement: 4 coarse nd).									19.44		19.44	Sqm	612.20	11,901.17
oviding & laying granite stone flooring using 19-20 mm thick granite stone slab of proved quality, colour and size above 0.4 Sqm as per IS 14223 in Stair Treads and ers over an under layer of 20 mm thick cement mortar (1:4) (1 cement: 4 coarse sand) nfirming to IS-1443 including cutting to size, laying and joining with white cement rry and colouring pigment to match the shade with typical half nosing and cutting oves etc. including cost of all labour, materials, royalties, loading and unloading, nveyance, sundries, watering and curing, etc. complete as per the direction of the gineer-in-Charge. (Colour: Tan Brown) ote- Sample of granite tiles shall be approved before procurement and use.)														
Ground Floor										10.08	10.08	Sqm	3029.50	30,547.36
oviding & laying granite stone flooring in Floors and landing using 19-20 mm thick nite stone slab of approved quality, colour and size above 0.4 Sqm as per IS 14223 laid er an under layer of 20 mm thick cement mortar (1:4) (1 cement: 4 coarse sand) nfirming to IS-1443 including cutting to size, laying and filling the joints with white ment slurry mixed with colouring pigment to match the shade and colour including the t of all materials, cost of all labour, conveyance, royalties, loading, unloading, sundries, tering and curing, T&P, etc. complete as per the direction of the Engineer-in-Charge. lour: Tan Brown) ote- Sample of granite tiles shall be approved before procurement and use.)														
Ground Floor										10.38	10.38	Sqm	2986.80	31,002.98
oviding & laying granite stone tiles in dado/skirting using 10mm thick granite stone e of approved quality, colour and size above 0.4 Sqm as per IS 14223 to proper line, el and slope laid over 12mm thick cement mortar (1: 4) conforming to IS IS-1443 luding cutting to size, laying and filling the joints with white cement slurry mixed with louring pigment to match the shade and colour, cleaning the surfaces including the cost all materials, cost of all labour, conveyance, royalties, loading, unloading, sundries, tering and curing, T&P, etc. complete as per the direction of the Engineer-in-Charge. lour: Tan Brown) ote- Sample of tiles shall be approved before procurement and use.)														
Ground Floor										30.02	30.02	Sqm	2301.70	69,097.03

OR

Block Dev. Officer Jalingha

Description of items	Main Gate	C-Wall	Drain	Reg Shed	Shed OPD	Drying area	Parking Shed	Road	Ramp	Repair	Qnty	Unit	Rate (Rs.)	Amount (Rs.)
ply, installation of pressed Steel door of the specified dimensions and accessories such inges, door stopper, tower bolt, door handle, door closer, dead lock, consealed flush c. shaft lock, martise lock and vision panel etc. complete as mentioned along with ranty coverage and after sales services etc inclusive of all costs, taxes, GST, cost of very charges, fixing, fitting and any other invidential charges etc. complete ngs:8 Nos Hinges,2 Nos Door stopper,2 nos Tower Bolt,1 No Mortice Lock and Vision el) ke:Tata Pravesh/Navair/Shakti Harmann)														
le Leaf (2000X2400)										3.00	3.00	Nos	36277.25	1,09,831.75
viding and fixing 63mm X 125mm factory made single extruded WPC (Wood Polymer mposite) solid door/window/Casestory windows & other Frames/Chowkhat prising of virgin PVC polymer of K value 58-60 (Suspension Grade), calcium bonate and natural fibers (wood powder/ rice husk/wheat husk) and non toxic itives (maximum toxicity index of 12 for 100 gms) fabricated with miter joints after lying PVC solvent cement and screwed with full body threaded star headed SS screws ng minimum frame density of 750 kg/cum, screw withdrawal strength of 2200 N ce) & 1100 N (Edge), minimum compressive strength of 58 N/mm2, modulus of ticity 900 N/mm2 and resistance to spread of flame of Class A category with property eing termite/borer proof, water/moisture proof and fire retardant and fixed in tion with M.S hold fast/lugs/SS dash fasteners of required dia and length complete as direction of Engineer-In-Charge.														
ll Floor										126.60	126.60	Rmt	1135.20	1,43,716.32
plying, fitting and fixing of 32mm thick flush door shutter with approved quality of m thick BWR block board pasted with 1mm thick sunmica on both side of approved gn and quality including cost of all door fittings and fixtures etc. complete														
ll Floor										54.18	54.18	Sqm	10668.61	5,78,025.29
viding and fixing factory made Casement uPVC white colour Door comprising of uPVC ti-chambered frame having section Door frame: 60mm x 66mm, Door sash: 60mm x mm made out of lead free green profiles with corners fusion welded, fully reinforced n Galvanized steel 1.5/2.0 mm. The windows profile should fulfill the requirements of 2010. The physical properties of the profiles like Vicat softening temperature, sity, tensile strength, hardness, weatherability, impact strength and Modulus of ticity should be tested in accordance with ASTM/DIN ISO standards and the thermal ductivity as per IS standards. The window comprising of uPVC extruded glazing beads ppropriate dimension, EPDM gasket, G.I fasteners 100 x 8 mm size for fixing frame to shed wall, plastic packers, plastic caps and necessary stainless steel screws etc. After g frame the gap between frame and adjacent finished wall shall be filled with weather of silicon sealant over backer rod of required size. The sash will be fitted with 6mm ective glass (Make:Kommerling/Fenesta/Duroplast)														
ll Floor										7.56	7.56	Sqm	8682.12	65,636.83
viding and fixing factory made 3 track 2 panel with mesh: nmerling/Fenesta/Duroplast uPVC white colour sliding window comprising of uPVC ti-chambered frame having section Frame 109 x 52 mm, Window sash: 42 x 60 mm, de out of lead free green profiles with corners fusion welded, fully reinforced with vanized steel 1.2/1.5 mm. The windows profile should fulfill the requirements of Viny 0. The physical properties of the profiles like Vicat softening temperature, density, ile strength, hardness, weatherability, impact strength and Modulus of Elasticity uld be tested in accordance with ASTM/DIN-ISO standards and the thermal ductivity as per IS standards.														

OR

Block Dev. Officer, Balangha

Sl. No.	Description of Items	Main Gate	C Wall	Drain	Reg Shed	Shed OPD	Drying area	Parking Shed	Road	Ramp	Repair	Qnty	Unit	Rate (Rs.)	Amount (R
	The window comprising of uPVC extruded glazing beads of appropriate dimension, EPDM gasket, G.I fasteners 100 x 8 mm size for fixing frame to finished wall, plastic packers, plastic caps and necessary stainless steel screws etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of required size. The sash will be fitted with 5mm toughened reflective glass.										41.40	41.40	Sqm	9179.30	3,
	(a)Ground Floor														
58	Waterproof Compound for Plastering: Additional for intergral waterproofing compound of cement to mortar. (Make Fosroc/MYK/Asian Paints/Sunanda/Tremco Pvt Ltd./SIKA)										61.58	61.58	Kg	472.39	
														Total Amount	Rs. 1,24,(
														LAND SCAPE	Rs. 4,

Rs. 1,28,34,

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Block Dev

INTERNAL ELECTRIFICATION

Sl. No.	Description of work	Unit	Qnty.	Rate	Amount
	Subhead- I (Internal Electrification)				
1	Rewiring for light point/ fan/ exhaust fan point/ call bell point with 1.5 sqmm FRLS PVC insulated copper conductor single core cable in surface / recessed 2 mm thick PVC conduit with modular switch and earthing the point with 1.5 sqmm FRLS PVC insulated copper conductor single core cable including providing modular box with cover of requisite number of modules including providing cover plates as required. Make: Conduit precision/Norepack Wire KEI/Finolex/Havells Switch & socket: Legrand(Myirus)/schneider-Zenclo/Panasonic(vision)				
a)	Single light point controlled by one 6A switch or first light point of group control.	Each	212	678.00	1,43,736.00
b)	Subsequent point of group control	Each	171	399.00	68,229.00
2	Supplying and fixing two module steeped type electronic fan regulator with proper modular plate switch box including connections etc as required	Nos.	20.00	454.00	9,080.00
3	Supplying and fixing 6 Amp plug with 6 Amp switch (Modular Type) on existing board.	Nos.	15	422.00	6,330.00
4	Supplying and fixing including testing and commissioning of 6A modular socket outlet with 6 Amp switch including providing GI modular box with faceplate etc as required.				
a)	1 nos 6 Amp 3-pin socket with 6 Amp switch.	Nos.	20	541.00	10,820.00
b)	2 nos 6 Amp 3-pin socket with 2 nos 6 Amp switch	Nos.	25	706.00	17,650.00
5	Supply, installation, testing & commissioning of 6 / 16 Amp Plug Boards consisting of a 16 Amp clip-in type modular switch with indicator and a 6/16 Amp clip-in type modular socket fixed on metallic concealed box including interconnections and making good the damages caused complete as required and as per direction of Engineer-in-charge.	Nos.	30	561.00	16,830.00
6	Supplying, installation, testing & commissioning of 25 amp modular socket outlet on surface or in recess, on 1 Nos two module GI box with plate and 1 nos 2module box with 25A switch etc. complete as direction of Engineer-in-charge.	Nos.	5	1,330.00	6,650.00
7	Wiring for circuit/ submain wiring along with earth wire of following size of FRLS heavy gauge PVC insulated copper conductor single core cable in heavy duty PVC conduit laid in surface/ recess as required.Make-KEI/Finolex/Havells				
a)	2X1.5 + 1X1.5 sqmm FRLS Cu wire (for UPS ckt wiring)	mtr	150	197.46	29,618.64
b)	2X2.5 + 1X2.5 sqmm FRLS Cu wire (for Light plug circuit wiring)	mtr	1100	233.05	2,56,355.93
c)	2X4 + 1X4 sqmm FRLS Cu wire (for power plug & SPN DB submain)	mtr	450	283.05	1,27,372.88
d)	4X6 + 2X6 sqmm FRLS Cu wire (submain)	mtr	300	638.98	1,91,694.92
8	SITC of LED Surface/suspended Light fitting (3300 Lumen) 2'x2' sqaure light of PHILIPS .(CAT No:RC365B LED33- 6500 PSU OD WH)/ Equivalent of Wipro/Halonix/Havells as decided by EIC.	Each	30	3,509.00	1,05,270.00
9	SITC of LED Surface/suspended Luminaire (2000 Lumen) battern light of PHILIPS (CAT No:BN150W LED20S-6500 PSE OD GR) / Equivalent of panasonic/ Wipro/Halonix/Havells as decided by EIC.	Each	176	948.00	1,66,848.00
10	SITC of LED Surface/suspended down light fitting (1500 Lumen) of PHILIPS (CAT No:DN194B LED15S-6500 PSU WH S1) / Equivalent of panasonic/ Wipro/Halonix/Havells as decided by EIC.	Each	25	1,314.00	32,850.00
11	SITC of LED bulb with fitting (9Watt) of Philips /Crompton/ Wipro	Each	50	206.00	10,300.00
12	Supplying, installation, testing and commissioning of Exhaust fan / fresh air fan with louvre (Make -Bajaj/Usha/ Crompton/ Orient/ Khaitan/ Havells) as required.				
a)	300 mm sweep fibre body fresh air fan	Nos	50	1,600.00	80,000.00
13	Supply, Installation, Testing, Commissioning of highwall Inverter comptabilie split units (minimum 3 star) of following capacities including proper mounting arrangements and accessories, copper refregirant piping pvc drain piping,power cable,control cable, initial charge of refrigerant, safety limit thermostat, etc complete including 5 KVA voltage stabilizers (Make - Voltas/Daikin/LG/Hitachi)				
a)	1.5 TR capacity.	Each	5	45,243.00	2,26,215.00
14	Supply, instalaiton, testing and commission of SOFT COPPER REFRIGERANT PIPING OF 18 swg for high wall unts of various sizes with necessary supports, fitting interconnecting the liquid and the suction lines between the aircooled outdoor unit and the indoor unit. Both suction and liquid line shall be insulated with 19mm thick nitrile rubber tubes as insulation material and shall be covered with treated woven glass fiber reinford covering etc. complete as per the specifications and approved drawings				
a)	1 1/8" Dia	Mtr	25	739.00	18,475.00
b)	5/8" Dia	Mtr	25	283.00	7,075.00
15	Supplying, installation, testing and commissioning of ceiling fan (5 star rating) including wiring the down rod, earthing etc as required (Make : Bajaj/Usha/ Crompton/ Orient/ Khaitan/ Havells).				
(a)	1200 mm sweep	Nos.	20	2608.00	52160.00

16	Supplying and fixing following way, TP and neutral, sheet steel, MCB distribution board 415 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required (But without MCB/RCBOs/ISOLATORS)				-
a)	4 way, Double door TPN DB	Nos	5	4,384.00	21,920.00
17	Supplying and fixing following rating RCBOs/ MCBs in the existing DB complete with connections,testing and commissioning etc. as required				-
a)	63 Amps4P,MCB	Each	5	2,247.00	11,235.00
b)	32 Amps DP, 30 MA RCCB	Each	5	780.00	3,900.00
c)	6 Amp to 32 Amp, 10 KA SP MCB (C-Curve)	Each	60	328.00	19,680.00
18	Supplying and fixing of following sizes of heavy gauge PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required				-
a)	20 mm	mtr	500	57.00	28,500.00
19	Supply and laying of 25/32mm UPVC trunking system and acessories (Make Legrand/MK(honeywell)	Mtrs	300	50.00	15,000.00
	Sub Total				**16,83,795.37**
	External Electrical System				
20(a)	Supply,installation testing and commissioning of 20 side polygonal street light pole of length16 mtr (Bottom section 8 mtr long,360 mm dia 4 mm thick pipe; Top section 8 mtr long, 150 mm dia 3 mm thickn pipe) along with base plate with bolting arrangement to withstand windspeed of 180 Km/Hr, 1050x250 mm opening door Diameter of base plate 520mm and 25mm thickness,motor capacity of 0.75HP,8 arm,2 continous 6mm dia stainless steel wire rope with 535 mm ID carriage ring and 6A SPN MCB, duly wired upto the luminaire with 6C X 2.5 sqmm PVC insulated FRLS copper wire duly painted with epoxy based enamel paint of approved colour after treatment along with provision of masonary pedestal duly finished with plaster and painting with GI pipe for cable entering as required (Make -Bajaj/ Utkarsh/ Crompton)	No	1	2,13,754.00	2,13,754.00
	Providing, fixing, testing and commissioning of light fixtures for external and facade lighting as approved and directed by engineer-in- charge etc complete in all respects				
(b)	350 W Outdoor Street LED lights with silicon potted driver, IP66, PDC aluminium body , bottom opening maintanance , LPW not less than 130. (Make:Crompton cat no:LSF0-250-CDL/60-M or equivalent of BAJAJ/Philips/Havells) as rerquired	No	4	30,441.00	1,21,764.00
(c)	LED type single dome aviation obstruction light (Make-Bajaj/LT)	No	1	4,892.00	4,892.00
21	Supply,installation testing & commsioing wall mounted LED floodlight type 80W Wall Bracket with all assesories,IP -66 of make Havells (cat No-JETAIRISFL 120 W LED 757APWBLTG) or equivalent make Philips/Lighting Tech/Halonix	Each	20	9,360.00	1,87,200.00
22(A)	FLOOR PANEL				
	Busbar -400 AL busbar with SC rating of 36KA suitable for operation at 415 Volt, 50 HZ , 3 phase Supply.				
	Two (2)-Incomer feeders each consisting of				
	One (1) - 250 Amp 36 KA 4P MCCB with 3 Nos Phase indicating lamps with control fuse/ MCB, 3 Nos 400/5 A 15VA Cl 1.0 CTs, Digital Voltmeter, Ammeter				
	One set - Indicating lamp for ON/OFF/Trip and Phase indication with control fuse/ MCB.				
	One(1) - 250A 4P changeover switch				
	Eight(08) - Outgoing Feeders each comprising of				
	One (1) 63 Amp. 25KA 4P MCB				
	PANEL AS ABOVE	Nos.	1	1,14,584.00	114584.00
(B)	**Feeder Pillar for External Lighting**				
	Supplying installation testing commissioning if double door feeder pillar fabricated out of 2 mm thick CRCA sheet duly painted, 200 Amp Al busbar with neutral bus rincluding cc/ brick foundation as required including following internal fixtures.				
	1 No - 63 Amp 4P MCB Incomer				
	8 Nos - 16 Amp SP MCB Outgoing				
	1 No - 16 Amp SP MCB with 6/16 Amp socket outlet with 10 Amp modular switch and 1 No- Bracket Holder with 6 Amp Modular switch.				
	PANEL AS ABOVE	Set	1	16,073.00	16073.00
	Cable				
23	Supplying & Testing of 1.1 KV grade Aluminium XLPE power cable of following size suitable for 415 Volt, 3Ph, 50 c/s supply				
a)	3.5C X 120 sqmm Al	Mtr	100	873.00	87,300.00
b)	4C X 10 sqmm Al	Mtr	100	156.00	15,600.00
c)	2CX 6 sqmm Cu for wiring for flood light	Mtr	400	226.00	90,400.00
	Cable laying				
24	Laying of one number PVC insulated and PVC sheathed/XLPE power cable of 1.1KV grade of following size direct in ground including excavation (75 cm) sand cushioning,protective covering and refilling the trench etc as required				
	upto 35 Sqmm	Mtr	100	387.00	38,700.00
	above 35 Sqmm	Mtr	100	422.00	42,200.00
	TERMINATION OF CABLES :-				

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Block Dev. Officer, Loisingha

	for PVC insulated and PVC sheathed cable of 1.1 kv grade (without cost of Cable)				
a)	3.5CX 120 sqmm	Each	2	272.00	544.00
	4C X 10 sqmm Al	Each	2	69.00	138.00
	Earthing				-
26	Earthing with GI earth pipe 4.5 meter long,40mm dia including accessories and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc with charcoal/coke and salt as required	Nos	3	5,809.32	17,427.97
27	Providing and fixing 25 mm X 5mmGI strip at below 0.5 mtr from ground as electrode including connection like nut,bolt,spring etc as required	Mtr	70	169.92	11,894.40
28	Providing and fixing 6 SWG GI wire on surface or in recess for loop earthing along with cables etc as required	Mtr	200	31.36	6,271.19
29	Supplying and laying UPVC pipe (80 Schedule) of following diameter burried in ground at appropriate depth for cable laying as required				-
a)	110 mm dia	Mtr	50	250.00	12,500.00
	Sub Total				**9,81,242.56**
30	**AV System**				
A	Supply, installation, testing, and commissioning of Class D Amplifier consisting of Frequency Response: 20-20kHz (+/-0.3dB), Peak Output Current: 25A, Dynamic Range 112dB (A-weighted), Noise Level -76dBu (A-weighted), Distortion (1kHz@1W/8Ohm)0.003% Distortion (1kHz@50W/8Ohm)0.011% (Stereo) 0.004% (Bridged-Mono) Crosstalk (1kHz@1W/8Ohm)-95dB,Gain: 26dB/32dB,Maximum Input Level +24dBu. Mains Connector: Standard IEC C14. Make-Quest/Bose/ Audio Focus	Nos	1	1,05,188	1,05,188
B	Supply, installation, testing, and commissioning of Wall mountable Loudspeaker consisting of Max SPL 112 dB, Sensitivity: 93 dB, Frequency Response: 75Hz – 20kHz ±2dB. Transformer Taping: 100V: 20w/30w/40w/60w, 70V: 10w/15w/20w/30w. Directivity: H x V: 150° x 120° -10dB. Environmental Ingress Rating: Speaker Cabinet IP56 (IP67 when used with IPMX1 kit) Make-Quest/Bose/ Audio Focus	Nos	4	33,300	1,33,200
C	Supplying, installation,Testing & commissioning of i5 Powered OPS System with 10th Gen intel core having 8 GB RAM, 256GB SSD, Windows 10 Professional suitble for 240 volts AC,50 Hz power supply etc complete as required. Make- HP/Lenovo/ Dell	Nos	1	76,500	76,500
D	Supplying, installation,Testing & commissioning of USB based PTZ Make-Panasonic/ People link	Nos	1	84,375	84,375
E	Supplying, installation,Testing & commissioning of 9 U rack Make-Valrack/ Netrack	Nos	1	11,925	11,925
	Sub Total				**4,11,187.50**
31	**FIRE EXTINGUISHERS**				
Sl No.	**Description of work**	**Unit**	**Qty.**	**Rate(Rs)**	**Amount(Rs)**
A	FIRE EXTINGUISHERS - FIRST AID				
1	Supplying, installing and commissioning of ISI ABC Powder 4 Kg Fire Extinguisher containing Mono Ammonium Phosphate Powder 50, Stored Pressure Type,Pressure Gauge, fittted with discharge hose, wall mounting bracket etc. Discharge Time less than 15 Secs. Controllable discharge mechanism, Range minimum 4 Meters applicable on Class A,B,C and electrically started Fire. A Rating- 8A, B Rating 34B, Can Construction : Deep drawn & Co2 Mig welded, Valve Construction : Forging & Machining, Internal Coating of Can : Epoxy Powder coating, External Coating of Can : Epoxy Polyster Powder coating, Sheet metal thickness : 1.60MM. ISI approved as per IS:15683:2006(Make: superimax/Cese fire/Minimax)	Nos	3	3,800.00	11,400.00
2	Supplying, installing and commissioning of CO2 Type 4.5 Kg Fire Extinguisher containing Mono Ammonium Phosphate Powder 50, Stored Pressure Type, Pressure Gauge, fittted with discharge hose, wall mounting bracket etc., Discharge Time less than 15 Secs. Controllable discharge mechanism, Range minimum 4 Meters, applicable on Class A,B,C and electrically started Fire. A Rating- 8A, B Rating 34B, Can Construction : Deep drawn & Co2 Mig welded, Valve Construction : Forging & Machining, Internal Coating of Can : Epoxy Powder coating, External Coating of Can : Epoxy Polyster Powder coating, Sheet metal thickness : 1.60MM, ISI approved as per IS 15683:2006(Make: superimax/Cese fire/Minimax)	Nos	2	5,600.00	11,200.00
3	Fire buckets (FILLED WITH SAND) round bottom type enamel painted, white inside & Red out side and Letter "FIRE" in black out side and handle with mounting bracket	Nos	2	650.00	1,300.00
	Total Amount				**23,900.00**
	Grand Total				**31,00,125.43**

CONTRACTOR

Block Dev. Officer, Loisingha

Bill of Quantities

ESTIMATE FOR THE WORK:" IMPLEMENTATION OF AMA HOSPITAL PROGRAMME UNDER 5T AT CHC LOISINGHA, BALANGIR ".

A)	**Internal Water Supply & Sanitary Installations**				
Sl. No	**Item of Works**	**Unit**	**Qnty.**	**Rate (In Rs.)**	**Amount(In Rs.)**
1	Providing all materials labour, T&P for laying/fixing of following dia CPVC pipes S D R 11 as per IS-15778 with ISI mark &sch-80 cpvc pipe including fixing of required size CPVC fittings like bend, Tee elbow, offsets etc and the same fixed on wall or floor with holder bat clamps screw in all floor or laying in trenches including excavation of earth work in all kinds of soil & backfilling the trenches as per specification & testing the joints with required water presure.The cost inclusive of all taxes.duties.transportation scaffolding etc as per specification and direction of Engineer-in-charge **Make:ASTRAL/ASHIRVAD/AJAYA/AKG,SUPREME.TRUEFLOW**				
a)	20mm dia	Mtr.	7.00	240.00	1 680.00
b)	25mm dia	Mtr.	84.00	316.00	26 544.00
c)	32mm dia	Mtr.	72.00	477.40	34.372.80
d)	40mm dia	Mtr.	96.00	663.20	63 667.20
e)	50mm dia	Mtr.	36.00	1.016.00	36 576.00
3	Providing all materials, labour, T&P for fitting & fixing of following Bronze Ball Valves confirming to IS-778 with ISI mark in all floor & fixing with the pipes after cutting the pipes to required shape & size including wastage etc. of following nominal diameter, all complete including testing the joints with required water pressure.The cost inclusive of all taxes.duties,transportation scaffolding etc all complete as per specification and direction of Engineer-in-charge. **Make:ZOLOTO. (As per Art no.1008 & HSN Code-84812000 of ZOLOTO)**				
a)	25mm dia Bronze ball valve	Nos	10	1.107.00	11 070.00
b)	32mm dia Bronze ball valve	Nos	6	2.636.00	15.816.00
c)	40mm dia Bronze ball valve	Nos	10	3.636.00	36.360.00
d)	50mm dia Bronze ball valve	Nos	6	5.589.00	33.534.00
2	Providing all materials labour, T&P for making grooves in bricks/stone masonary walls vertically or horizontally up to required depth and width in all floor for laying of pipes and fittings up to 50mm dia, testing the joints with required water pressure and making good the damages with cement concrete 1:2:4 with 12mm size h.g.c b.chips and finished smooth with cement morter (1.4) to original shape including cost of materials, curing, conveyance taxes of all materials etc all complete as per specification & direction of EIC.	Mtr	20.00	186.70	3.734.00
3	Providing all labour T&P for cutting holes in bricks or stone masonry wall for taking pipes in all floors and making good the damages with cement concrete 1.2.4 finished smooth with CP 1.4 to original shape including cost of all materials curing conveyance, taxes, duties etc all complete as per specification & direction of Engineer-in-charge				
a)	For 15mm to 50mm dia pipe to pass in 125mm to 250mm thick wall	No	10.00	48.20	482.00

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Block Dev. Officer, Loisingha

Bill of Quantities

ESTIMATE FOR THE WORK:" IMPLEMENTATION OF AMA HOSPITAL PROGRAMME UNDER 5T AT CHC LOISINGHA, BALANGIR ".

A)	**Internal Water Supply & Sanitary Installations**				
Sl. No	**Item of Works**	**Unit**	**Qnty.**	**Rate (In Rs.)**	**Amount(In Rs.)**
4	Providing all materials, labour, T&P for fitting and fixing white glazed vitreous china Floor mounted water closet (European pattern) with Cistern & seat cover (solid) of approved make in all floor including supply of sutaible bracket, PVC wall plug and Brass screws etc all complete including cost, taxes and conveyance as per specification all complete as per direction of Engineer-in-charge. **Make : HINDWARE/JOHNSON/JAQUAR**				
a)	EWC Pan Rimless Single Piece-WC (Jaquar) Model No VGS-WHT-81853S300UF/Jhonson G41075W0104/Hindware 92515	Set	10.00	31,911.50	3,19,115.00
5	Supply all materials and labour for fitting and fixing of following size white glazed vitreous china wash hand basin with half pedestal of approved make in all floor of approved quality including cutting the walls & floor and making good the damages with cement concrete (1:2:4) etc including all taxes, duties, transportation etc all complete as per direction of EIC (**Make:HINDWARE/JOHNSON/JAQUAR)**				
a)	Wash Basin: Size: 56 x 40 x 20 cm	Set	10.00	7,346.50	73,465.00
b)	Half Pedestal for wash basin	Set	3.00	1,955.80	5,867.40
6	Supplying all materials, labour & T&P for fitting and fixing of following sizes of white glazed vitreous china flat back, lipped front urinal basin confirming to specification of approved make as per IS-2556 with ISI mark in all floor along with supply & fixing of necessary component parts like pair of C.I./M.S. bracket including connection from supply pipe with all taxes, duties, transportation etc all complete as per specification & direction of the Engineer-in-charge (**Make:HINDWARE/PARRYWARE/CERA)**				
a)	Urinal Size- 390mm x 375mm x 590mm size flat back large standing urinal (As per Cat. No 60002 of Hindware/jaquar model no URS-13261H/Jhonson P0519PW0703)	Set	3.00	3,038.00	9,114.00
7	Providing all materials, labour, T&P for fitting and fixing of white glazed vitreous china water closet (European pattern) 'P' or 'S' type with cistern & seat cover, wash hand basin of size 650mmx350mm with one pair basin bolt, one no. hinged rail 760mm long & 5 nos. grab rails 600mm long including supply of sutaible PVC wall plug and Brass screws etc. **suitable for handicapped toilets** in all floor etc. all complete including cost, taxes and conveyance as per specification all complete as per direction of Engineer-in-charge **Make:HINDWARE/JOHNSON/JAQUAR**				
i)	EWC for handicapped toilet	Sets	1.00	43,783.00	43,783.00
8	Providing all materials, labour,T&P and fittings and fixing of different water supply (CP on Brass) fitting (Quarter Turn or as specified) as per IS specification & approved make in all floor of following sizes and specification with leak proof threaded joints with thread seal tape or any other method as required and directed including all taxes, duties, transportation etc., testing and rectification of defects after testing complete as per direction of Engineer-in-charge **Make:Jaquar/Hindware/Kohler/PARYWEAR**				
a)	15mm dia pillar cock	No	10.00	1,935.80	19,358.00
b)	32mm dia CP Bottle Trap	No	14.00	2,162.70	30,277.80
c)	15mm dia Angle Stop cock with wall flange	No	33.00	1,377.40	45,454.20
d)	32mm dia C.P waste (Half Threaded)	No	11.00	508.60	5,594.60
e)	Angle Cock self closing system for urinal	No	3.00	2,337.10	7,011.30
f)	32mm dia C.P. Doom Waste (Full Threaded)	No	3.00	742.40	2,227.20

CONTRACTOR

Block Dev. Officer, Loisingha

Bill of Quantities

ESTIMATE FOR THE WORK:" IMPLEMENTATION OF AMA HOSPITAL PROGRAMME UNDER 5T AT CHC LOISINGHA, BALANGIR ".

A)	**Internal Water Supply & Sanitary Installations**				
Sl. No	**Item of Works**	**Unit**	**Qnty.**	**Rate (In Rs.)**	**Amount(In Rs.)**
g)	15mm CP Spreader (Make-Viking)	No.	3.00	457.80	1,373 40
h)	15mmx450mm Braided Hose Connection Pipe with both side Nuts & Rubber Washers	No.	24.00	291.80	7,003.20
i)	C.P. Soap Dish Holder	No.	20.00	1,163.70	23,274 00
j)	C.P. Toilet paper holder with flap	No.	10.00	1,163.70	11,637.00
k)	CP Towel Ring	No.	10.00	847.20	8,472.00
l)	Health Faucet with 1.00m long PVC tube & wall hook	No.	10.00	1,286.70	12,867.00
m)	15mmx50mm C P Extension piece	No.	34.00	133.70	4,545.80
o)	32mm dia C.P. Coat Hook (Double)	No.	10.00	597.70	5,977.00
p)	150mmx150mm size stainless steel hinged grating (Make-Prayag)	No	9.00	604.20	5,437 80
q)	Providing all materials, labour, T&P for fixing of following sizes of bevelled edge mirror of 5mm thick mounted on 4mm thick AC back sheet & CP cup screw with PVC wall plugs in all floor including cost, conveyance, taxes of all materials complete as per specification and direction of E.I.C. **Make-PRAYAG**				
r)	600mm x 450mm size	No	10.00	2,034.50	20,345 00
s)	600mm long Glass Self	No.	10.00	1,295.70	12,957 00
t)	Providing all materials, labour, T&P for fitting and fixing of following size of 12mm thick toughened glass for urinal partition of approved make in all floor with edge moulding & polishing with chromium plated brass screws, G/W brackets 90° (Double Sided Back Plate) of DORMA make with all taxes, duties, transportation etc. all complete as per specification & direction of Engineer-in-charge.				
i)	Toughened glass partition of Size-1200mm ht. x 600mm width for Urinal Partition	No	9 00	8,334.00	75,006.00
9	Providing all materials, labour, T&P for laying/fixing of following dia uPVC pipes as per IS-4985 with ISI mark of 6 kgf/cm^2 including fixing of required size uPVC fittings like,bend,Tee,elbow,offsets,etc. and the same fixed on wall or floor with holder bat clamps screw in all floors or laying in trenches including excavation of earth work in all kinds of soil & backfilling the trenches as per specification & testing the joints with required water presure.The cost inclusive of all taxes, duties, transportation, scaffolding etc. as per specification and direction of Engineer-in-charge. **Make : ASTRAL/ASHRIVAD/AJAYA/SUPREME/TRUELOW**				
a)	50mm dia	Mtr.	120.00	176.30	21,156 00
9	Supplying all materials, labour, T&P, fitting and fixing uPVC SWR pipes (Type-B) of approved make confirming to IS-13592/1992, both below & above ground level or fixing on wall surface in all floors including all taxes, duties, transportation & scaffolding etc. all complete as per specification & direction of the Engineer-in-charge. **Make: ASTRAL/ASHRIVAD/AJAYA/SUPREME/TRUEFLOW**				
a)	110mm dia pipe	Mtr.	83.00	704.90	58,506.70
10	Supplying all materials, labour, T&P, fitting and fixing of following dia uPVC SWR (Ringfit) fittings of approved make confirming to IS-14735 in all floor with all taxes, duties, transportation & requisite testing as per specification & direction of EIC. **Make:ASTRAL/ASHRIVAD/AJAYA/SUPREME/TRUE FLOW**				
a)	50x50mm dia reducing Tee	No.	8.00	131.90	1,055.20
b)	50x50mm dia reducer Elbow	No.	8.00	118.30	946.40
c)	110mm Coupler	No.	20.00	228.30	4,566 00

CONTRACTOR

Block Dev. Officer, Loisingha

Bill of Quantities

ESTIMATE FOR THE WORK:" IMPLEMENTATION OF AMA HOSPITAL PROGRAMME UNDER 5T AT CHC LOISINGHA, BALANGIR ".

A)	Internal Water Supply & Sanitary Installations				
Sl. No	Item of Works	Unit	Qnty.	Rate (In Rs.)	Amount(In Rs.)
d)	110mm x110mm P-Trap	No.	24.00	488.00	11,712.00
e)	110mmx87.5° door bend	No	10.00	310.00	3,100.00
f)	110mmx87.5° plain bend	No.	18.00	263.60	4,744.80
g)	110mmx45° plain bend	No	18.00	220.20	3,963.60
h)	110mm dia Single Tee with Door	No.	12.00	430.00	5,160.00
i)	110mm dia Single 'Y' with Door	No	6.00	549.00	3,294.00
j)	110mm dia Double 'Y' with Door	No.	0.00	667.10	-
k)	110mm Cowl	No	20.00	153.90	3,078.00
l)	PVC Clamp Suitable for 110mm dia pipe	No.	100.00	91.90	9,190.00
m)	110mm WC connector bend with lip ring	No	12.00	317.00	3,804.00
n)	110mmsocketplug	No.	16.00	112.00	1,792.00
o)	110mm Single Y	No.	6.00	449.10	2,694.60
p)	110mm Single tee	No	12.00	385.60	4,627.20
11	Supplying and Fixing of polythene molded water storage cylindrical tank with lead and lucking arrangement as per IS-12701/1996 with ISI Mark including cutting holes of required size & shape through the tank and fixing mild steel tubes and fittings and providing extra sockets and jam nuts fixing ball valve etc. including hoisting upto required elevation and placing the tank to the required position etc all complete as per direction of Engineer-in-Charge. **Make-Sintex/astral**				
i	2000 Litres Capacity Triple Layerwhite Tank for Drinking& flushing	No.	4.00	23,506.30	94,025.20
12	Supply, installation testing & commisioning of water cooler cum purifier with chiller in floor of following capacity.60/80 SS including fixing the same on the floor with necessary water connection & waste waste arrengments with all labour T&P etc.all complete as per the specification & direction of EIC. ***(As per Model :AG Green pure Chill 80SS of Aquaguard/IONEXCCHANGE)***				
a)	**Zero B Storage Cooler cum UV Water Purifier 60/80/120 AquaguardGreen Storage Cooler-cum-Purifier Model- AG Green Pure Chill 120PSS UV,**	Each	2.00	95,747.00	1,91,494.00
13	Supplying all materials, labour T&P fitting and fixing uPVC SWR pipes (Type-A) For rain water Stacking pipe in the Duct(Co-moulded Ring type) of approved make confirming to IS-13592/1992with ISI marked, both below & above ground level or fixing on wall surface in all floors including all taxes, duties, transportation & scaffolding etc all complete as per specification & direction of the Engineer-in-charge. ***Make: ASTRAL/ASHIRVAD/AJAY./SUPREME/TRUEFLOW***				
a)	110mm dia Bend (87.5 degree)	Nos	6.00	263.60	1,581.60
b)	110mm dia pushfit coupler	Nos	12.00	228.30	2,739.60
c)	110mm dia pipe	Mtrs	24.00	704.90	16,917.60
d)	110mm dia Bend (87.5 degree) Door bend	Nos	6.00	310.00	1,860.00
e)	Vertical Grating 150x150mm for Rain water gutter on terrace opening to 160mm dia Rain water pipes	Nos	6.00	259.00	1,554.00

CONTRACTOR

Block Dev. Officer, Loisingha

Bill of Quantities

ESTIMATE FOR THE WORK:" IMPLEMENTATION OF AMA HOSPITAL PROGRAMME UNDER 5T AT CHC LOISINGHA, BALANGIR ".

A) Internal Water Supply & Sanitary Installations

Sl. No	Item of Works	Unit	Qnty.	Rate (In Rs.)	Amount(In Rs.)
14	Providing all material, labour, T&P and construction of Gully Trap chamber of size as mentioned below with 250mm nominal size flyash Brick having crushing strength not less than 75kg/ sqcm in CM 1:4 over a bed of 100mm thick C C (1:3:6) using 40mm size HG metal, plastering with 12mm thick cement plaster with cement punning in cement mortar 1:4 on inner surface and 12mm thick cement plaster in cement mortar (1:4) on external surface fitting & fixing of PVC Gully Trap and pre-cast factory made (SFRC) cover with frame of opening size 260mmx260mm, moulding and shaping the channel & benching with C.C (1:2:4) with hard granite chips 12mm size, earth work excavation in all kinds of soil & rock and filling the cavity of the chamber with excavated & selected earth levelling the surface around the chamber with disposal of surplus earth within 50mt lead as per specification, design & drawing including cost of curing and all taxes, royalty, cost, conveyance etc all complete as per specification & direction of EIC.				
a)	Inner size 300mmx300mmx450mm depth Gully Trap chamber	No	10.00	2,937.90	29,379.00
16	Providing all materials required for construction of inspection chamber with Fly Ash bricks of size 25cm x 12cm x 8cm having crushing strength not less than 75Kg/Sqcm in C M (1:4), PCC 1:3:6 with 40mm size hard granite crusher broken metal of 100mm thick, 12mm thick cement plaster 1:3 both in outer & inner surface of the wall & bottom, earth work excavation in all kinds of soil/rock including back filling with selected excavated earth duly watered & rammed RCC M-20 with 20mm & down size H G crusher broken chips having minimum cube strength 200Kg/Sqcm at 28 days confirming to IS-453/76 & IS-3370 for roof slab of 125mm average thick with form work as per the requied size including cost for MS reinforcement as per approved design & drawing & fixing of Pre-cast factory made manhole cover with frame (SFRC medium duty) for opening of 500mm including cost of all materials, labour, T&P etc complete as per specification & direction of Engineer-in-charge				
a)	Inner size 750mm x 750mm x 500mm depth	No	10.00	10,742.00	1,07,420.00
A	**Total Internal P.H.**			**Total**	**16,04,360.20**
				RS	16,04,360.00

CONTRACTOR

Block Dev. Officer, Loisingha

BILL OF QUANTITIES

Name of Work: Implementation of Ama Hospital Programme under 5T at CHC Loisingha

PHE(CIVIL WORK)

Sl. No.	Description of items	Quantity	Unit	Rate (Rs,)	Amount (Rs.)
1	Providing and laying 600 mm x 600 mm Fully Body Vitrified Floor Tiles confirming to IS : 15622 of approved make, quality and colour without any warpage laid over an under layer of 20 mm thick base of cement mortar (1:4) (1 cement: 4 coarse sand) including cutting to size, laying and filling the joints with Epoxy Grout with colouring pigment to match the shade and colour, cleaning the surfaces including the cost of all materials, cost of all labour, conveyance, royalties, loading, unloading, sundries, watering and curing, T&P, etc. complete as per the direction of the Engineer-in-Charge. (Note- Sample of tiles shall be approved before procurement and use.) (Make:Somany/Jhonson/RAK/kajaria) (Epoxy Grout item Paid Separately)				
	Ground Floor	23.40	Sqm	1106.60	25,894.44
2	Providing and laying of Glazed Ceramic Wall Tiles in dado/skirting confirming to IS : 15622 of approved make, quality, colour and size 600mm x 300mm upto required height from floor level fixed over an under layer of 12mm thick bed of cement mortar (1:3) (1 Cement : 3 Coarse sand) including cutting to size, laying and filling the joints with epoxy grout with colouring pigment to match the shade and colour, cleaning the surfaces including the cost of all materials, cost of all labour, conveyance, taxes, royalties, loading, unloading, sundries, watering and curing, T&P, etc. complete as per the direction of the Engineer-in-Charge. (Note- Sample of tiles shall be approved before procurement and use.) (Epoxy Grout item Paid Separately)				
	Ground Floor	125.50	Sqm	925.30	1,16,125.15
3	**Grouting the joints of flooring tiles having joints** of 3 mm width, using epoxy grout mix of 0.70 kg of organic coated filler of desired shade (0.10 kg of hardener and 0.20 kg of resin per kg), including filling / grouting and finishing complete as per direction of Engineer-in-charge.				
	(1)600x600mm Tile,600x300mm Tile	148.90	Sqm	244.30	36,376.27
4	Providing and fixing Fiber Glass Reinforced plastic (FRP) Door Frames of crosssection 90 mm x 45 mm having single rebate of 32 mm x 15 mm to receive shutter of 30 mm thickness. The laminate shall be moulded with fire resistant grade unsaturated polyester resin and chopped mat. Door frame laminate shall be 2 mm thick and shall be filled with suitable wooden block in all the three legs. The frame shall be covered with fiber glass from all sides. M.S. stay shall be provided at the bottom to steady the frame.. The rate include cost of all materials, cost of labour, conveyance, loading, unloading, T&P, etc, all complete as per the direction of Engineer-in-Charge.				
	Ground Floor	44.55	Rmt	586.80	26,141.94
5	30 mm thick Fiberglass Reinforced Plastic (F.R.P.) flush door shutter in different plain and wood finish made with fire retardant grade unsaturated polyester resin, moulded to 3 mm thick FRP laminate all around, with suitable wooden blocks inside at required places for fixing of fittings and polyurethane foam (PUF)/ Polystyrene foam to be used as filler material throughout the hollow panel, casted monolithically with testing parameters of F.R.P. laminate conforming to table - 3 of IS: 14856, complete as per direction of Engineer-in-charge. The rate include cost of all materials, cost of labour, conveyance, loading, unloading, T&P, etc, all complete as per the direction of Engineer-in-Charge.				
	Ground Floor	14.20	Sqm	3162.40	44,906.08

CONTRACTOR

Block Dev. Officer, Loisingha

Sl. No.	Description of items	Quantity	Unit	Rate (Rs,)	Amount (Rs.)
6	Supplying and Applying of two component flexible crack bridging waterproof coating applied over prepared surface including surface cleaning, removing all loose particles, visible crack repair, honeycombs & blemishes from the concrete surface with suitable polymer modified mortar. It should have following minimum properties: Powder Component: Sand/White cement Liquid Component: Polymer dispersion Color: Grey & Mixing ratio: 3:1(Powder: Liquid) Two Coats Recommended, allow 1st coat to cure 6-8 hrs before applying 2nd coat. Consumption: 2.0 Kg/ SqM Elongation (at 30°C): Approx. 40% Water Penetration :1.5 Bar Tensile Strength : 0.86 N/mm2 & 4.5 N/mm2(with Fibre reinforcement) All corner junction between floor and wall @ 40mm X 40 mm sealed with polymer modified repair mortar(ReArm SBR 45 + Cement + Sand). All complete as per manufacturer specification and as directed by EIC.**(Make:MYK / Fosroc /Tremco Pvt.Ltd./Pidilite /Sika / Sunanda/Asian)**	148.90	Sqm	464.60	69,178.94
				Total Amount	**Rs. 3,18,622.82**

I M/S _____ _____, "___ Class" Contractor hereby quoted my % (Percentage) rates at _____ % (percent) (both in figure & word) excess over than /less than/ equal to the amount put to tender i.e Rs 1,78,57,433.00 (Rupees One Crore Sevety Eight Lakh Fifty Seven Thousand Four Hundred Thirty Three Only)

Note:

1. The contractor should not write anything except quoting of percentages and in case anything else regarding tender rate mentioned, the tender is liable to rejection.
2. Strike out which is not applicable.
3. Percentage should be quoted upto 2 (two) digit after the decimal

No of Corrections:
No of over writing:
No of Pages:

CONTRACTOR

Block Dev. Officer, Loisingha